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Entrepreneurship Education and Training

香港公開大學
THE OPEN UNIVERSITY OF HONG KONG

Contents

Entrepreneurship Education and Training

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Entrepreneurship has a tremendous impact on the economic development of a country, so much that entrepreneurship is seen as a solution for the fast changing economic demands worldwide and has been recognized as a path to sustainable economic development. Despite recognition of entrepreneurship on the road to global economic development, a large body of research on the elements of entrepreneurship education remains unresolved. Are these behaviors inherent to human beings, their genetic code, their psychological traits, or can students, young children, and even adults, be taught how to become an entrepreneur? This book presents several chapters following different approaches to answer these questions. Researchers explore education programs in different countries, they show experiences in entrepreneurship education, explain how to teach entrepreneurial skills, cultural issues, and propose some orientations and reflections on entrepreneurship education.

Chapter 1 The Spirit of Entrepreneurial Education in Namibia — An Exploratory Study

by Wilfred Isak April [1]

1.1 Introduction

Entrepreneurship is viewed as the driving force for economic growth in countries around the world. Entrepreneurs have the ability to spot opportunities in the market where some people will see issues or problems. This in turn helps individuals with a high entrepreneurial propensity to transform and change their communities and economies (Makura, 2008). One of the most interesting places where an untapped potential of entrepreneurial spirit exists is in Africa, and Southern Africa in particular, which is blessed with an untamed nature and abundant natural resources. Namibia, the country on which this chapter is based, amazes the author through the incredible energy, determination and perseverance coming from the people when talking about entrepreneurship. The best way to harness and make use of these abundant resources is through entrepreneurial education – in particular our youth, who are regarded as the leaders of tomorrow. A massive opportunity lies ahead in Namibia for young people and those who are willing and able to follow their footsteps. Entrepreneurship should not be just about making money or acquiring wealth, but should be seen as a unique opportunity to uplift the nation and communities at a grassroots level. This brings us to the definition of entrepreneurship:

> *In the international literature 'entrepreneurship' is derived from the French verb 'entreprendre' which means to take your bare hands and do something. Each person has the ability to make something from nothing, and the education aspect of entrepreneurship can be both formal and informal.*
>
> *Entrepreneurship in the Namibian context can be defined as the efforts made by a particular individual in a community or a society in accumulating the necessary resources to benefit the community (April, 2009* [2]*).*

1. Private Bag Windhoek, Namibia
2. *April, W.I. (2009). An Exploration of Entrepreneurship Potential amongst Namibian Youth: The Arandis Village. PhD Thesis.*

This chapter will first give an account of the background of the Republic of Namibia. A detailed analysis of the before and after independence education systems in Namibia will be outlined, followed by a look into the spirit of entrepreneurial education in Namibia. This chapter will highlight some key initiatives and directives that Namibia has in terms of the nation's Vision 2030. In addition, the research methods will be discussed and an account will be given on conclusions and future research recommendations.

1.2 Background on the Republic of Namibia

The Republic of Namibia is situated on the southwestern coast of Africa, and was formally known as Sud West Africa. The Namib Desert is one of the oldest deserts in the world, running across the coastline, except for the northernmost Kaokoveld. Namibia, which borders the north with Angola, South Africa to the south and Botswana to the east. Namibia is home to the most ancient nations on Earth, the !Khung (!- Indicates the click sound), members of the Khoisan people (H. Witbooi, personal communication, 15 August 2008). The Europeans used to call these people Bushmen (meaning people who reside or live in the Bush). Very few of these people are still alive today, except in the far northern parts of Namibia and in the Kalahari Desert. The traditional or informal education of these people is largely oral tradition. These communities have deeply rooted cultural values, mostly in terms of honesty, and nobody will use water or food that another person has stored in ostrich eggshells and buried in the sand. These people have deeply embedded entrepreneurial skills, as they are risk takers and use the limited resources at their disposal to make a living.

By around 1000 A.D. the indigenous people of Namibia gave way to the various Migrating Bantu speaking people who later made Namibia their home. By the 1800s a reasonable number of Herero and Owambo people moved southwards to Namibia. The mid-1800s witnessed the arrival of the missionaries and soldiers, who settled mostly in the coastal regions. The *'Iron Chancellor'* Otto von Bismarck declared *'My Map of Africa lies in Europe'* when he convened the Berlin conference at which European powers were searching for new markets and coveting the riches of Africa. The continent was divided into regions and national boundaries. Together with Togo, Kamerun (which with Togo was split between Britain and France after World War I and is today known as Cameroon), German East Africa (after World War I, Tanganyika, known since independence as Tanzania, was mandated to Britain and Ruanda- Urundi to Belgium) and German South West Africa (today known as Namibia) became German property (See Figure 1.1). This colonial past has an impact on the way in which education, both formal and informal, is perceived in Namibia.

Figure 1.1 Map of Africa illustrating some colonies (Cameroon, Tanzania and Namibia)

In 1915, during World War I, South Africa allied with the British and took over South West Africa. The initial intention of South Africa was to annex the country, but this was prevented by the League of Nations, which gave South Africa the authority to manage Namibia's government and affairs. In 1945, after World War II, the United Nations, which replaced the League of Nations, requested that South West Africa be placed under United Nations trusteeship. South Africa refused, and guerrilla warfare led to the establishment of the South West Africa People's Organization (SWAPO). On March 21, 1990 Namibia became an independent nation. The next section of the chapter will look at Namibia's education systems before and after independence.

1.3 Namibia's pre-post independence education systems

Education for Africans in Namibia went through three successive phases prior to independence, and the fourth stage took shape after independence in 1990. In this section of this chapter we will have a closer look at the three phases prior to independence and the fourth phase after independence. These phases are pre-Bantu education before 1962, Bantu education from 1962-1976, and post-Bantu education from 1977 onwards. All of these phases were accompanied by a general pattern of political and social economic changes of the inhabitants of this country. Each phase was clearly influenced by the political situation in Namibia at that particular point in time.

Prior to Namibian independence, education in Africa existed in both formal and informal manners. Informal learning usually took place through observation: the younger generations observed what the elders, older siblings or older members within a community were doing. In terms of informal learning we draw upon the great works of Paul Freire, a Brazilian educationist who has contributed significant thought on progressive practice. Freire's thought was more on informal thinking and education, and he viewed informal learning as conversational rather than curricular. Informal learning, especially in terms of business, will allow people to work together rather than working against one another. This could allow people to see entrepreneurship as a partnership in the 21st century. Although it might be controversial, Freire argued too much formal education to be like a banking deposit. It could be argued that the educationist is making banking deposits to the educatee. It was also the notion of Freire that dialogue can be viewed as a means of creating a deeper understanding and difference in the world. The views of Freire support the notion that, for entrepreneurial education to foster and grow in developing economies like Namibia, a dialogue is critical as it can enhance the community and build social capital. An informal educator, according to the work of Freire, is about action. This does not imply that the formal educational aspect does not take action into consideration. The formal aspect, on the other hand, is institutionalized education, and carefully planned education programmes. It is important to highlight in this chapter that, prior to the introduction of Western educational philosophies, education in Africa (Namibia) existed in one form or another. It would be wrong to argue that the early formal pioneers moved in a complete educational vacuum. Every society is believed to have their own education system, if only to the extent that it is its concern and beliefs that give it an identity and preserve its existence (Amukugo, 1993 [3]).

It is the general assumption and belief of some scholars that education was not solely introduced through colonization (Amukugo, 1993 [4]). In 1980, the National Education Act No. 30 replaced the South African Bantu Education Act, No. 47 of 1953. The primary aim of the Namibian Education Act was to create three more bodies. The National Examination Board for South West Africa was then created to prescribe the minimum standards for courses and syllabi to oversee examinations. It is important to highlight that the education systems had race-based examinations administered under different departments (Bantu, coloured and white). The apartheid system played an instrumental role in maintaining social stratification. During the colonial period certain subjects in schools were only available for whites, such as computer studies and mathematics. The coloureds were fortunate to take accountancy and typing, while the blacks were only allowed to take home economics and needlework.

3. Amukugo, E.M. (1993). Education and Politics in Namibia: Past Trends and Future Prospects. Cape Town. Gamsberg Macmillan Publishers.
4. Amukugo, E.M. (1993). Education and Politics in Namibia: Past Trends and Future Prospects. Cape Town. Gamsberg Macmillan Publishers.

In many instances during the apartheid era, educational and occupational roles usually corresponded to one's economic, and then social status, in society. Thus, by virtue of the level of education the disadvantaged black majority in Namibia could receive, it was clear that the type of jobs they held caused them to remain members of the lowest class (J. Rodrickson, personal communication, 15 July 2014).

After independence, the Republic of Namibia introduced entrepreneurial education in primary and secondary schools, with the primary aim of helping to reduce unemployment in Namibia. The intention was to ensure that Namibians were well equipped with the essential skills and knowledge of how to start a business, if they desired, once they completed school. All young pupils in primary schools in Namibia are required to study social science courses that have a strong entrepreneurial component. Entrepreneurship is taught as a module from grade 8 to 12 and all students are introduced to basic entrepreneurial skills and principles. Another role of entrepreneurial education is to give Namibians access to the labour market and to enable communities to survive. The Republic of Namibia has definitely made progress in terms of entrepreneurial education after independence. Particularly in terms of quantity, Namibia has to improve a lot and a number of entrepreneurial centres where citizens, young and old, can learn how to start a business of their own have been introduced in Namibia. The next section of this chapter will look at the spirit of entrepreneurial education in Namibia.

1.4 The spirit of entrepreneurial education in Namibia with reference to Vision 2030

Small and medium-sized enterprises (SMEs) make up an important part of the Namibian economy. SMEs contribute 12% to the Namibian GDP and employ an estimated one fifth of the workforce. To ensure that Namibia reached its goals of Vision 2030 a number of entrepreneurial programmes have been introduced in the country. These programmes are catered for in both formal and informal ways. The formal programmes constitute the official introduction of entrepreneurship at a secondary school level, where students can bridge to start or set up a business of their own after their high school career. There are also vocational training centres where Namibians get a first-hand opportunity to upgrade their entrepreneurial skills to start a business venture of their own.

Fostering entrepreneurial education in any economy is critical as it will lead to creative manpower and a successful workforce with better skills to meet the demand of the economy. It is the argument of the author that the major obstacle for growth in developing economies such as the Republic of Namibia is a lack of educated entrepreneurs who are able to mobilize and coordinate production inputs. Financial institutions cannot afford to lend money to uneducated or uninformed entrepreneurs as it will seem as if they are throwing money away or making a negative investment. It is the viewpoint of the author that it is not only financial skills which are lacking, but also general knowledge, ability and skills that entrepreneurs need to possess in today's competitive global market. This can also take us back to the scholarly argument as to whether entrepreneurs are born or bred – with genetic and environmental conditions that could make them destined for entrepreneurship. However, Kent (1990) has put succinctly that education can make a difference to the supply of entrepreneurs in developing economies such as Namibia. This view is slightly different from the views of Freire (1997) when we look at informal education.

The study of entrepreneurial education around the world is still in its infancy (Brazael and Herbert 1999). In a similar view, Namibia as a nation has only recently started to introduce entrepreneurial education across the various sectors of the economy. However, if Namibia as an economy aspires to become competitive in the African market and around the globe, entrepreneurship is a viable option. Brockhaus (2001) [5] noted that the first course in entrepreneurship was introduced in 1957 at the Harvard Business School. Drucker also taught another course at New York University in 1953. Surprisingly it was only during the last two decades that entrepreneurship has been formally introduced in academia for example, the Babson School of Entrepreneurship in Babson, Massachusetts. The first doctor of philosophy graduates in entrepreneurship emerged in 1981 in the USA at Babson. It is possible to agree with Timmons (1988) [6] that entrepreneurship is also about the ability to create something from nothing. It is also about initiating, doing and achieving, and goes beyond just watching the creation of a new venture by establishing a business in the practical sense. Entrepreneurship education can have a strong bearing on the development of entrepreneurs in Namibia. Namibia has set up various centres such as the Namibian Business and Innovation Centre to help with the grooming of entrepreneurs in Namibia. The University of Namibia and the Polytechnic of Namibia offers entrepreneurship as a course, but have not established standalone degree programmes. There are also entrepreneurial training courses offered at accredited smaller training institutions in Namibia. The teaching of entrepreneurship in Namibian tertiary institutions is critical as it can be seen as a response to overcome the legacy and educational systems of the colonial past. It is also a move to stimulate entrepreneurial thinking amongst Namibian citizens.

A number of activities have recently been undertaken in order to stimulate the growth of the SMEs in Namibia. This support is usually in managerial and financial form to train people to become entrepreneurs. Namibia has a policy on small business development. in the early 2000s it appeared that the net growth by jobs created and lost was more positive in the economic clusters of body care, healthcare, hospitality, tourism and crafts, and much less in the electronics, manufacturing and consulting sectors. After been trained in the entrepreneurial sectors, most entrepreneurs prefer to work in hospitality and tourism. They prefer this because these businesses are relatively easy to enter and they try to avoid risks. This reveals that some Namibians are moderate risk takers. However, these jobs require less innovation. Some of the core reasons as to why entrepreneurs do this are a result of their personal characteristics. A lack of psychological success factors and a lack of desire to take initiative in the decision-making process is also a hindrance to some Namibian entrepreneurs. When the author looks at Namibian people, entrepreneurial

5. Brockhaus, R.H, Hills, G.E, Klandt, H. & Welsch, P. (2001). Entrepreneurship Education: A Global View. Aldershot: Ashgate Publishing.
6. Timmons, J.A. (1988). The Entrepreneurial Mind. Andover, MA.: Brick House Publishing.

development can be predicted on three levels. Entrepreneurial education in Namibia should enable the citizens of the country to develop certain technical skills that they would like to exploit as self-sustaining entrepreneurs, but might not have the entrepreneurial skills and they might develop a sense and an aspiration for entrepreneurship. Some of them might develop an entrepreneurial attitude and behave accordingly. In Namibia most entrepreneurs have to be trained in crafts, and more so in entrepreneurial skills such as marketing, record keeping, and employee personnel, among others. All organizations in Namibia play different roles in the development of the economy; for example the Centre of Entrepreneurial Development (CED) at the Polytechnic of Namibia. A major challenge for upcoming entrepreneurs in Namibia is the change of mindset from having skills to becoming a competent entrepreneur. This will require a lot of input from all stakeholders. In addition, local banks in Namibia such as Bank Windhoek are providing mentor skills training this regard, and there are a number of consulting firms providing similar services. Training mentors enables help people to become self-reliant and independent entrepreneurs and self-sustaining business people who might eventually start their own businesses. According to the NIED Report (2006) [7] some educational institutions such as the Polytechnic of Namibia realized the national aim of the Republic of Namibia to increase the number of SMEs; thereby, Namibians are encouraged to play a part and inspire young people at an earlier stage of their careers to change their mindsets and consider entrepreneurship as a viable career option. Primary school learners should also be encouraged, and should be informally exposed to entrepreneurial activities within their respective communities. It is also very important to highlight in this chapter that the informal sector in Namibia booms with entrepreneurial initiatives under a local bridge at Wernhill Park shopping. People make an effort to sell whatever they are able to in order to sustain their livelihoods and family. The next section of this chapter deals with entrepreneurial challenges in Namibia.

1.5 Challenges for Namibia in terms of entrepreneurial education

Although Namibia is working towards Vision 2030, the major challenge to get more people involved in the small and medium-sized business sector. When changing the mindset of people in Namibia, it requires full acceptance and incorporation (both at an individual and business sector level) of the business principles and fundamentals. This involves a paradigm shift of culture or attitude of taking up a job or any small business activity, even if it is only for subsistence reasons. This will require taking full ownership, exhibiting entrepreneurial behaviour and feeling challenged by one's own goals, rather than only having the desire to earn money. SMEs that fit in Namibia's economy would be of interest to new entrepreneurs if they have made a mind shift and have proven that they are competent before going into business. This will require

7. NIED. (2006). Draft Syllabus of Entrepreneurship. Junior Secondary Phase. Windhoek: Ministry of Education.

aspiring entrepreneurs to become acquainted to business principles at a young age to take one step closer in a positive direction.

Other challenges for Namibian entrepreneurs include attaining collateral from banks to start their business. Most people find themselves at the bottom of the pyramid in terms of income and so simply being able to start a business is a challenge for most citizens. The Republic of Namibia is a country with 11 different ethnic groups, and each of these groups has their own cultures and traditional belief systems. According to April (2009) [8] there are numerous cultural factors that prohibit even youth from entrepreneurial education. These are, amongst many others and not limited to young women usually being seen as housekeepers and having to get married and bear children for their husbands. Another critical challenge is that Namibian communities usually have large extended families, and even when people start an enterprise they mostly fail to follow the basic business principles, as family values hold precedence over business values. This can usually lead to closure of the business within the first few years of being established. It is the notion of some communities that entrepreneurship interferes with their traditional system, and that there could be a better manner through which they can be incorporated into the national economy.

1.6 Research methodology

Being exploratory in nature, this chapter aims to explore the spirit of entrepreneurial education in Namibia. The author used a qualitative research approach to write up this chapter. Qualitative research enabled the author to capture rich meaning from the responses of the audience. The author interviewed 50 respondents for this study. The sample constitutes both respondents in school, out of school and members of the community (see table below for the breakdown of respondents).

Description	Total
Youth in school	15
Youth out of school	15
Members of the community	20
TOTAL OF THE RESPONDENTS	**50**

Most youth in school are of the opinion that entrepreneurs are the lifeblood of the Namibian economy. For the Namibian economy to prosper, entrepreneurs will be

8. April, W.I. (2009). An Exploration of Entrepreneurship Potential amongst Namibian Youth: The Arandis Village. PhD Thesis.

needed now and in the future. The out-of-school youth felt entrepreneurship to have a very important role for the development of the Namibian economy while members of the community felt the same way. However, some respondents are of the opinion that the economy still faces many challenges and has a long way to go. The majority of the respondents felt that a change of mindset is not easy, while some of the young people were also struggling to come up with a perfect definition for entrepreneurial education. Some interviewees felt that entrepreneurship not only takes mindset into account, but that the right attitude is an essential quality for success. This could help the Namibian economy if those with the right attitude are guided to start their own businesses. Spotting academically gifted students and taking them through a rigorous mentorship programme could also foster a culture of entrepreneurship in Namibia. The interviewees also pointed out that the colonial past makes it difficult for them to live out entrepreneurship, especially those in rural remote Namibia. Some interviewees felt some business owners to lack motivation when starting up their own business. The majority of the respondents felt that entrepreneurship is not well promoted in Namibia. The way in which Namibians interpret entrepreneurship is different from the original perception of what entrepreneurship for a developing economy should entail, and many people in Namibia feel that starting a business is a viable option, but do not know how to start one. This will require a redesign of strategies and remedial ideas for future success. The next section of this chapter will look at conclusions, recommendations and the way forward for Namibia.

1.7 Conclusions, recommendations and the way forward

This chapter explored the role of entrepreneurial education in Namibia. It can be concluded that Namibians have a strong will in terms of entrepreneurial education, but the actual implementation of relevant programmes remains a challenge for the economy. It is clear from this chapter that entrepreneurship should be promoted on a much larger scale, and more extensively, in order to reach communities in Namibia. Youths should be exposed to business settings, to help them develop and foster the right attitude in order to develop entrepreneurial skills abilities and skills. A constant and deliberate effort should be made to educate Namibians more in entrepreneurship, and this can be done by taking the following points into consideration:

- Young pupils, starting from primary school, should be exposed to business concepts in order to develop the right mindset (skills and competencies to develop better).
- Successful integration of entrepreneurial education will also require patience and respect from the various ethnic groups who exist in Namibia.
- The theoretical components in the education curriculum should be balanced with practical work to develop competencies that will stimulate the entrepreneur.
- A Namibian who is already in business should be mentored to perform to the best of their ability and try to develop some competencies.

- Institutions of higher learning such as the University of Namibia, who offer courses in entrepreneurship, should help with convincing the nation that a mindset change is needed and the conditions need to be fulfilled.

1.8 References

1. Amukugo, E.M. (1993). *Education and Politics in Namibia: Past Trends and Future Prospects.* Cape Town. Gamsberg Macmillan Publishers.
2. April, W.I. (2009). *An Exploration of Entrepreneurship Potential amongst Namibian Youth: The Arandis Village.* PhD Thesis.
3. Brockhaus, R.H, Hills, G.E, Klandt, H. & Welsch, P. (2001). *Entrepreneurship Education: A Global View.* Aldershot: Ashgate Publishing.
4. Freire, P. (1995). *Pedagogy of the Oppressed. Reliving Pedagogy of the Oppressed.* New York: Continuum.
5. NIED. (2006). *Draft Syllabus of Entrepreneurship. Junior Secondary Phase.* Windhoek: Ministry of Education.
6. Timmons, J.A. (1988). *The Entrepreneurial Mind.* Andover, MA.: Brick House Publishing.

Chapter 2 Entrepreneurship Education for Women in Brazil — Challenges and Limits

by Elaine da Silveira Leite [1]

2.1 Introduction

A brief socioeconomic literature review, approaching economic, political and social analyses, reveals that Brazilian society has distinctive characteristics, in which the emergence of new economic agents and institutions are responsible for disseminating financial activities and entrepreneur practices in the country. The Brazilian financial market has developed several institutions to create a stable environment encouraging savings and investment from the majority of the population who are unable, unfamiliar with or were marginalized by the financial system.

It is possible to observe a serious of actions that were important for the development of the Brazilian economic scenario; and, it is also significant highlighted that this events were particularly emphasized in Brazilian media as being essential for economic growth. These included some procedures about providing new laws for corporations; offering protection for minority shareholders [2] - ; strengthening of Securities and Exchange Commission of Brazil, whose activities were restructured to support financial market development [3] - ; establishing benefits for companies that adopt the corporate governance practices launched by the Brazilian Development Bank [4] - ; and the creation of a capital market plan [5] - to guarantee the sustainability of the stock market. These recent events have brought security and ensured the creditability of the Brazilian financial market [6] - .

1. Federal University of Pelotas, Brazil
2. Data taken from: Adriana Dias, "Impactos positivos da nova lei das Sociedades Anônimas". Empreendedor. 15 Fev. 2008. Web. 10 Aug. 2009. <http://www.empreendedor.com.br/codigo=6596>
3. Data taken from: "FIDC: novas instruções da CVM devem trazer mais proteção ao investidor." Administradores. 12 Dec. 2006. Web. 10 Aug. 2009. <http://www.administradores.com.br/informe-se/informativo/fidc-novas-instrucoes-da-cvm-devem-trazer-mais-protecao-ao-investidor/8663/>
4. Data taken from: Catherine Vieira. "Os pioneiros da governança corporativa".Valor Econômico 29 Jun. 2004. Web. 10 Aug. 2009. <Http://www.lavca.org/lavca/allpress.nsf/0/966BC1542A814BDA86256EC6001EF760>
5. Data taken from: "Plano Diretor do Mercado de Capitais, o que muda para o investidor?" Portal Acionista. 10 Aug. 2009. Web. 10 Aug. 2009. <http:// www.acionista.com.br/dep_tecnico/070809_plano_diretor.htm>
6. It is important to mention Apolinárioet al. (2002) who states that the Brazilian government has adopted new strategies to make the national stock market stronger. The "desestatização", which has been observed for the last years by selling government's stocks from the two biggest Brazilian companies, Petrobras and the Companhia Vale do Rio Doce, represents the last stage of privatization process, which was initiated in 1997. This process is called "Stock Market Democratization". The success in moving funds from FGTS (Time Service Warranty Funds) to Petrobras Privatization Mutual Funds (FMP) made Brazilians' interest in investing their money into the FMPCVRD increase greatly, causing the biggest stock sale operation that has ever happened in Brazil.

Therefore, in April 2008, Brazil was classified as investment grade. It suggests that the country was regarded as having low risk of default and the nation is safe to receive investment [7] - . Consequently, the news affected the stock market and its index registered a new record score [8] - . It is also important to mention that Brazil also received substantial investment by foreign investors, as a consequence of the world attention focused on the BRIC's (Brazil, Russia, India and China) [9] - .

At least, Brazil symbolically won a great position in the international scenario and it is seen as a virtuous economic, political and legal environment. In this scenario, new agents emerged; they are considered financial intermediaries that entice ordinary people to became entrepreneur and encourage them to the finance field through different activities such as production of books, lectures and coaches. In this sense, it is attractive to present theses intermediates and their activities, because this makes it possible to understand how some actors are able to bring individuals into new economic practices.

The Brazilian economy context allowed the emergence of new actors. They are moral entrepreneurs of finance, educating on ways to invest honestly to achieve economic success, even during times of crisis. By capitalizing on volatility and uncertainty, they educate how instability can be the best time for the development of economic skills.

The expansion of this culture of investment is popularized and connected with models of self-help. This phenomenon has been consolidated into a new model of society that supports the growth of the entrepreneur and financial practices in Brazil and it legitimatizes personal economic activities.

This paper presents some recent literature on aspiring female entrepreneurs in order to argue about the social (re)signification that relates the role of women in family and society, approaching the transformation of evaluative concepts that surround the socio-economic life of women through books and websites that encourages entrepreneurship and economic decision practices to reach financial independence.

2.2 State and new economic practices

The debate about the role of the State and the economy in Brazil led to a series of studies, mainly from the 1980s, and it continues at present, especially about the state's role such as regulation and deregulation issues (Evans, 1995 [10]). Overall, the 1980s were characterized by a neo-conservative wave and its proposal of a minimal state. In 1990s, when the neoliberal proposal became less acceptable, the movement toward reform, or more specifically, the state reconstruction began to be a dominant

7. Data taken from: Claudia Violante, "Após grau de investimento, Bovespa bate recorde histórico". Agência Estado, 30 Apr. 2008: Economic Section. Print.
8. (Bovespa) Stock Exchange Index. Data taken from: Bovespa. 10 May 2008. Web. 10 Aug. 2009 <http://www.bmfbovespa.com.br/indices>
9. Data taken from: Anne Warth and Francisco Carlos de Assis, "Brasil é o 10º em ranking mundial de investimento estrangeiro." Agência Estado 17 Sep. 2009. Web. 10 Nov. 2009. <http://www.estadao.com.br/noticias/economia,brasil-e-o-10-em-ranking-mundial-de-investimento-estrangeiro,436642,0.htm>
10. Evans, Peter. Embedded Autonomy. States & Industrial Transformation. New Jersey: Princeton University, 1995. Print.

program (Bresser-Pereira, 1997 [11]). According to Bresser-Pereira and Grau (1999), the globalization process from the 1990s also required new methods of more efficient public administration; consequently, it increased the importance of new actors to implement social services that was guaranteed by the State.

At this same time, the State was seen as inefficient and corrupt, in which political and economic reforms were being discussed to change this scenario. However, this situation created a new dynamic, which provided the rise of new agents and organizations, for example, the growth of non-governmental organization (NGOs) and self-help groups that were concerned about bringing social and economic development to Brazilian nation (Bresser-Pereira; Grau, 1999 [12]).

These developments help us understand not only the reform of the State but also the development of the Brazilian financial market and the emergence of corporate governance issues in Brazil (Grün, 2003). Corporate governance, which is shaped by the financial sphere, appeared as a requirement for transparency via society, emerging as a criticism of the Brazilian bureaucratic model. The corporate governance movement was supported during the Fernando Henrique Cardoso government (1995-2002) and was tied to the privatization issues, because talking about transparency was essential to warm up the capital market and to attract investors. The government needed to be transparent to increase investors' confidence in the privatization process, which means that the government was required to adopt corporate governance to be perceived as transparent institution (Grün, 2003).

Carvalho (2002) [13] argues that it is possible to observe modifications of institutional investor's attitudes during the Fernando Henrique Cardoso government. As a result, important facts emerge, such as, the internationalization of the Brazilian capital market, the increasing number of companies accessing international market through American Depositary Receipt (ADR) [14] - ; the opening of the financial system for multinational institutions, and the increasing importance of foreign investors in the domestic stock market.

In 2002, the principal candidate for the Presidency, Luiz Inácio Lula da Silva, who represents the left and unionism, went to Bovespa (the principal stock exchange in Brazil). At that time, he wanted to demonstrate adherence to economic and corporate governance practices established in the financial market. As a symbolic approach, it is possible to argue that corporate governance has gained huge attention in the nation (Grün, 2003).

It is important to highlight, according to Sá (2003), that the corporate governance discourse is associated with economic progress, and that the financial actors claim that it is through the economic growth that Brazilian society will achieve social development. In general, social and economic development became to be seen as part of the same political approach.

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11. Bresser-Pereira, L. C. "State Reform in the 1990s: Logic and Control Mechanisms." In: Institutions and the role of the State. Cheltenham: Edward Elgar, 1 (1997): 175-219.
12. Bresser-Pereira, L. C. and Grau, N. C. "Entre o Estado e o Mercado: o Público Não Estatal." In: O Público Não-Estatal na Reforma do Estado. Rio de Janeiro: Editora FGV, (1999): 15-48.
13. Carvalho, A. G. "Governança Corporativa no Brasil em Perspectiva." Revista de Administração de Empresas. 37 (2002): 19-32.
14. Datataken from: "International Investing: get the facts". Securities and Exchange Commission.Divisionof Corporation Finance.Web. 10 Dec. 2009.<http://www.sec.gov/pdf/ininvest.pdf>

Therefore, corporate governance becomes a great solution for Brazilian society. It is recognized not only as a neoliberal prescription to solve the problem of companies' capitalization, but also as a means to enlarge both financial markets, and the Brazilian economy and social field (Grün, 2004).

In this sense, Brazil, like other emerging nations, is experiencing rapid financialization. This process is shaped by financial changes in the global financial market and involves restructuring of the country's financial organization through privatization, fiscal and monetary reform and the creation of new programs and institutions that encourage economic growth and popular investment (Grün, 2009). Financialization includes not only financial intermediaries but also self-help deals (Leite, 2012 [15]).

The financialization processes is formed by an interesting dynamic in Brazil, in which corporate governance practices gain significance in the context of the critique of the inefficient state. Here, it is possible to observe the rise of new economic actors that appeared as a solution to change the "uncertainty" of the economic and political scenarios.

Thus, the pathway of corporate governance, which goes through the economic and political issues to the capital market in Brazil, opens a new way to understand how actors try to change the traditional perception of the market through their symbolic strategies (Grün, 2007). Moreover, regarding the popularization of financial market issues, the Brazilian state is watching its expansion, but to some extent, without control over the situation.

At the same time, that the financial market is being reshaped, it is possible to notice the rise of personal finance and entrepreneurial discourses that it is linked to self-help schemes in Brazil. An interesting evidenece of this scenario comes from the bookstores' shelves that are filled with books and releases that deal with money and financial advices.

McGee (2005) [16] explains that in a period of declining security, there is no surprise if one finds a marked increase in the number of self-help titles. In this way, McGee emphasizes how the promise of self-help can lead individuals into a new sort of enslavement, into a cycle where the self is not improved but endlessly belabored.

Simultaneously, it allocates to the individual sphere the need to rely on private financing, rather than relying on the government. It formed the basis for the development of a new way of thinking in Brazil, the stimulus to economic growth by individuals through the ideals of self-help, that means – "if success is solely the result of one's own efforts, then the responsibility for any failure must necessarily be individual shortcomings or weaknesses" (McGee, 2005 [17]:13). This movement seeks to reach the general population, it is not restricted to a portion of society able to innovate, save and invest in the markets.

15. LEITE, E. S. Reconversão de habitus: o advento do ideário de investimento no Brasil. Tese defendida no Programa de Pós-Graduação em Sociologia – UFSCar, 2012.
16. McGee, M. Self-Help, Inc.: Makeover Culture in American Life. London: Oxford University Press, 2005. Print.
17. McGee, M. Self-Help, Inc.: Makeover Culture in American Life. London: Oxford University Press, 2005. Print.

2.3 Interlocking: Entrepreneur, personal finance and women

In Brazil, Paula and Wood Jr. (2003) [18] highlight that the first signs of demand for personal finance issues were noted after the release of the books: *Your Financial Future* [19] - and *Rich Dad, Poor Dad*.

Among the list of publications related to personal finance, there are several books directed to women, for example, "Rich Woman – the investment guide for Women". The formula she uses is her "husband's idea" – he is the author of *Rich Dad, Poor Dad*. She employs her own history of life to teach how to be financially independent. Other illustration is the book: *Normal Girls Go Shopping; Expert Girls Go to the Stock Market* written by Brazilian authors –; they advertise – "You do not know, but you were made to invest". The authors focus on how women are educated to hate money [20] - . In general, the advices for women emphasize that women do not enrich because they focus on needs of others rather than on themselves. Consequently, these facts prevent women from becoming independent.

These books follow a model that structures a kind of "cultural guide", in which enhances questions about conspicuous consumption, biological and social women's periods like – career, marriage, children, divorce, boyfriend, pregnancy, etc. By the way, it is important to observe that they emphasize the quest for financial independence, but highlight issues that lead to the idea of housekeeping and family.

The book titled "Smart woman: (...) makes investments" [21] - is a typical example. The narrative focus on issues related to career and indicated some steps to achieve financial independence, but it also highlighted that women could not forget how to be a good mother and a respectable housewife. The author emphasizes the needed for women to think of theirselves, but also points to their traditional role in family.

In general, these publications also deal with traditional housekeeping like shopping, caring children and family. These subjects appeared associated with issues like financial planning, credit cards, and investments as guidelines to motivate them to set goals and to manage time, money and other resources as central entrepreneurship skills to achieve financial independence.

In this sense, several reports about the increasing number of women participation in markets and their relationship with money were found in a range of economic Brazilian newspaper [22] - . Some reports mention it as a new phenomenon that were being occurred, mostly in the upper middle classes – it shows that some women left their professional life to manage the family's assets. As presented in the quote below:

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18. Paula, A. P. P. & Wood T. Jr. "Pop-Management: Contos de Paixão, Lucro e Poder." Encontro de Estudos Organizacionais. 9. 24 (2003): 39-51. Print.
19. Free translation made by the author.
20. Ibid.
21. Ibid.
22. Data taken from: Emcincoanos, número de mulheresnabolsacresceumais de setevezes. Patricia Alves. Portal InfoMoney. 07/08.

> *(...) she is graduated in marketing management. Main Occupation "home broker." That's how she defines herself. Three years ago, she started managing the family financial assets. She was encouraged by her husband, a mechanical engineer who works in the area of power generation. She attended a seminar of the "Women in Action," realized by Bovespa. Since then, she has managed the couple's investments. She is happy, because she is watching the multiplication of their money* [23] - .

In this scenario, the São Paulo Stock Exchange leads a program directed to female entrepreneurs – it is called "Women in action" (2003). The project was designed to give women the step-by-step guidance to learn about business plan. It also elucidates demands about budget skills, and presents advices about financial options and requirements.

This fact is clear more evident, when it focus on Sebrae (Brazilian government agency that provides support to micro and small enterprises) that encourages women of all social classes to became entrepreneur. For example, the "Yearbook of Women Entrepreneurs and Workers in Micro and Small Businesses" endorses that investigators analyzed gender profiles in small businesses from 2001 to 2011 and they reveal that female entrepreneurs in the country grew by 21.4% in this period (Stewart, 2013) [24] - . In the yearbook, a technical Director emphasizes that:

> *As business women, they can better reconcile their work with their obligations to take care of their homes and their children. Nearly half of these women are solely responsible for the education of their children, and that doesn't stop them from starting a business with dedication.* [25] -

At present, it is notable the spread of entrepreneurship education as a subject in the curriculum of all educational levels, from preschool to high school. At the same time, it is important to mention the expansion of MBA´s that focus on business management professionals in the country. However, Sebrae, since the early 1990s stands out as the main institution related to the promotion of entrepreneurship culture in Brazil.

It is worth to emphasize that, in the beginning of 2014´s, was inaugurated the Sebrae Business School (São Paulo) the first public educational institution dedicated to offer courses about entrepreneurship at technical and graduation levels [26] - .

Thus, entrepreneurship themes in schools and universities is a recent topic. There are no records of specific courses directed to women in these institutions. Besides the acting of Sebrae, regarding to entrepreneurship education of women, there are

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23. *Data taken from: "Público feminino é arma da bolsa parareterpessoafísica". Valor Econômico, 26/03/2009.Free translation made by the author.*
24. Data taken form: Women Entrepreneurs are on the Rise, Making it Work in Brazil. By Emily Stewart. October 15, 2013. In:http://pulsosocial.com/en/2013/10/15/women-entrepreneurs-are-on-the-rise-making-it-work-in-brazil/. Access: July, 2014.
25. *Ibid.*
26. Data taken from: http://www.sebraesp.com.br/index.php/239-uncategorised/institucional/escola-de-negocios. Access: August, 2014.

programs sponsored by the federal government and nonprofit institutions. In this case, it is noteworthy to highlight some projects in Brazil.

On the one hand, the “Mulheres Mil” is a program inserted into the set of public policy priorities of the federal government, in which aims to stimulate equity, access to education, and gender equality, especially, in the Northeast and North regions. Under three axes – education, citizenship and sustainable development – the program seeks to provide social inclusion focused on autonomy and creation of alternatives workplace to improve the quality of their lives and their communities [27] - .

Another program is the “10,000 Women” promoted by Fundação Getulio Vargas and IE Business School, launched in 2008, is a philanthropic initiative that seeks to bring business education for women and to improve the quality of their learning. [28] - .

On the other hand, there are also initiatives from nonprofits associations, like the Association of Women Entrepreneurs (Brasilia) that seek to ensure the empowerment of women, as well as, to promote opportunities for the social and cultural equality between men and women. It is important to note that the courses offered range from computer, hardware, and telemarketing to courses like home services and caregiver for the elderly sector [29] - .

In general, the stimulus to be an entrepreneur, proclaimed by the “gurus” and government institutions, emphasizes the importance of planning a career path that involves being a businessperson and financially independent. That means, women could be an autonomous worker, and they also could work in their own home; therefore, it is possible being a respectable mother and a virtuous housewife – “Generally, women are better able to achieve a balance between their personal and professional lives than men. In fact, many women go the entrepreneurial path in order to have more flexibility with their time” – elucidates a technical Director of Dieese in the reporter (Stewart, 2013).

However, these discourses obscure the underworld of informal and precarious labor, affecting in particular the lower classes.This phenomenon reinforces the traditional role of women and it supports the fact that they are working longer and harder than ever before. Far from the idea that women work for a salary or for their independence, most women work because they needed it.

These financial consultants have been infiltrated through different sectors of society, forming a particular dynamic. This movement has resonance in Brazilian society, because it resets the social roles in their place, that is, the women are ‘backing home’ to take care of families’ money (Leite, 2012 [30]).

The arguments employed by such consultants massively reinforce the needed for entrepreneurial motivation to achieve financial independence. However, such arguments appear strictly related to issues such as marriage, home, family, children, quality of life, etc. The advisors also report some financial family problems, and they

27. Data taken from: http://mulheresmil.mec.gov.br/index.php. Access: August, 2014.
28. Data taken from: http://www.10000mulheres.com.br/. Access: August, 2014.
29. Data taken from: http://www.amedf.org.br/. Access: August, 2014.
30. LEITE, E. S. Reconversão de habitus: o advento do ideário de investimento no Brasil. Tese defendida no Programa de Pós-Graduação em Sociologia – UFSCar, 2012.

consider a lack of financial understanding and poor money management skills that were not coordinated by the women.

These events indicate an interesting sociological phenomenon, in which the woman comes out of the labor market and back into the domestic sphere, that means, the women are coming back to their traditionally safe environment – the *oikos*.

Whereas, the “housekeepingt” is the role that historically was part of the women’s activities, but, in this case, the female figure is seen not as a house manager, but as a kind of a home “investor”. Apparently, this new phenomenon places the woman in her place of origin: the home.

We are watching a phenomenon that involves issues relating to the family; where the “cultural guide” preaches that women have to take care of their home and children, not only financially but also in a traditional way. The relationship between financial world and the role of wife/mother can also be easily found in books that encourages entrepreneurship attitudes in Brazil.

By comparing books considered bestsellers in the United States with which are translated in Brazil, it is possible to note that the advices directed to women given by Brazilian intermediaries are not so aggressive related to some suggestions given by one of the most popular financial counselors in the United States.

The American financial guru uses aggressive and hostile language to give financial advices and to talk about money to the viewers´ of her show. Overall, her aggressive style and the visibility she gives to the fact that she is lesbian apparently would not work in Brazilian society. After more than 10 years of success in the United States, there are no translations of her books to Portuguese. However, there is an adaptation of her financial guide “Women and Money,” in 2009, realized by the principal financial advisor in Brazil.

In the preface of “Women and Money,” the Brazilian author addresses that he agrees with the simple way she presents complex subjects such as finance for the public. However, he emphasizes that some opinions and suggestions made by Suze are clearly different from his arguments.

On the other hand, *“Rich Dad, Pood Dad´s”*, who also is one of the best-known American financial book – the author has a different attitude. His principles follows the form of a story, which tells the Rich Dad’s path to get rich.

Thus, it is necessary to point out that the “adaptation”of ideas is a great evidence that outlines the “cultural guide,” which conduct and attract individuals to the financial universe in which issues such as family, money, and wealth express a peculiarity of Brazilian society.

From the exposure of these facts, it is possible to argue that the construction of this new kind of economic figure is tied to the ideas that lead to family issues in Brazil, which becomes an apparatus for stability and security. This “new figure” annihilates the negative aspects of the entrepreneur, if he is greedy and individualistic, the new example should worry in accumulating wealth to enjoy and ensure your family’s future. In other words, the expansion of the financial and entrepreneur practices is supported by Christian ideals about the strengthening of the family ties, which focus on the need for savings.

The appeals for the individuals to take control of their own financial independence symbolically legitimize foreign economic practices that was seen before as a negative skills. Thus, the financial advisors help to demystify the capital market, which gradually become a not "hazard" form of investment in Brazilian society.

There is a mechanism that operates both in the objective and in subjective spheres of society, in which sets up the legitimacy of the financial world in the country. The "new" economic culture that have been created is surrounded by family ethics and operates as an apparatus capable of changing social behaviors and sensitivities, ie, the *habitus* (Bourdieu, 1997 [31]), which, in turn, reflects social rearrangements and redirects the roles of individuals and family in society.

The advices instill in the public receptor a new perception about the financial world, leading individuals to believe that acting "economically" is a moral action. There is a moral influence being created to perform individual's actions that transforms attitudes and practices. Personal finance promoters have created a new social space, supported by performances, miraculous calculations, magic and science. Therefore, the idea about happiness and satisfaction is associated with the possession of money (Zelizer, 1994 [32]; Simmel, 1990 [33]).

> *The tremendous importance of money for understanding the basic motives of life lies in the fact that money embodies and sublimates the practical relation of man to the objects of his will, his power and his impotence; one might say, paradoxically, that man is an indirect being. I am here concerned with the relation of money to the totality of human life only in so far as it illuminates our immediate problem, which is to comprehend the nature of money through the internal and external relationships that find their expression, their means or their effects in money (Simmel, 1990 [34]: 211).*

Historically, Donzelot (1986) [35] demonstrates the importance of savings for the advent of working class families as a practice of discipline individual unruly behavior. The rebirth of the questions that refer to a temperance movement reinforces the meaning of the familialism concept (Lenoir, 2003 [36]), which suggests thinking "family" as a category that is integrated to financial sphere as a natural institution.

For this author, the meaning of "family" is dynamic, because, historically, it has been changing with the emergence of economic models and new forms of political and social organization. According to Lenoir, the family cannot be regarded as a principle of evolution, but as a product of economic, political and social context, in which it is

31. Bourdieu, Pierre. "Le Champs Économique." Actes de la recherché en Sciences Sociales. 119 (1997): 15-57.
32. Zelizer, Viviana. The Social Meaning of Money. New York: Princeton, 1994.
33. Simmel, George. The Philosophy of Money. New York: Routledge, 1990.
34. *Simmel, George. The Philosophy of Money. New York: Routledge, 1990.*
35. Donzelot, J. A polícia das famílias. 2ª edição. Rio de Janeiro, editora Graal, 1986.
36. Lenoir, Remi. Généalogie de la morale familiale. Paris: Seuil, 2003.

possible to argue that the advance of financial and entrepreneurial practices also operates as a tool that "normalize" the routine of a family life – leading women to their traditional place.

It is noteworthy that other agents and institutions also contribute to strengthening the current ethics of the family as disciplinary rules of behavior (Foucault, 1994 [37]). For example, in Brazil, there is the "State", which formulates policies and programs of economic and social inclusion that values the family unit, and the Catholic Church, which carries out a campaign about the indissolubility of marriage, promoting ideas against the abortion, the homosexuality and the contraception, etc.

Similarly, it is possible to observe the expansion of neopentecostal churches, which strengthen the family entity as a synonym for professional and economic success; they try to establish a new meaning for "money", introducing economic topics such as entrepreneurship, business, personal finance, among others. At the Universal Church of the Kingdom of God, according to Mariano, the individual with financial problems are induced to participate in the ritual of prosperity, and, if he pay the tithe, he will receive pastoral councils, prayers, exorcisms, and promises of incentives for self-employed (Mariano, 1999: 60).

In the same way, the individuals, are called by the personal financial promoters, to reflect about the budget and to start carrying out a new financial plan, and also they are incentivized to initiate an innovative business. These prosperity churches are symbolic associated with financial and entrepreneur intermediaries, because culturally they are promoting new attitudes regarding the financial and entrepreneurial life. In fact, there is a formation of a "cultural guide" that admit the versions of different agents and institutions that figure the social space; however, we are watching a cultural progress of the finance and entrepreneur ideas proposed by unthinkable characters surrounded by an optimism culture and familialism ethics.

This brief scenario shows a specific reality in Brazil, the apparent link between this sector and family issues illustrates a peculiarity, which supports, respectively, the rise of the financial intermediaries and the legitimacy of the investment and entrepreneurs practice as a "natural" phenomenon.

The logic employed as an argumentative "sermon" operates as a symbolic violence (Bourdieu, 1997 [38]), which induces the individual to strictly control their daily economic practices. People are influenced by biases existing in the financial field, so become an entrepreneur and accumulate wealth; it is part of a natural human condition. The magic that makes up the formulas presented by the consultants has been linked to family metaphors of the universe that are used to justify the financial world (Lakoff, 1996 [39]), while concepts such as investment, uncertainty, instability and risk are been part of the individuals and families daily lives.

This dynamic opens way to reflect about transfer the analysis focused on socioeconomic aspects to the cultural field, but this finding may indicate that we are facing the rise of a conservative society, in which a new "order of justice" has been

37. FOUCAULT, M. Dits et écrits. Paris: Gallimard, vol. IV, pp. 783-813, 1994.
38. Bourdieu, Pierre. "Le Champs Économique." Actes de la recherché en Sciences Sociales. 119 (1997): 15-57.
39. Lakoff, G. Moral politics: what conservatives know that liberals don't. Chicago: University of Chicago Press, 1996.

established in Brazil (Douglas, 1996 [40]; Grün, 1998 [41]). It is possible to observe the existence of an ideology that values the ethics of moral norms reinforced by economic inclusion of families disseminated by a variety of agents, which make up a sort of second nature, that is, a national habitus (Elias, 1986 [42]).

Gurus' performances help to instill in the public receptor a new perception about the financial world. According to Becker (1977), social norms are created by groups or individuals that are called "moral entrepreneurs." Therefore, these gurus are significant to spread new social values. They are "moral entrepreneurs" of financial and entrepreneurial education.

The books and contents analyzed try to educate and to bring items to be copied – this could transformer the social meanings given to people and social activities. The mechanism used by gurus transforms individual in their collective experience and thus it contributes to the (re) production of *habitus* (Bourdieu, 1997 [43]).

There is a moral influence being created to perform individuals that transforms attitudes and modes of action. Financial education promoters have created a new social space, supported by performances, miraculous calculations, magic and science. Therefore, the idea about happiness and satisfaction are connected to the possession of money (Zelizer, 1994 [44]; Simmel, 1990 [45]) and linked with the notion of heteronormative family.

"When personal finance becomes the way in which ordinary people are invited to participate in that large abstraction called the economy, a new set of signals are introduced as to how life is to be lived and what it is for" (Martin, 2002 [46]). The argument supported by Martin reinforces what happened in Brazil. The personal finance advice creates an "obsession" for making money that dominates lifestyle, personal ambitions and decisions.

Consequently, the risk becomes part of everyday life (Martin, 2002 [47]). The moral entrepreneurs also use the argument that, currently, people have no more security in daily life. In a period, where instability and unemployment worries the population, personal finance books show cases of business or professional success based on self-help schemes and family triumph.

2.4 Final considerations

In recent years, there has been a proliferation of articles and books heralding this supposed phenomenon. It illustrates the emergence of financial guides services directed to individuals and families in Brazil. In general, these specialists, considered

40. DOUGLAS, M. Thought styles: Critical essays on good taste. London:Sage, 1996.
41. Grün, Roberto. GRÜN, R. A Classe Média no mundo do Neoliberalismo. Tempo Social, São Paulo, v.10, n.1. pp. 143-163, 1998.
42. Elias, N. A Sociedade de Corte. Trad. Ana Maria Alves. Lisboa: Editorial Estampa, 1986.
43. Bourdieu, Pierre. "Le Champs Économique." Actes de la recherché en Sciences Sociales. 119 (1997): 15-57.
44. Zelizer, Viviana. The Social Meaning of Money. New York: Princeton, 1994.
45. Simmel, George. The Philosophy of Money. New York: Routledge, 1990.
46. Martin, Randy. Financialization of Daily Life. Philadelphia: Temple University, 2002. Print.
47. Martin, Randy. Financialization of Daily Life. Philadelphia: Temple University, 2002. Print.

"gurus", search for guiding individuals toward changes, related to entrepreneurial motivations and practices of risky investments. Currently, these gurus teach about new careers, how to succeed a new enterprise, how to make money; in this sense, they also provide some recommendations about savings and investments.

The most recent studies related to entrepreneurship and women take into consideration researches that focus on the problems they face, their managerial practices, and their skills for success and gender differences. Specifically, the interest in understanding women's entrepreneurial activities is a result of the importance they are gaining in the entrepreneurial sector as well as evidence that women efforts are been associated with being an entrepreneur, securing their financial independence without leaving their traditional role as mother and as housewife.

In this regard, the results show, in what extent, publications on entrepreneurship and personal finance focused on women "magically" standardizes feminists ideals linked to the notion of material wealth (money) and financial independence, at the same time, it is strictly associated with moral values that defines the "traditional" role of women.

These financial consultants have been infiltrated through different sectors of society, forming a particular dynamic, for example, they are called to give lectures in neopentecostal churches, in this sense, the priests also have transmitted financial thoughts 'religiously' to their believers. This movement has resonance in Brazilian society, because it resets the social roles in their place, that is, an important evidence a is that the women are 'backing home'.

By these evidences, this paper presented that entrepreneur issues are been embedded in Brazilian society. It constitutes a kind of "cultural guide" that addresses a moral topic, supporting the idea of personal and financial success. These speeches are embeddedness by an optimism culture that encourages individuals to take economic choices that were not considered as a moral practice before.

2.5 Notes

1. Data taken from: Adriana Dias, "Impactos positivos da nova lei das Sociedades Anônimas". Empreendedor. 15 Fev. 2008. Web. 10 Aug. 2009. <http://www.empreendedor.com.br/codigo=6596>
2. Data taken from: "FIDC: novas instruções da CVM devem trazer mais proteção ao investidor." Administradores. 12 Dec. 2006. Web. 10 Aug. 2009. <http://www.administradores.com.br/informe-se/informativo/fidc-novas-instrucoes-da-cvm-devem-trazer-mais-protecao-ao-investidor/8663/>
3. Data taken from: Catherine Vieira. "Os pioneiros da governança corporativa".Valor Econômico 29 Jun. 2004. Web. 10 Aug. 2009. <Http://www.lavca.org/lavca/allpress.nsf/0/966BC1542A814BDA86256EC6001EF760 (http://www.lavca.org/lavca/allpress.nsf/0/966BC1542A814BDA86256EC6001EF760)>
4. Data taken from: "Plano Diretor do Mercado de Capitais, o que muda para o investidor?" Portal Acionista. 10 Aug. 2009. Web. 10 Aug. 2009. <http:// www.

acionista.com.br/dep_tecnico/070809_plano_diretor.htm (http://www.acionista.com.br/dep_tecnico/070809_plano_diretor.htm)>

5. It is important to mention Apolinárioet al. (2002) who states that the Brazilian government has adopted new strategies to make the national stock market stronger. The "desestatização", which has been observed for the last years by selling government's stocks from the two biggest Brazilian companies, Petrobras and the Companhia Vale do Rio Doce, represents the last stage of privatization process, which was initiated in 1997. This process is called "Stock Market Democratization". The success in moving funds from FGTS (Time Service Warranty Funds) to Petrobras Privatization Mutual Funds (FMP) made Brazilians' interest in investing their money into the FMPCVRD increase greatly, causing the biggest stock sale operation that has ever happened in Brazil.
6. Data taken from: Claudia Violante, "Após grau de investimento, Bovespa bate recorde histórico". Agência Estado, 30 Apr. 2008: Economic Section. Print.
7. (Bovespa) Stock Exchange Index. Data taken from: Bovespa. 10 May 2008. Web. 10 Aug. 2009 <http://www.bmfbovespa.com.br/indices>
8. Data taken from: Anne Warth and Francisco Carlos de Assis, "Brasil é o 10º em ranking mundial de investimento estrangeiro." Agência Estado 17 Sep. 2009. Web. 10 Nov. 2009. <http://www.estadao.com.br/noticias/economia,brasil-e-o-10-em-ranking-mundial-de-investimento-estrangeiro,436642,0.htm>
9. Datataken from: "International Investing: get the facts". Securities and Exchange Commission.Divisionof Corporation Finance.Web. 10 Dec. 2009.<http://www.sec.gov/pdf/ininvest.pdf>
10. *Free translation made by the author.*
11. Ibid.
12. Ibid.
13. Data taken from: Emcincoanos, número de mulheresnabolsacresceumais de setevezes. Patricia Alves. Portal InfoMoney. 07/08.
14. Data taken from: "Público feminino é arma da bolsa parareterpessoafísica". Valor Econômico, 26/03/2009.Free translation made by the author.
15. Data taken form: Women Entrepreneurs are on the Rise, Making it Work in Brazil. By Emily Stewart. October 15, 2013. In:http://pulsosocial.com/en/2013/10/15/women-entrepreneurs-are-on-the-rise-making-it-work-in-brazil/. Access: July, 2014.
16. Ibid.
17. Data taken from: http://www.sebraesp.com.br/index.php/239-uncategorised/institucional/escola-de-negocios. Access: August, 2014.
18. Data taken from: http://mulheresmil.mec.gov.br/index.php. Access: August, 2014.
19. Data taken from: http://www.10000mulheres.com.br/. Access: August, 2014.
20. Data taken from: http://www.amedf.org.br/. Access: August, 2014.

2.6 References

1. Apolinário, A. Silva, A. R. Diniz, C. E. M. Ribeiro, E. P. Capistrano, E. O. "O Impacto do FGTS na Alavancagem do Mercado de Capitais Brasileiro." In: *XXII Encontro Nacional de Engenharia de Produção*. October, 2002
2. < http://www.abepro.org.br/biblioteca/ENEGEP2002_TR34_1217.pdf> Web.
3. Becker, Howard S. *Uma Teoria da Ação Coletiva*. Rio de Janeiro: Zahar, 1997.
4. Bourdieu, Pierre. "Le Champs Économique." *Actes de la recherché en Sciences Sociales*. 119 (1997): 15-57.
5. Bresser-Pereira, L. C. "State Reform in the 1990s: Logic and Control Mechanisms." In: *Institutions and the role of the State*. Cheltenham: Edward Elgar, 1 (1997): 175-219.
6. Bresser-Pereira, L. C. and Grau, N. C. "Entre o Estado e o Mercado: o Público Não Estatal." In: *O Público Não-Estatal na Reforma do Estado*. Rio de Janeiro: Editora FGV, (1999): 15-48.
7. Carvalho, A. G. "Governança Corporativa no Brasil em Perspectiva." *Revista de Administração de Empresas*. 37 (2002): 19-32.
8. Carruthers, B. G. & Espeland, W. N. *Money, Meaning and Morality*. American Behavioral Scientist, 41, 1384, 1998.
9. Crotty, J. "The Neoliberal Paradox: the Impact of Destructive Product Market Competition and Impatient Finance on Nonfinancial Corporations in the Neoliberal Era." *PERI Research Brief*. University of Massachusets, Amherst, 2003. Print.
10. Donzelot, J. *A polícia das famílias*. 2ª edição. Rio de Janeiro, editora Graal, 1986.
11. DOUGLAS, *M. Thought styles*: Critical essays on good taste. London:Sage, 1996.
12. Elias, N. *A Sociedade de Corte*. Trad. Ana Maria Alves. Lisboa: Editorial Estampa, 1986.
13. Erturk, I. Froud, J. Johal, S. Leaver, A. Williams, K. "The Democratisation of Finance? Promises, Outcomes, Conditions." *Review of International Political Economy* 14.4 (2007): 553-75.
14. Evans, Peter. *Embedded Autonomy. States & Industrial Transformation*. New Jersey: Princeton University, 1995. Print.
15. FOUCAULT, M. *Dits et écrits*. Paris: Gallimard, vol. IV, pp. 783-813, 1994.
16. Grün, Roberto. GRÜN, R. A Classe Média no mundo do Neoliberalismo. *Tempo Social*, São Paulo, v.10, n.1. pp. 143-163, 1998.
17. "Atores e Ações na Construção da Governança Corporativa Brasileira." *Revista Brasileira de Ciências Sociais*. 18 (2003): 139-161. Print.
18. "A Evolução Recente do Espaço Financeiro no Brasil e Alguns Reflexos na Cena Política." *Revista Brasileira de Ciências Sociais*. 47 (2004): 5-47.
19. "Decifra-me ou Te Devoro! As Finanças e a Sociedade Brasileira." *MANA*. 13 (2007): 381-410.
20. "A Crise, a Guerra Cultural e as Surpreendentes Transformações do Espaço Econômico Brasileiro em 2009". In: Colóquio Internacional- A internacionalização das ciências sociais francesas e a cooperação científica com o Brasil. *Working Paper*, 2009.

21. Harrington, Brooke. *Pop Finance: Investment Clubs and the New Investor Populism*. New Jersey: Princeton University, 2008.
22. Lakoff, G. *Moral politics*: what conservatives know that liberals don't. Chicago: University of Chicago Press, 1996.
23. LEITE, E. S. Reconversão de habitus: o advento do ideário de investimento no Brasil. Tese defendida no Programa de Pós-Graduação em Sociologia – UFSCar, 2012.
24. Lenoir, Remi. *Généalogie de la morale familiale*. Paris: Seuil, 2003.
25. Mariano, R. *Neopentecostais: sociologia do novo pentecostalismo no Brasil*. São
26. Paulo, Loyola, 1999.
27. Martin, Randy. *Financialization of Daily Life*. Philadelphia: Temple University, 2002. Print.
28. *McGee, M. Self-Help, Inc.: Makeover Culture in American Life*. London: Oxford University Press, 2005. Print.
29. Paula, A. P. P. & Wood T. Jr. "Pop-Management: Contos de Paixão, Lucro e Poder." *Encontro de Estudos Organizacionais*. 9. 24 (2003): 39-51. Print.
30. Preda, Alex. "The Rise of Popular Investor: Financial Knowledge and Investing in England and France, 1840-1880". *The Sociological Quartely*. 42 (2001): 205-232.
31. SÁ, G. A revolução cultural no mercado acionário. *Revista de Administração da USP*, São Paulo, v. 38, n. 2, p. 112–125, abr/maio/jun, 2003.
32. Simmel, George. *The Philosophy of Money*. New York: Routledge, 1990.
33. Stewart, Emily. Women Entrepreneurs are on the Rise, Making it Work in Brazil. In: http://pulsosocial.com/en/2013/10/15/women-entrepreneurs-are-on-the-rise-making-it-work-in-brazil/. October 15, 2013. Access: July, 2014.
34. Zelizer, Viviana. *The Social Meaning of Money*. New York: Princeton, 1994.
35. Weber, Max. A Bolsa. Lisboa: Relógio d'água, 1984.

Chapter 3 Entrepreneurship Education in China

by Weiming Li [1] ***and Chunyan Li*** [2]

3.1 Introduction

The current rise of entrepreneurship education in China adapts to the requirements of the construction of an innovation-oriented country and the development of high-quality education, itself. The significant influence of entrepreneurial activities on promoting the development of economics, the progress of science and technology, the creation of jobs, and the improvement of employment structures has been widely recognized by the community. The latest data show that in the entrepreneurship rankings of more than 60 countries and regions involved in a global entrepreneurship survey, China jumped from eleventh in 2002 to second in 2012 [3]. However, compared to this increase in active entrepreneurial activities, the development level of entrepreneurship education is not mature enough to meet the needs of entrepreneurial practice. The perfection of the entrepreneurship education system, therefore, is badly needed, and we must raise the level of entrepreneurship education, promoting the entrepreneurial qualities and abilities of university students. With the posting of “Several Opinions Proposed by the Ministry of Education on Improving the Overall Quality of Higher Education” in April 2012, the Ministry of Education made some clear and specific requirements, such as: “innovation and enterprise education should run through the whole process of personnel training”, “formulating the teaching basic requirements on innovation and entrepreneurship education in universities, developing the innovation and entrepreneurship education curriculum”, “vigorously carrying out the training of qualified teachers”, and “supporting students to engage in innovation and entrepreneurship training”. Strengthening innovation and entrepreneurship education will be one of the most important directions for higher education reform in the future, underlining the profound impact innovation and entrepreneurship education has on comprehensively improving the quality of higher education.

Entrepreneurship education in China did not start until the Ministry of Education initiated a pilot project of entrepreneurship education in April 2002 at nine universities, such as Tsinghua University, Beijing University of Aeronautics and Astronautics, and so on. Along with this initiative, Chinese universities have been

1. Hainan University, China
2. Hainan University, China
3. Feng YaHong. China become the most active global entrepreneurship area (EB/OL. http://cppcc.people.com.cn/BIG5/n/2013/ 0201/c34948-20401987.html.

promoting entrepreneurship education continuously for the past 10 years, trying to increase students' professional quality and entrepreneurial abilities. However, matters like curriculum design or teachers training are still prominent due to the short period of entrepreneurship education development that began from a low degree of development.

Taking 2002 as a starting point, and relying on investigations into Chinese entrepreneurship education in the past 10 years, this article will propose constructive ideas about perfecting the entrepreneurship education system of university students. Firstly, the paper will probe into the evolution of the aspects of educational forms, educational content, education models, and other areas of entrepreneurship education in the university, clarifying its development. Secondly, the paper will analyse the weaknesses of the curriculum system, teachers, education models, and supporting mechanism, pointing out the existing problems in universities' entrepreneurship education.

3.2 Evolution of university entrepreneurship education

Entrepreneurship education in Chinese universities began in the late 1990s. With increasingly engagement in entrepreneurial activities, innovation and entrepreneurship are urgently needed for economic and social development, and entrepreneurship education in Chinese universities is in continued progress to conform the practical requirement.

3.2.1 Pilot project from entrepreneurship competition to entrepreneurship education

The entrepreneurship education of university students started in the early 1980s in the United States, and was introduced to China in the form of entrepreneurship competition in the late 1990s. In May 1998, Tsinghua University and a Shanghai magazine successfully combined with several universities to hold the first Tsinghua Business Plan Competition and introduce it into domestic university campuses. With the sponsorship of the Communist Youth League, the China Association for Science and Technology, and the All-China Students Federation, the first "Challenge Cup" Chinese University Student Business Plan Competition was held by Tsinghua University in 1999, establishing its reputation. Nearly 400 works from more than 120 universities were brought together by the competition, initiating an upsurge of innovation and entrepreneurship throughout the universities nationwide, and having a broad impact on society.

Along with the nationwide spread of the business plan competition, university teaching activity had more and more to do with business plan competition counselling, entrepreneurship courses, and entrepreneurial talents training. The

Ministry of Education launched the pilot work of entrepreneurship education in April 2002, which at first had nine selected universities as follows: Tsinghua University, Beijing University of Aeronautics and Astronautics, Heilongjiang University, Shanghai Jiao Tong University, Nanjing University of Finance and Economics, Wuhan University, Xi'an Jiao Tong University, and North-western Polytechnic University. There is also exploration of entrepreneurship education suitable to our nation's situation, which is through an entrepreneurship education pilot to encourage universities to practice entrepreneurship education in various ways. As a result of an entrepreneurship education pilot of nearly 10 years' duration, Chinese universities have achieved the transition from active entrepreneurship competitions to initiative entrepreneurship education, as well as a beneficial exploration of the pattern of entrepreneurship education — not only forming diverse entrepreneurship educational schemes at typical pilot universities, but also forming distinctive ones at non-pilot universities, laying the foundation for the widespread use of entrepreneurship education throughout the country.

3.2.2 Shift from teacher-oriented training to student-oriented cultivation

Problems with faculty form the primary block to launching entrepreneurship education. From 27 October to 2 November in 2003, with the participation of 200 teachers from more than 100 universities, the first core teacher training of entrepreneurship education was held by the Minister of Education at the Ruxin Conference Center of Beijing University of Aeronautics and Astronautics, marking the start of entrepreneurship education teaching. In the next 10 years, the Business Management Training School of Beijing University of Aeronautics and Astronautics had held ten successful core teacher training of entrepreneurship education, which, at the beginning, included entrepreneurship education content, the curriculum of entrepreneurship, and how to help students change idea to business. In recent training courses, besides the content of entrepreneurship education, experience sharing through patterns, methods, technology, and innovative experiments in national universities is being more and more important. By the end of 2012, this training project had trained more than 1,300 core teachers for universities' entrepreneurship education.

Another important measure to promote teacher training is KAB (Know About Business Entrepreneurship Education), which has been pushed through international co-operation by the Communist Youth League and All-China Students Federation from August 2008. This is an attempt to develop Chinese entrepreneurship education, aiming to explore a Chinese entrepreneurship education that takes into account international experience. [4] By the end of March 2012, KAB (China) had trained 4,045 teachers from 1,008 universities, created university student KAB entrepreneurship club in 153 universities, founded university student KAB entrepreneurship education

4. KAB The National Promotion Office. KAB Entrepreneurship Education (China) project promotion planEB/OL. http://www.kab.org.cn/content/2011-09/15/content_4894576. html.

bases in 185 universities, had more than 300,000 university students participate in learning and practicing entrepreneurship [5], offered the course of "University Student KAB Entrepreneurship Foundation" at 850 universities such as Tsinghua University, China Youth University for Political Science, Zhejiang University, etc., published two sets of course textbooks for the preparation of teachers and students, and established four systems, as follows: course construction, teacher training, quality control, and interflow promotion.

In the wake of the run of core teacher training of entrepreneurship education and KAB (China), universities had, period by period, been increasing their reserves of teachers and the serious shortage of teachers has also been fixed, step by step. The shift from teacher-oriented training to student-oriented cultivation has been achieved due to the increase in the number of universities setting entrepreneurship courses and placing increased importance on entrepreneurship education in personnel training. For example, entrepreneurship education in Nankai University covers the entire learning process, and in order to offer diversity courses and entrepreneurship practices the students are divided into several types according to different goals and demand: such as entrepreneurship optional courses and simulation company training camps designed for students interested in learning about the knowledge and experiences of entrepreneurship, with a follow-up service provided for students attempting to apply entrepreneurship practice to apprenticeship, pair work, and so on.

3.2.3 Transition from classroom teaching to multiple teaching patterns

Closed classroom teaching is the most common method of traditional curriculum education in domestic universities, which can neither interest students nor improve their entrepreneurial skills if applied to entrepreneurship education directly. In the pilot process of entrepreneurship education, universities have begun to search for a variety of patterns, of which Wenzhou University and three pilot universities (including Tsinghua University, Renmin University of China, and Heilongjiang University) are selected as cases to illustrate this paper.

3.2.3.1 Tsinghua university: Deep focus

Relying on its strong research advantage and its promotion of entrepreneurship education to all students, Tsinghua University applied the entrepreneurship course system to the scenarios of technological innovation, technological commercialization, and high technology industry, concentrating on talent training that can increase an enterprise's capacity for independent innovation and international competitiveness. China Center for Entrepreneurial Research and technological innovation at Tsinghua

5. Zhang Kun. KAB The general director of the national promotion office Zhang Kun words of welcomeEB/OL. http://chuangye.cyol.com/content/2012-04/16/content_6068212.html.

University has more than 10 entrepreneurship courses. In addition, the Tsinghua-Berkeley Global Technology Entrepreneurship Program is built in partnership with Berkeley University of California, customizing courses and compulsory practical projects like “technological entrepreneurship”, “characteristic industry innovation and entrepreneurship”, “intellectual property management”, and so on, to help students get access to the leading technology enterprises in Zhongguancun and increase the capability of technology innovation. In addition, Tsinghua has also had a special Science and Technology Innovation Center with Science and Technology Innovation Fund to support students’ innovation activities and provide guidance and consultation.

3.2.3.2 Renmin university of China: Class extension

To improve the overall entrepreneurship ability and quality of students, Renmin University of China combined curriculum education with practice education through class extension. “The First Class” is the core class of teaching, with entrepreneurship courses like “entrepreneurial spirit”, “venture capital”, “entrepreneurship management”, and so on [6]. Courses are improving on several fronts, simultaneously: on the one hand, increasing the proportion of optional courses to broaden the students’ choices; on the other hand, advocating participatory teaching to develop students’ creative thinking. “The Second Class”, also known as the extracurricular practice class, is the extension of “The First Class”, encouraging students to join in various social practice activities and social welfare activities. Adopting entrepreneurship education lectures and competitive activities, entrepreneurial practice groups came into being in the form of projects and social organizations relying on professions.

3.2.3.3 Heilongjiang university: Entity experience

Relying on the construction of entrepreneurship practice base for university students, Heilongjiang University insisted on the combination of theory and practice in the pilot process and paid more attention to fostering students’ entrepreneurship practice ability. School sources were integrated in various ways to create conditions of entity entrepreneurial experience for students. For instance, scientific laboratories are open to students so that they can come into contact with advanced equipment and the newest scientific achievements, stimulating students’ entrepreneurial enthusiasm to use the leading technology. Beyond that, operational entities are also be founded to enhance students’ entrepreneurial practice experience: such as a technology services company, students’ supermarket, students’ bookstall, students’ tutor department, and so on. These entities are managed and operated by entrepreneurial practice students, letting them experience the entirety of entity operating and entrepreneurship under

6. Cao ShengLi, LeiJiaXiao, The need for innovative entrepreneurship education in Chinese Colleges and universities to Chinese (N). Chinese Education Newspaper, 2010-1-13.

the guidance of teachers, fostering their entrepreneurship spirit and entrepreneurship ability.

3.2.3.4 Wenzhou university: Position entrepreneurship

Driven by its training in position entrepreneurship sense and ability, Wenzhou University promotes entrepreneurship education successfully and has become a state level experimental area of entrepreneurship talent training outside the Ministry of Education's pilot universities. An entitative entrepreneurial talent training school has been founded, and a unique entrepreneurial talent training system has been structured, through the setting of classes like entrepreneurial pioneer class, manager developing class, enterprise successor class, and bi-major of entrepreneurship and management. There is also a 3-level linkage practice carrier of entrepreneurship education, consisting of a professional entrepreneurial studio, an entrepreneurship centre of school, and a pioneer park of university with the functions of transformation, enhancement, and incubation. In addition, with the integration of social sources with a local advantage, Wenzhou University combined with Wenzhou's chamber of commerce nationwide, constructing students' position entrepreneurship practice bases outside of the school with well-known group companies such as Red Dragonfly, AOKANG, CHINT, etc. [7] This enterprise has the aim of training students to become position entrepreneurial talents with the expertise to be highly entrepreneurial on three levels: position entrepreneurial sense training, position entrepreneurial ability training, and position entrepreneurial management practice.

3.2.4 Transition from knowledge impartment to quality-oriented education

At the beginning of domestic entrepreneurship education in universities, there was more concentration on the impartment of knowledge and theory to students and less focus on quality-oriented entrepreneurship education, leading to the shortage of entrepreneurial enthusiasm and practice ability among the majority of students, even after they had completed their education. In practice, universities changed this situation after exploring the different levels of their provision, shifting from knowledge impartment to quality-oriented education. For instance, pilot universities like Tsinghua University, Beijing University of Aeronautics and Astronautics, and Heilongjiang University comprehensively improved their students' entrepreneurial quality from practical skills, entrepreneurial spirit, and anti-risk ability, through the building of a pioneer park, establishing entrepreneurial funds, or offering entitative business platforms. Moreover, other universities are trying to integrate entrepreneurship education into quality-oriented education, such as Wenzhou University, which is

7. Huang ZhaoXin. The training mode of engineering talent fusion entrepreneurship education in local colleges and Universities (J). Research on Higher Engineering Education, 2012, (5).

attempting to integrate contemporary Zhejiang merchants, Wenzhou merchants, and students' entrepreneurial stories into the ideological and political theory course. This would not only improve the effectiveness of the ideological and political theory course, but also enrich and update quality-oriented educational content such as courses in philosophy, entrepreneurial spirit training, psychology, and business ethics.

3.3 The problem of entrepreneurship education in Chinese universities

In the development of entrepreneurship education in a decade of development in China, we have made some achievements. Compared with foreign comprehensive entrepreneurship education systems, however, there is still a big gap. This article will focus on the following points to elaborate why this should be the case.

3.3.1 The unreasonable design of curriculum

Teaching is the most basic form of education, and the higher education curriculum is the core of the teaching process. Through the analysis of a decade of entrepreneurship education in Chinese universities, the unreasonable design of the curriculum is mainly reflected in the following aspects.

3.3.1.1 The single course forms

The enterprise education must break the traditional teaching model, which is closed, and increase the proportion of the curriculum that addresses other forms of education: including entrepreneurship training and combat simulation, as well as practical experience in entrepreneurship. However, there are only a few schools that could do this at present, and many colleges in different places still regard the "classroom" as the core model, which is supplemented by a number of other activities. These courses cannot provide opportunities for students to participate in entrepreneurial practice actively, with the consequence that students cannot play a role effectively with initiative, enthusiasm, and innovation. As a result, it affects the effectiveness of entrepreneurship education.

3.3.1.2 The limited number of courses

Only 41 in 107 universities which are in the “211 project” offer entrepreneurship courses in China, while there are over 1,600 universities providing more than 2,200 entrepreneurial courses in America [8]. In contrast, the entrepreneurship courses provided by many universities in China are very limited, there is only one course called “Entrepreneurial Management” or “Graduate Employment and Entrepreneurial Guidance”. This makes it difficult to meet the needs of students who want to learn entrepreneurship theory and train in entrepreneurial skills.

3.3.1.3 The insufficient course subdivision

As the pioneer of entrepreneurship education in China, Beijing University of Aeronautics and Astronautics has set up the “School of Business Management Training”, offering three required courses in entrepreneurial management introduction, business communication, business practices, and five optional courses such as team training, development training, entrepreneurial market research, corporate and contract law, and business finances. However, compared with Stanford University (with 21 entrepreneurship courses) and the Berkeley University of California (with 23 entrepreneurship courses), this curriculum is still not large enough and lacks the support to develop different types and levels of students.

3.3.2 The shortage of qualified teachers

Entrepreneurship education is a comprehensive discipline. It requires teachers to have not only high quality professional and teaching skills, but also to have the ability to guide business practices. In the teachers’ construction of entrepreneurship education, our universities are facing a huge gap in demand [9]. The shortage of highly qualified teachers of entrepreneurship education has become the bottleneck that constrains the rapid development of entrepreneurship education.

3.3.2.1 A limited overall number of teachers

As an emerging discipline and curriculum, most training of universities’ entrepreneurial management teachers, especially teachers with the relevant

8. Yuan ZhiYong, China's current entrepreneurship education is worrying (N). Science and technology daily, 2010-4-2.
9. Huang ZhaoXin. Change the center of gravity of entrepreneurship education in Colleges and Universities—A case study in Wen Zhou University (J). Education Research, 2011, (10).

professional backgrounds, still cannot meet the needs of actual teaching in recent years.

3.3.2.2 Shortage of teaching skills

Most university teachers engaged in education enter work directly after graduating from school. Many teachers have instructed students after they had received relevant knowledge and training. The majority of the content is theoretical explanation, and the entrepreneurship education courses are academic. This cannot truly cultivate students' entrepreneurial awareness and ability.

3.3.2.3 Teachers' weak ability in practice guidance

In order to strengthen practical entrepreneurship education, most universities employed a group of entrepreneurs as visiting teachers. Although this arrangement was widely welcomed by students, limited lectures were lack of systematic. In addition, some of the entrepreneurs were so lacking in teaching experience that the effect was sometimes unsatisfactory.

3.3.3 Entrepreneurship education model needing to be perfected

Entrepreneurship education is a systematic project, which is engaged in economy and management, humanities, and other fields. To bring entrepreneurship education into the orbit of the university, there should be plans to perfect the entrepreneurship education model. However, the following problems still exist in entrepreneurship education of Chinese universities.

3.3.3.1 The lack of a systematic education model

Although more and more teachers in Chinese universities are engaged in entrepreneurship education, entrepreneurship has not yet been fully integrated into the national system of discipline construction and universities have to rely on teachers and teaching conditions in other disciplines in order to expand entrepreneurship education. This meant that the model was heavily influenced by traditional teaching models, leading to the lack of independence, pertinence, and an appropriate system of entrepreneurship educational patterns. Simultaneously, in addition to providing a small number of "entrepreneurial foundation" courses, most universities lacked a completely systematic entrepreneurship education curriculum, and instead classified entrepreneurship education as one category within career planning or careers guidance, rather than forming independent entrepreneurship courses and a systematic entrepreneurship curriculum group.

3.3.3.2 The lack of planning in education model

The promotion of entrepreneurship education should be planned and designed according to students' different levels and majors. Reasonable planning is reflected in systematic management, adopting certain entrepreneurship education models relating to educational goals, educational programs, educational implementation, and the evaluation of education. Entrepreneurship education in most universities cannot meet the above requirements: on the one hand, teacher training of entrepreneurship education and supporting policies in many universities is not yet fully in place, thus failing to meet different types of students' needs for entrepreneurship education; on the other hand, entrepreneurship education in many universities is still at the stage of observation, learning, and exploring, and cannot form stable and mature entrepreneurial education models, leading to a lack of long-term arrangement and design.

3.3.4 The unsound supporting mechanisms of entrepreneurship education

In recent years, entrepreneurship education in Chinese universities has been gradually developing, but many universities are concerned only with the entrepreneurial activities of a small group of people rather than the majority. Some universities prefer utilitarian exploration with quick results, hoping to rapidly achieve the effect of releasing employment pressure by entrepreneurship [10], leading to failed entrepreneurship education, supporting mechanisms such as matching funds mechanism, hatch mechanisms, policies safeguard mechanism, and hindering the development of entrepreneurship education of university students.

3.3.4.1 The shortage of funds to support entrepreneurship practice

Funds are the primary problem to be solved for entrepreneurship education in Chinese universities. At present, funds used to meet the need of students' entrepreneurship practices mainly consist of the entrepreneurial fund established by the government, the investment and risk fund established by private entrepreneurs,

10. Zhu XiaoJuan. Error analysis and countermeasures of entrepreneurship education in Colleges and Universities (J).Grope for Education, 2008, (10).

and the entrepreneurial fund established by schools, though the amount of most entrepreneurial funds are very limited. Even the entrepreneurial fund of Beijing University of Aeronautics and Astronautics that first started entrepreneurship education is three million (and the entrepreneurial fund of Fudan University is 10 million) its exemplary role is still limited. Universities are different from profit-making organizations, after all, and it is difficult for the majority of universities to spend large amounts of money on supporting students' entrepreneurial practice with the immature conditions of models such as alumni donations.

3.3.4.2 The unreasonable supporting of incubator space with entrepreneurship

The problem of incubator space has become a bottleneck, restricting the development of entrepreneurial practice teaching in Chinese universities. Incubator space can be the business practice field to simulate entrepreneurial aspects, and it can also be the simple laboratory space and an important place where students can enter the market; practice business activities; experience technological innovation, results transformation and commercial activities; achieve self-development; and run an enterprise. These all require universities to provide buildings, land, and hardware facilities as support. However, due to the limitation of funds, conditions, and emphasis on entrepreneurship, many universities failed to provide the necessary incubator space or the limited space, and have impeded the entrepreneurial practices of some students.

3.3.4.3 The inadequate policy security supporting entrepreneurship practice

The inadequate security supporting policies related with entrepreneurship education in Chinese universities has become another bottleneck, restricting the development of entrepreneurship education in Chinese universities. In the past ten years, although state and local governments have successively introduced a number of policies to encourage students to establish a business — such as proposing to allow students to remain on the school roll for entrepreneurship, relaxing the standards of loans of university student entrepreneurship, reducing and eliminating the revenue for university student entrepreneurship, and other many preferential policies — the genuine impact that these policies have on entrepreneurship education is very limited. On the one hand, most policies are encouraging university students to leave the campus and participate in entrepreneurship, but failed to support the entrepreneurship education of all students; on the other hand, most universities failed to develop specific safeguards or implement rules for providing ancillary support, thus affecting the effect of the implementation.

3.4 Conclusion

With increasingly active entrepreneurial activities in China, entrepreneurial contributions to the nation and local economies have become increasingly prominent, and the need to vigorously develop entrepreneurship education has been the general consensus among universities. Universities have explored entrepreneurship education adapted to the actual needs of our country since the Ministry of Education started the pilot project of entrepreneurship education. After decades of development, the audience and penetration of entrepreneurship education at universities is gradually increasing, and entrepreneurship education has also gradually changed from the early entrepreneurship competitions, teacher-oriented training, classroom teaching, and knowledge impartment into focusing on entrepreneurial ability training, raising quality, and diversified educational styles. Overall, entrepreneurship education at universities has experienced profound change in terms of educational forms, content, models, and so on. However, because of the short period and the undeveloped starting point of entrepreneurship education in Chinese universities, the present entrepreneurship education in Chinese universities still experiences problems like the unreasonable design of curricula, the shortage of qualified teachers, the single model of entrepreneurship education, and the lack of supporting mechanisms. In future development, to catch up with the pace of European and other developed countries', our country should further strengthen the construction of curriculum systems, entrepreneurship practice systems, faculty systems, educational model systems, and education evaluation systems. Through perfecting the entrepreneurship education system; further enhancing entrepreneurship education quality in Chinese universities; and cultivating high-level entrepreneurship talents with excellent creative thinking, entrepreneurial skills, and entrepreneurial practical ability, we can provide personnel security and intellectual support for implementing the development strategies of the innovation-oriented country.

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3.6 References

1. Feng YaHong. China become the most active global entrepreneurship area (EB/OL. http://cppcc.people.com.cn/BIG5/n/2013/ 0201/c34948-20401987.html (http://cppcc.people.com.cn/BIG5/n/2013/%200201/c34948-20401987.html).

2. KAB The National Promotion Office. KAB Entrepreneurship Education (China) project promotion planEB/OL. http://www.kab.org.cn/content/2011-09/15/content_4894576.html.
3. Zhang Kun. KAB The general director of the national promotion office Zhang Kun words of welcomeEB/OL. http://chuangye.cyol.com/content/2012-04/16/content_6068212.html.
4. Cao ShengLi, LeiJiaXiao, The need for innovative entrepreneurship education in Chinese Colleges and universities to Chinese (N). Chinese Education Newspaper, 2010-1-13.
5. Huang ZhaoXin. The training mode of engineering talent fusion entrepreneurship education in local colleges and Universities (J). Research on Higher Engineering Education, 2012, (5).
6. Yuan ZhiYong, China's current entrepreneurship education is worrying (N). Science and technology daily, 2010-4-2.
7. Huang ZhaoXin. Change the center of gravity of entrepreneurship education in Colleges and Universities—A case study in Wen Zhou University (J). Education Research, 2011, (10).
8. Zhu XiaoJuan. Error analysis and countermeasures of entrepreneurship education in Colleges and Universities (J).Grope for Education, 2008, (10).

Chapter 4 Entrepreneurship Education in Spain

by José C. Sánchez-García [1] and Brizeida Hernández-Sánchez [2]

4.1 Introduction

The study of entrepreneurship at all stages of education has been the subject of debate in the international sphere for many years. For some time now the European Union has been recommending its member States to carry out specific actions in order to foster an enterprising spirit among students. Currently some very important documents and recommendations for action are available, and they call on public authorities, business associations, schools, NGOs and other interested parties to promote entrepreneurship in education.

Although numerous studies have shown that business skills can be cultivated as early as the first stages of schooling and that there is a strong relation between an adequate educational offering in entrepreneurship and greater business activity, the truth is that the educational training in entrepreneurship offered is still poor in all countries, especially at the pre-university level [3, 4, 5, 6, 7, 8]

The aim of this chapter is to present concrete experiences of the practical application of entrepreneurship education in Spain and also to contribute to the dissemination and exchange of best practices in that country. In doing so we hope to offer a complete panorama of the current situation in Spain and help to design future actions. We also hope this serves as a stimulus to highlight all of these experiences.

1. Chair of Entrepreneurship, Salamanca University, Salamanca, Spain
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3. Sánchez, J.C., Aldana R., & Hernández B.R. (2013) Activities and programs of entrepreneurship education in Spain. American Journal of Entrepreneurship, 6(2), 73-93.
4. Eurodyce (2012). Entrepreneurship education at school in Europe: National Strategies, Curricula and Learning Outcomes
5. Dirección General de Política de la Pequeña y Mediana Empresa (2010). El fomento de la iniciativa emprendedora en el sistema educativo en España. Madrid
6. Sánchez, J.C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. International Entrepreneurship and Management Journal, (7), 239-254
7. Sánchez, J.C. (2013) The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. Journal of Small Business Management, 447-465
8. Global Entrepreneurship Monitor. GEM. http://www.gemconsortium.org (accesed 9 February 2015)

4.1.1 International framework: OECD and EU

At the European level, entrepreneurship education has mainly been approached from international agencies such as the Organization for Economic Cooperation and Development (OECD) and the European Union (EU), of which Spain is a member.

The OECD groups 30 States committed to promoting democracy and a market economy. It came into being in 1961 as the successor of the Organization for European Economic Cooperation (OEEC). The OECD compiles statistics and comparative economic data; it investigates social change and developmental patterns in areas such as commerce, the environment, agriculture and other sectors. In this way its member States can compare experiences and seek effective solutions to problems that are common to all. In the fields of education and employment, the OECD is not only working hard to ensure equal access to education but also fighting against social exclusion and unemployment.

Among the milestones in fostering an enterprising spirit we would highlight the Bologna Conference and the Istanbul Conference. On June 14-15, 2000, the 1st Ministerial Conference was held in Bologna to discuss "Enhancing the Competitiveness of SMEs in the Global Economy: Strategies and Policies," thus giving rise to the so-called Bologna Process on SME policies and entrepreneurship. The result of that conference was the Bologna Charter on SME Policies in 2000 [9], which proposed a consistent approach to SME policies. The Charter recommends that SME policies should take into account that the capability of these companies to manage innovation can be improved by: the dissemination of a culture of innovation, and the dissemination of technological and market information (e.g. by creating links between companies and educational systems).

The OECD Ministerial Conference held in Istanbul on June 3-5, 2004 to discuss "Promoting Entrepreneurship and Innovative SMEs in a Global Economy" examined how to promote entrepreneurship as a force for innovation, as well as the effects of globalization on SMEs and their ability to compete globally. The Ministerial Declaration from the Istanbul Conference regarding the promotion of innovative and internationally competitive SMEs reaffirms the need to support the development of the best public policies, including education, in order to foster the creation and rapid growth of innovative SMEs. It specifically proposes the development of a culture that favours entrepreneurship and recognizes successful businesses as well as the integration of entrepreneurship at all levels of the formal education system to facilitate this development. Formal education should be complemented with "learn by doing" activities and other practical workshops; this objective thus demands special attention to teacher training programs.

In regard to the European Union (EU), it should be pointed out that the treatment of entrepreneurship education in the European context has its origins in several different authorities. First, the European Commission, through the Directorate-General for

9. Sánchez, J.C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. International Entrepreneurship and Management Journal, (7), 239-254

Enterprise and Industry (DG Enterprise and Industry), which is in charge of promoting the agenda of entrepreneurial initiative, including in education, by means of political cooperation outside the structure of binding Community legislative instruments. This matter has also been addressed by the DG of Education and Culture and in the DG for Regional and Urban Policy. Entrepreneurship education has thus been subject to consideration in the different agencies of the Council of Europe, and in the mandatory European Council meetings every semester.

The reasons why entrepreneurship education has been approached from such different angles in the EU are obvious. The DG of Education and Culture seeks to have comparable qualifications in order to foster the free circulation of persons and workers. The DG for Enterprise and Industry seeks to promote a business mentality and enrich the productive fabric of Europe. Both of these touch on regional cohesion policies, addressed to eliminating the differences in economic development of the member States and their regions.

Table 4.1 provides a synthesis of the main milestones in the European debate about the introduction of entrepreneurship education, from the year 2000 with the launching of the Lisbon strategy until the present. More information can be found regarding some of the milestones and documents included in the Table as well as how entrepreneurship education is treated in the EU by consulting the corresponding section of the SME portal of the European Commission [10].

Document/ Event	Date	Area of Community Competence
Special Meeting of the European Council in Lisbon	Lisbon, June 2000	European Council
European Charter for Small Enterprises	Santa Maria da Feira, June 2000	EU General Affairs Council
European Forum. Training for Entrepreneurship	Nice, October, 2000	DG Enterprise and Industry (European Commission)

Table 4.1 Summary of the principal milestones in the European debate on entrepreneurship education (2000-2012)

10. European Commission.Enterprise and Industry. http://ec.europa.eu/enterprise/entrepreneurship/training_en.htm (accesed 6 February 2015)

Document/ Event	Date	Area of Community Competence
Communiqué "Education and Training"	2003	European Commission
Communiqué "Promoting an enterprising mind-set through education and training"	2006	European Commission
Conference "Entrepreneurship Education in Europe: Fostering Entrepreneurial Mindsets through Education and Learning" (Oslo Agenda)	Oslo, 2006	European Commission
Recommendation on key competences for permanent learning	2006	European Parliament and European Council
"Small Business Act" for Europe (SBA)	June 2008	European Commission
High level panels with representatives from the DGs of Education and Industry/ Economics of the Member States	March to October 2009	European Commission and Member States
	November, 2009	European Commission
	November, 2011	European Commission
	March, 2012	European Commission

Table 4.1 Summary of the principal milestones in the European debate on entrepreneurship education (2000-2012)

Document/ Event	Date	Area of Community Competence
	March, 2012	European Commission

Table 4.1 Summary of the principal milestones in the European debate on entrepreneurship education (2000-2012)

The debate in Europe began with the Special Meeting of the European Council in Lisbon, 2000 [11] to examine the development of entrepreneurship education in the EU agenda. The European Council meeting held on 23-24 March 2000 adopted the goal of making the EU's knowledge-based economy the most competitive and dynamic in the world, capable of sustainable economic growth, with more and better jobs and greater social cohesion, by 2010. As a means to achieving this objective it was agreed, among other things, that it was necessary to create the best possible environment for small businesses and entrepreneurship. The European Charter for Small Enterprises, also known as the Feira Charter [12], was subsequently adopted by the Council of General Affairs in Lisbon on 13 June 2000, and was approved at the European Council Meeting at Santa María da Feira, held on 19-20 June of that same year. The Charter recommends that member State governments should concentrate their strategic efforts around ten lines of action of capital importance for the context in which small businesses operate.

Among these lines of action, the most outstanding, in the first place, is education and learning for entrepreneurship, since in order to cultivate an enterprising spirit from an early age it is necessary to offer studies relating to the business sphere, mainly at the secondary and university levels, and foster both the business initiatives of young people and educational programmes addressed to small businesses.

In addition, the DG Enterprise and Industry of the European Commission, in conjunction with EU member States, organized the Niva Sophia Antipolis Forum in Training for Entrepreneurship in October 2000 [13], which brought together 350 representatives from a wide range of educational agencies and institutions and local development initiatives, national representatives and representatives from the business world and business organizations. Debates were structured around three workshops:

1. From school to university: what teaching and learning strategies, what action should be taken to encourage the entrepreneurial spirit in young people?
2. How can vocational training promote entrepreneurial initiative?

11. European Council. Council of the European Union. Presidency Conclusions. Lisbon European Council. http://consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/00100-r1.en0.htm (accesed 5 February 2015)
12. European Commission. Enterprise and Industry. Industrial competitiveness. http://ec.europa.eu/enterprise/enterprise_policy/charter/docs/charter_es.pdf (accesed 5 February 2015)
13. Direction Generale de Entreprises. DGE. http://www.industrie.gouv.fr/pratique/format/colloq/sp_coll-es.htm (accesed 5 February 2015)

3. New management practices and the development of “intrapreneurship”.

As a result of these workshop debates a report was written highlighting the following as educational goals, especially at the lower level (primary and secondary):

- Fostering pupils’ and students’ problem-solving capabilities. This should improve their ability to plan, make decisions and communicate, as well as making them more willing to take on responsibilities, i.e. the typical aspects of *management competencies*.
- Pupils and students should become ever more able to cooperate, network, take on new roles, etc. In other words, the aspects typical of *social competencies* should be fostered.
- Pupils and students should develop self-confidence and a motivation to act, learn to think critically and independently, and in particular, acquire the will and the ability to learn autonomously, that is, *personal competencies*.
- Pupils and students should acquire a thirst for creativity, proactivity, and personal initiative, as well as be prepared to face risks when their ideas are put into practice, that is, what are known as typical *enterprising qualities*.

Moreover, the IV Multiannual Programme Fostering Enterprise and Entrepreneurship 2001-2005, approved by Council Decision of 20 December 2000 [14], considers a compilation of reports of best practices following the methodology known as “best procedure”. This methodology consists of applying the Open Method of Coordination (OMC) –stipulated in the Lisbon Strategy as the work methodology - for the specific context of SME support policies [15].

Among the activities of the Multiannual Programme in question, the European Commission has published three reports on the introduction of entrepreneurship into non-university education, based on the aforementioned methodology of the exchange of best practices. Experts from all of the member States have contributed to identifying the best practices for these reports. The contact point in Spain for the designation of experts is the DGPYME (DG for SMEs), which has named the experts proposed by the Spanish Ministry of Education and Science in all these groups.

The contents of these reports can be summarized as follows:

1. The first report was published in 2002 under the title “Final Report of the Expert Group on Education and Learning for Entrepreneurship” [16] and deals with key aspects in fostering an enterprising spirit in Primary and Secondary Education: teacher training in entrepreneurship; cooperation between schools and universities, on the one hand, and between schools and businesses, on the other, addressed to promoting an entrepreneurial spirit; university chairs in entrepreneurship and the activities they organize. In addition, they came to a common agreement on the definition of entrepreneurship or “enterprising spirit” that contains two elements:

14. European Commission. Enterprise and Industry. Industrial Policy communication. http://ec.europa.eu/enterprise/enterprise_policy/mult_entr_programme/programme_2001_2005.htm (accesed 5 February 2015)
15. European Council. Council of the European Union. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/104692.pdf (accesed 5 February 2015)
16. European Commission. Enterprise and Industry. Industrial Policy communication http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/archives.htm (accesed 5 February 2015).

- A broad concept of education in enterprising attitudes and capabilities, which includes the development of certain personal qualities and does not focus directly on enterprise creation,
- A specific concept of education addressing enterprise creation.

The recommendations of the expert group included organizing a “European Day of Entrepreneurship Education” and the creation of permanent networks of experts on this matter; an enhancement of efforts to compile quantitative data, including the adoption of national action plans; better offers of specific training for teachers; greater promotion of existing international programmes based on learning through practice ; the creation of a national or regional framework for entrepreneurship education and the realization of political commitments.

1. Subsequently, in 2004 [17], based on the recommendations of the abovementioned report, a new document was published by the expert group on entrepreneurship education in primary and secondary education, in which they identified the national and regional policies capable of fostering concrete advances in entrepreneurship education in primary and secondary schools. In addition to analysing the national curriculum, the report compiled data and recommended putting support measures into effect at both the national and European level, and pointed out the importance of establishing stable links with the Administration, especially the Ministries of Education and Economy/Industry. The group’s report also calls on regional and local authorities, as well as business associations.
2. The third report, entitled “Final Report of the Expert Group on Mini-Companies in Secondary Education”, published in 2005 [18], focused on mini-companies as an effective methodology for disseminating an entrepreneurial mind-set. This project made an inventory of student business programmes in secondary schools, based on information contributed by the member States. It also adopted the term “mini-company” or “student company” as a *“pedagogical tool based on practical experience by means of running a complete enterprise project, and on interaction with the external environment (i.e. the business world or the local community)”* either with real cases or virtual simulations.

The expert group identified certain factors for the effectiveness and success of these student enterprises, such as contact with the local business community, the adaptability of these programmes to different types of education and students’enthusiasm or motivation. They also recommended that these mini-companies (also known as student companies) should be present in educational systems. More specifically, public authorities were recommended to:

- develop a general strategy for teaching entrepreneurship in schools;
- establish permanent cooperation among the different ministries, business associations, NGOs, educational institutions and municipalities in order to foster activities based on the student company methodology;

17. European Commission. Enterprise and Industry. Industrial Policy communication. Training Education. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/primsecedu.htm (accesed 6 February 2015)
18. European Commission. Enterprise and Industry. Entrepreneurship. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/minicomp.htm (accesed 6 February 2015)

- approve and actively promote student companies in schools and among heads and teachers;
- guarantee the elimination of legal and administrative barriers to the creation and implementation of mini-companies.

The European Commission's Communiqué of 11 November 2003, Education and Training 2010 [19], recognizes the efforts made by the member States to adapt educational and training systems to the knowledge society and economy, but urges them to increase the rhythm of the reforms and to adopt a global, consistent and concerted strategy.

In 2006, The European Commission's Communiqué of 13 February entitled "Promoting an enterprising mind-set through education and training" [20] supports the member States in developing a more systematic strategy for entrepreneurship education.

The continuation of this Communiqué gave rise to the Conference held in Oslo on 26-27 October 2006 regarding "Entrepreneurship Education in Europe: Fostering Entrepreneurial Mind-sets through Education and Learning" [21], convened by the Commission together with the Norwegian government, and the result of which was the Oslo Agenda for Entrepreneurship Education in Europe. This is the next milestone after the Feira Charter in the development of entrepreneurship education in the EU.

During the Conference, representatives of the different national, regional and local governments, business associations, teachers and students, NGOs and the Commission itself exchanged examples of best practices and proposals were launched to advance in this matter at all levels of education, from Primary School to University.

The conclusions of the Conference advocated better integration of the programmes and activities within the curricula, while maintaining flexibility as to their contents and participants. Entrepreneurship can be integrated into the curricula as a horizontal element in all study contexts or as an independent subject. In any case the Conference conclusions recommend introducing new pedagogical methods in all subjects.

The conclusions also underscored the need to create a common European platform for projects in operation and teaching materials that will contribute to the dissemination of information and facilitate comparative analyses. Teacher mobility in this sense should be supported throughout Europe. In addition, they consider that the participation of individuals with business experience must be a basic element in entrepreneurship education, and that cooperation between the public and private sectors should be increased, involving companies as part of their corporate social responsibility. This participation on the part of companies should be recognized with some kind of prize awarded at the European level.

At national level the creation of guide groups is recommended, complemented by a European observatory in which all interested parties are represented (public administrations, companies, schools, students, etc.). The role of the observatory would

19. Comisión de las Comunidades Europeas. Comunicación de la Comisión. Educación y Formación 2010. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0685:FIN:ES:PDF (accesed 6 February 2015)
20. European Commission. Enterprise and Industry. Industrial Policy communication. Training Education http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/commplan.htm (accesed 6 February 2015)
21. European Commission. Enterprise and Industry. Entrepreneurship. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/oslo.htm (accesed 6 February 2015)

be to determine the objectives of entrepreneurship education, taking into consideration its different elements.

The European Commission, again according to these conclusions, should take the initiative when assessing programmes and activities to ensure that the outcomes can be compared. In particular, it should support research into the impact of activities based on student mini-companies and specific business projects.

All of this was included in the Oslo Agenda for Entrepreneurship Education in Europe 2006, which is a proposal to take a step forward in fostering entrepreneurship in education through systematic and effective actions. The agenda contains a rich menu of educational options addressed to those in charge at different levels of action so that they can choose the most suitable options for them from among those proposed and adapt them to their specific situation.

These proposals were drawn up around six spheres of action: the framework of political development, support for schools, support for teachers and educators, entrepreneurship activities in schools and higher education, building networks and opening up education to the outside world, and communication activities [22].

The Recommendation of the European Parliament and Council of 18 December 2006, regarding the key competencies for permanent education [23] follows the Oslo Agenda chronologically.

According to this Recommendation, the key competencies for life-long learning comprise a combination of knowledge, skills and attitudes that are necessary for personal development, social integration, active citizenship and employment. They are essential for the knowledge society as a whole, and guarantee greater flexibility in the labour market, allowing it to adapt to the constant changes taking place in a globalized world. Young people should acquire these competencies by the end of their compulsory education and training, such that they are capacitated for adult life and the working world.

The Recommendation defines eight key competencies [24], and describes the knowledge, skills and attitudes that each of them comprises. They are listed below:

1. Communication in one's native language
2. Communication in foreign languages
3. Mathematical competencies and basic competencies in science and technology
4. Digital competency
5. Learning how to learn
6. Social and civic competencies
7. Sense of initiative and entrepreneurship
8. Cultural awareness and expression

All of these competencies are interdependent and all of them stress critical thinking, creativity, initiative, problem-solving, risk-assessment, decision-making and the

22. European Commission. Enterprise and Industry. http://ec.europa.eu/enterprise/policies/sme/files/smes/vocational/entr_voca_es.pdf. (accesed 6 February 2015)
23. Official Journal of the European parliament, L 394/10. 30.12.2006. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:ES:PDF (accesed 8 February 2015)
24. These eight key competencies are the ones included in the minimum guidelines for teaching established in Spain by the application of Art. 6.2 Law of Education (LOE)

constructive management of emotions. Number seven, the sense of initiative and entrepreneurship, is defined as the ability to put ideas into action. It presupposes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to attain objectives. The subject is aware of his or her work environment and is able to take advantage of the opportunities that arise.

Another outstanding milestone in the EU context is the Small Business Act (SBA) of June 2008 [25]. In a Communiqué, the European Commission includes ten principles to guide the formulation and execution of policies for improving the legal and administrative framework of small and medium sized businesses in the EU and its member States. Its full title is *“Think Small First – “A Small Business Act” for Europe: An initiative in favour of small enterprises”.* The Communiqué recognizes that the role of SMEs in our society is becoming more and more important, as they create employment and are key protagonists in guaranteeing the prosperity of local and regional communities.

Among its ten principles it first highlights precisely the one that involves actions relating to entrepreneurship education: *“Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded”*. In this sense the EU and member States wished to provide more support for future entrepreneurs, especially by stimulating entrepreneurial talent and interest, above all in women and young people.

After adoption of the SBA, The European Commission is making a new effort to improve the introduction of entrepreneurial initiative in the educational systems of all the member States. To do so, the DG Enterprise/Industry and the DG Education /Culture jointly organized a series of high level panels to bring together representatives from member States’ Ministries of Education and Industry. These panels met in 2009 by groups of countries.

Our review of the principal milestones, events and reports from the European Union in this matter concludes with the report and assessment of the pilot action by the four high-level panels held in 2009. The report commissioned by the European Commission and entitled “Towards Greater Cooperation and Coherence in Entrepreneurship Education from March 2010, includes the successful outcomes attained and the goals that still remain to be achieved in order to develop this subject matter in a uniform way throughout all EU territory.

As can be seen, the European debate regarding policies supporting SMEs and entrepreneurship is conceding well-deserved importance to education and training, and in the near future new European actions and programmes will be proposed to provide them with more momentum.

25. European Commission. Enterprise and Industry. http://ec.europa.eu/enterprise/entrepreneurship/sba_en.htm (accesed 2 February 2015)

4.2 Promoting entrepreneurship education in Spain

Spain's Ministry of Education is charged, among other things, with the general programming of the educational system, the minimum curricular contents, and defining educational standards. For its part, the Ministry of Industry, responsible for policies supporting SMEs and enterprise creation, is charged with the dissemination and follow-up of Community directives for policies in support of entrepreneurship; it also carries out actions for fostering and promoting entrepreneurial initiative, sometimes in collaboration with the Ministry of Education, in fulfilment of Spain's 2006 Plan for Business Promotion. Added to these difficulties in coordination is the fact that, in Spain, powers in education have been transferred to the corresponding Autonomous Communities into which the country is divided (Figure 4.1), making it even more difficult to establish joint and unified programmes in regard to entrepreneurship education.

Figure 4.1 Autonomous Communities of Spain

In 2003 Spain's DG for SMEs held a series of institutional contacts with the Ministry of Education with the idea of including entrepreneurial initiative as a basic competency to be attained in education, and to name experts from that Ministry to the work groups and meetings on the matter organized by the European Commission's DG of Enterprise and Industry. Likewise, Spain's DG for SMEs informed the EU of the best practices that, in this aspect, were beginning to be developed in Spain, underscoring the case of *Valnalón* in Asturias.

Since then, this DG has continued systematically to disseminate the European directives in this matter in order to incorporate this European objective as a basic aspect of Spanish public policies, both in the General State Administration and in the Autonomous Communities, and has continued to keep the EU informed of the most important Spanish experiences in this sense. With the reform of Constitutional Act 2/2006, of 3 May, of Education (LOE), the DG for SMEs again worked together with the Ministry of Education to ensure that entrepreneurial initiative was included in the Act as one of the major basic goals of the educational system, a matter which in the end was indeed included in the LOE. Both Ministries have also collaborated on the development of curricular contents in the different types of education. Since then, and up until now, the different laws and regulations relating to education have tried to spotlight the importance of this topic, which has now been officially introduced into the Royal Decrees on Teaching.

Nonetheless, even before the LOE was passed, quite a few enterprise-creating initiatives had been developing for some years in secondary and vocational schools in many of Spain's Autonomous Communities: Asturias, Extremadura, Galicia, etc. Some of them collaborate with each other and share educational methodologies and materials, as is the case of the EJE and EME programmes created by Valnalón in Asturias and implemented in many other Autonomous Communities.

Other important work that must be mentioned is that carried out by the Junior Achievement Foundation [26] since its establishment in Spain in 2001. Junior Achievement collaborates directly with schools all over Spain to prepare and inspire young people to be successful in a global economy by generating an entrepreneurial mind-set through different educational activities and competitions.

The compilation of these and other experiences is based on the publication, "Fostering an Entrepreneurial Mind-set in Schools" (Spanish Higher Council of Chambers of Commerce and the Ministry of Education, Social Policy and Sport - 2009), which contains an analysis of the situation in Spain, reflecting certain experiences and best practices in education, and the works by Sánchez, et al [27], [28]. These references have helped to identify existing best practices and they have been thoroughly and systematically updated, taking into account the new normative framework. For this task, the information used was provided by the different Regional Ministries of Education, Industry and Labour of Spain's Autonomous Communities, as well as information supplied by Chambers of Commerce and European Centres for Enterprise and Innovation.

We now move on to the entrepreneurship initiatives carried out in Spain by its Autonomous Communities. Some projects had to be left out because they are just getting started, and there may be others that as yet we have been unable to detect. This first sample of programmes and activities, however, can serve as a summarized and synthesized approach to the situation of entrepreneurship education in Spain, classified by Autonomous Regions. Table 4.2 lists the main entrepreneurship education programmes that are still currently in force in each of the Autonomous

26. Junior Achievement. http://www.fundacionjaes.org (accesed 9 February 2015).
27. Sánchez, J.C., Aldana R., & Hernández B.R. (2013) Activities and programs of entrepreneurship education in Spain. American Journal of Entrepreneurship, 6(2), 73-93.
28. Sánchez, J.C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. International Entrepreneurship and Management Journal, (7), 239-254

Communities. The column marked “Results” specifies the number of schools involved and the number of students that participated during the last year for which data is available, usually 2010.

Autonomous Community	Project name	Began	Educational level	Results
Andalusia	Carabelas	2007-...	Primary	48 schools; 4470 students
	Emprender en mi escuela	2008-...	Primary	22 schools, 1023 students
	ICARO	2008-...	Compulsory Secondary	12 schools, 229 students
	JES, jóvenes emprendedores solidarios	2006	All educational levels	109, 5000 students
	Empresa joven europea	2005	Compulsory Secondary, Upper Secondary, Vocational	53, 1694 students
	Emprende joven	2003	Vocational	1572 schools, 69512 students
	Concursos empresas virtuales	2003	Vocational	85 projects
	Creando empresa	2006-...		82 schools, 1800 students

Table 4.2 Entrepreneurship Education Projects in Spain’s Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
	Emprender en Europa	2006		18 schools, 600 students
	SEFED, simulación de empresas con fines educativos	2006		11 schools
	Music Hero	2007		34 schools, 853 students
	Emprende en Cádiz	2004-2012	All levels	37 schools, 8568 students
Aragon	Emprender en la escuela	2004	Compulsory Secondary, Upper Secondary	55 schools, 3460 students
Asturias	Una empresa en mi escuela	1998	8-11 years of age	48 schools, 1625 students
	Una empresa en mi centro	2003	8-11 years of age, EE	20 schools, 567 students
	Jóvenes emprendedores sociales	2004	Compulsory Secondary	17 schools, 526 students
	Empresa joven europea	1999	Compulsory Secondary	3400 students
	Eje profesional	2005	Vocational	3400 students

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
	Taller de Empresarios	1994	17–25 years of age	9000 students
	Jóvenes Productoras Cinematográficas	2003		100 students per year
	Creación y gestión de microempresas	2004	Upper Secondary	400 students
Balearic Islands	Jornadas de autoocupación	2002	Vocational	25 schools, 850 students
	Crea Institut Empresa	2008	Vocational	
	Simulación de Empresas	2002	Vocational	15 schools, 640 students
Canary Islands	Una empresa en mi escuela, EME y EJE	2003	Compulsory Secondary, Vocational	
Cantabria	Labor ESO	2005	Compulsory Secondary	
	Simulación de empresas		Vocational	
	Cultura emprendedora		Compulsory Secondary	
	Escuela juventud emprendedora	2006		600 students

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
Castile-La Mancha	Emprender en el aula	2006	Compulsory Secondary	
	Innova Junior	2007	Compulsory Secondary, Vocational, Upper Secondary	
	Jornadas de creación de empresas	1999	Upper Secondary, FP	240 workshops, 6667 attendees
Castile-Leon	Vitamina E-Primaria	2007	Primary	26 schools, 236 students
	Vitamina E-Iniciativa Emprendedora	2004	Compulsory Secondary (4th yr.)	123 schools, 2420 students.
	Vitamina E-Upper Secondary	2007	Upper Secondary	293 schools
	Aprende a emprender	2002	Vocational	193 schools, 14000 students
Cataluña	Seminarios de generación de ideas	2007	Compulsory Secondary, Upper Secondary	119 seminars, 53 workshops
	Programa emprendedores	2007	Compulsory Secondary	37 schools

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
	Estada a l'empresa		Upper Secondary	
Community of Valencia	Emprende plus	2010	Compulsory Secondary, Upper Secondary	83 schools, 2537 students
	Motivación para emprender	2003	Upper Secondary	131 workshops, 2790 students
	Motivación para emprender	2009	Compulsory Secondary	11 schools
Extremadura	Imaginar para emprender	2008	Primary	1550 students
	Imagina tu empresa	2005	Upper Secondary, Vocational	54 schools, 1200 students
	Imagina y emprende	2008	Compulsory Secondary	
Galicia	FP Plus-Programa idea	2009	Vocational	
	Taller iniciativas emprendedoras	2007	Compulsory Secondary	293 schools, 6260 students
	Seminarios para la difusión de la	2008	Upper Secondary, Vocational	23 schools, 644 students

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
	creación de empresas			
	Empresa e iniciativa emprendedora	2009	Vocational	
Madrid	Taller de emprendedores	2006	Compulsory Secondary	
	Yo tengo un plan	2006	Compulsory Secondary	
	Emprender en formación profesional	2009	Vocational	
	Talleres de fomento del espíritu empresarial	2009	Compulsory Secondary, Vocational	350 Workshops
Murcia	Talleres de actitudes emprendedoras	2008	Vocational	
	Concurso de ideas empresariales	2008		
	Talleres de habilidades empresariales	2009	Compulsory Secondary, Universidad	
	Escuela de Jóvenes Emprendedores	2009	Compulsory Secondary,	

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
			Upper Secondary	
	Olimpiada de creatividad	2009	Compulsory Secondary	
Navarre	Empresa Joven Europea		Compulsory Secondary	
	Guía-activa FP		Vocational	
	Concurso Jóvenes Emprendedores		Vocational	
Basque Country	Hasi eta hazi primaria	2007	Primary	
	Hasi eta hazi secundaria	2007	Compulsory Secondary	
	Hasi eta hazi Bachillerato	2007	Upper Secondary	
	Kosmodisea	2006	Primary, Compulsory Secondary, Upper Secondary	40 schools, 5430 students
	Gaze	2008	University	1000 students
	Sensibilización	2008	Vocational	30 schools, 3000 students

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

Autonomous Community	Project name	Began	Educational level	Results
	Urratsbat	2008	Vocational	40 schools
Rioja	Olimpiada de emprendedores		Vocational, Upper Secondary	
	Concurso ideas de negocio	2004	Vocational	104 ideas presented
	Empresa joven educativa	2004	Compulsory Secondary, Vocational	13 cooperatives, 165 students

Table 4.2 Entrepreneurship Education Projects in Spain's Autonomous Communities

4.3 Discussion

Having taken into account the contents and scope of the actions taken in all of Spain's Autonomous Communities, we are now able to approach a diagnosis of the state of the art of entrepreneurship education in Spain, a diagnosis that in turn we should be able to compare with the activities being carried out in this sense by other countries in our context. This assessment will provide some perspective and bring to light some of the best practices.

Until the latest University Act (LOE) came into force, only a few of the Autonomous Communities had included entrepreneurship education in their curricula as an elective subject. The pioneers in this sense were Asturias, Navarre and Castile-Leon. Since the University Act was passed, it has gradually and systematically been introduced into the curricula of all the Autonomous Communities, particularly in Vocational education (Ciclos Formativos and Formación Profesional).

Among the activities included in Table 4.2, sometimes the initiatives came from the schools themselves, which sought out different organizations and agencies (e.g. Chambers of Commerce or Young Entrepreneurs Associations-YEA) for help in developing part of the curriculum. Certain other initiatives had their origin in the educational authorities departments of the regional administrations, which made different projects and programmes available to schools to complement already existing educational projects. Other initiatives, such as the case of *Valnalón* (Asturias), have been public initiatives carried out through private entities that have embarked on a new integral project to combat (and very successfully so) the deteriorated economic and employment situation of their region, and that have managed to transfer their experience to other regions.

The programmes and projects mentioned here are the result of efforts made by individuals, educators, non-profit organizations and policy-makers to improve the outlook of the educational system in Spain and to open up vital prospects for students facing an ever more competitive labour market. Some projects have not been included because they are only in the very early stages, and there may be others that we were unable to detect, but all in all this is a fairly good sampling of the programmes and activities taking place and as a first approach to entrepreneurship education in Spain.

In all, there is a good number of both curricular and extracurricular activities in all of Spain's Autonomous communities, even though in a few cases they are a matter of initiatives linked to regional strategies for fostering an enterprising culture, most of which are isolated actions that would require more scope, systematization and support in the future. With a few exceptions in which the different regional ministries involved (usually those of Education, Industry and Economy) cooperate and channel their effort through an agency charged with implementing all the entrepreneurship education activities (Asturias with *Valnalón*, Andalusia with the *Fundación Red Andalucía Emprende*, the *Gabinete de Iniciativa Joven* in Extremadura, or in the Basque country with *Tknika*), there is usually scarce coordination and cooperation among the different regional ministries with responsibilities in this matter.

One reason for this lack of coordination is that entrepreneurship education requires a multidisciplinary and cross-sectional approach that leaves it without a consolidated identity. We could say that it has an "image problem" that makes it a subject matter that is difficult to pin down, even in the areas of Education.

Until now one of the best practices observed is that of creating a public entity governed by private law (the case of *Valnalón*) which brings together financing and knowledge from the competent regional ministries and which acts as a valid interlocutor for municipalities and schools to collaborate in the implementation of activities that should be deployed at the different levels of local administrations. In several Autonomous Communities with more than one province this kind of activity is sometimes promoted by the town councils.

It has also been observed that in places where the actions taken by the regional ministries responsible have not yet been developed adequately, initiatives come into play from Chambers of Commerce, Young Entrepreneurs Associations (YEA), and the European Business and Innovation Centre Network (EBN). Often it is the schools themselves that directly look to these entities, as well as other private ones such as Junior Achievement, when seeking an educational offer of this type. And what on occasion is specific cooperation can sometimes turn into full collaboration, involving the institutional authorities and achieving a consistent programming of educational activities.

In the Autonomous Communities in which the collaboration between the regional ministries is optimal, the Chambers of Commerce, YEA and EBN do not usually address their training programmes to non-university students owing to a lack of demand. However, they do support entrepreneurs who wish to set up a business regardless of their age, such that any student seeking help and guidance to implement a business project will find it even though there are no programmed activities addressed to students as such.

In addition, it was found that not enough information is being shared horizontally (among schools or among Autonomous Communities) in relation to existing experiences in matters of entrepreneurship education; there is no centralizing agency to disseminate the best practices or encourage cooperation among the Autonomous Communities in this area.

This information deficit could be approached through a system that evaluates the outcomes of the educational system. Likewise, best practices could be reported and exchanged through the organization of forums or periodical seminars among those responsible for the areas of education and industry in the different Autonomous Communities. This type of forum could also be promoted or fostered jointly from the Ministries of Industry and of Education. Recall that political commitments were made, including the evaluation of the progress made by member States in entrepreneurship education, as a the result of the 2006 Oslo Agenda, as well as other EU documents.

In regard to the dissemination of information, the impulse in horizontal information about experiences in entrepreneurship education has come from *Valnalón* in Asturias, which has taken the initiative on numerous occasions to transfer their educational project to other Autonomous Communities. This has meant that their own programmes (EME, EJE, JES, etc.) can be found in other Autonomous Communities (Andalusia, Canary Islands, Extremadura, Navarre and the Basque Country) where they have been successfully applied. The DG for SMEs has also contributed to making known these and other best practices in European and national contexts.

Another positive aspect to be highlighted in this review is the creation of entrepreneurship “seedbeds” in schools, in EBNs, and exceptionally in some Chambers of Commerce (Las Palmas de Gran Canaria). The seedbeds are one of the best ways to bring the business world together with education. They not only play an important role as a vehicle for the “demonstration effect” but also a follow-up can be made of the businesses created within them, facilitating assessment of the activities carried out according to their business performance, especially in the context of vocational training.

There are indications that point to these seedbeds as a great success in regard to student participation (especially in vocational training), because students can experience first-hand the creation of an enterprise, and find support from their tutors for launching it if the prospects for success are favourable. The economic success obtained by many of these companies serves to encourage other students to follow their example and put aside their fears about creating an enterprise, not to mention the economic benefit it provides for the region.

The itinerary for entrepreneurship education should begin in Early Childhood and Primary Education, and culminate in an entrepreneurial seedbed, where students who so desire can launch a business project and count on the necessary support until the enterprise has reached maturity. Entrepreneurial seedbeds exist in all of Spain’s Autonomous Communities, although not all of them are linked to the educational system. The experience of *Tknika* and the *Urratsbat* program in the Basque Country, where companies started from seedbeds have been followed up since 2007, found that 136 of these enterprises are not only still in business but in 2007 had a turnover worth €5,000,000. This experience shows the profitability that can come from institutional investment in entrepreneurship education, and the production and employment that can result from these companies born of entrepreneurial seedbeds.

In short, the ability to launch entrepreneurial projects has gradually been gaining much deserved prominence in recent years, both on the national and international economic agendas, for two reasons: on one hand, owing to its vital importance in fostering the competitiveness of human capital, and therefore the productive fabric of the country, and on the other, because of its ability to create employment. Enterprises not only create employment but also social stability, and therefore entrepreneurship should be stimulated from all possible angles if we wish to fight unemployment and generate wealth in a modern economy. It is well known that enterprising individuals tend to perceive market opportunities in their environment that they can develop successfully where others may see only risk.

Thus, given the context of the globalized knowledge economy we find ourselves immersed in, it seems logical to enrich its field of action for the benefit of all. The attitude we take towards entrepreneurship education will have a large impact on economic growth in Spain, because it promotes both individual creativity and economic dynamism. The creation of new enterprises, the commercialization of new ideas and innovation are essential for the economy.

It is therefore necessary to coordinate the financial and personal efforts of the different Administrations involved; they in turn must also improve communication and structures among themselves with periodic meetings and/or specialized publications. It is also necessary to devote greater effort to motivating, training and rewarding teachers and schools, because the specification of the curriculum and the inclusion of this type of subject matter in the school's educational project depends on the will of the teaching staff. Teachers should therefore be the first objective of entrepreneurship education because they really are the first and most important link in the educational chain.

4.4 References

1. Sánchez, J.C., Aldana R., & Hernández B.R. (2013) Activities and programs of entrepreneurship education in Spain. *American Journal of Entrepreneurship, 6(2)*, 73-93.
2. Eurodyce (2012). *Entrepreneurship education at school in Europe: National Strategies, Curricula and Learning Outcomes*
3. Dirección General de Política de la Pequeña y Mediana Empresa (2010). *El fomento de la iniciativa emprendedora en el sistema educativo en España. Madrid*
4. Sánchez, J.C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal, (7)*, 239-254

5. Sánchez, J.C. (2013) The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. *Journal of Small Business Management, 447-465*
6. Global Entrepreneurship Monitor. GEM. http://www.gemconsortium.org (accesed 9 February 2015)
7. European Commission.Enterprise and Industry. http://ec.europa.eu/enterprise/entrepreneurship/training_en.htm (accesed 6 February 2015)
8. European Council. Council of the European Union. Presidency Conclusions. Lisbon European Council. http://consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/00100-r1.en0.htm (accesed 5 February 2015)
9. European Commission. Enterprise and Industry. Industrial competitiveness. http://ec.europa.eu/enterprise/enterprise_policy/charter/docs/charter_es.pdf (accesed 5 February 2015)
10. Direction Generale de Entreprises. DGE. http://www.industrie.gouv.fr/pratique/format/colloq/sp_coll-es.htm (accesed 5 February 2015)
11. European Commission. Enterprise and Industry. Industrial Policy communication. http://ec.europa.eu/enterprise/enterprise_policy/mult_entr_programme/programme_2001_2005.htm (accesed 5 February 2015)
12. European Council. Council of the European Union. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/104692.pdf (accesed 5 February 2015)
13. European Commission. Enterprise and Industry. Industrial Policy communication http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/archives.htm (accesed 5 February 2015).
14. European Commission. Enterprise and Industry. Industrial Policy communication. Training Education. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/primsecedu.htm (accesed 6 February 2015)
15. European Commission. Enterprise and Industry. Entrepreneurship. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/minicomp.htm (accesed 6 February 2015)
16. Comisión de las Comunidades Europeas. Comunicación de la Comisión. Educación y Formación 2010. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0685:FIN:ES:PDF (accesed 6 February 2015)
17. European Commission. Enterprise and Industry. Industrial Policy communication. Training Education http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/commplan.htm (accesed 6 February 2015)
18. European Commission. Enterprise and Industry. Entrepreneurship. http://ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/oslo.htm (accesed 6 February 2015)
19. European Commission. Enterprise and Industry. http://ec.europa.eu/enterprise/policies/sme/files/smes/vocational/entr_voca_es.pdf. (accesed 6 February 2015)
20. Official Journal of the European parliament, L 394/10. 30.12.2006. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:ES:PDF (accesed 8 February 2015)
21. These eight key competencies are the ones included in the minimum guidelines for teaching established in Spain by the application of Art. 6.2 Law of Education (LOE)

22. European Commission. Enterprise and Industry. http://ec.europa.eu/enterprise/entrepreneurship/sba_en.htm (accesed 2 February 2015)
23. Junior Achievement. http://www.fundacionjaes.org (accesed 9 February 2015).

Chapter 5 The Importance of Partnerships in Promoting Entrepreneurship Education – Case Study of a Group of Schools

by Maria Isabel Carvalho [1] and Mário Franco [2]

5.1 Introduction

The importance of entrepreneurial activity to the economy is well founded, particularly in the areas of economic growth and job creation [3], [4]. Schools and universities across the world have been actively engaged in the study of entrepreneurship and the development of an entrepreneurship curriculum in recent years [5], [6], [7], [8]. The field of entrepreneurship has been one of the most topical areas of study in education in schools and universities throughout the world. Although formal education in Europe has not promoted entrepreneurship and independent employment, attitudes and cultural references are developed from childhood [9], [10] and so education can play a fundamental role in responding to the challenge of entrepreneurship in Europe [11] and particularly in Portugal.

Gert-Jan Koopman of the European Commission stated that entrepreneurship education really affects the number of young people choosing to start up their own business in the future. But although the majority of adolescents think schools are

1. University of Beira Interior, Covilhã, Portugal
2. University of Beira Interior, Management and Economics Department, CEFAGE-UBI Research Center, Covilhã, Portugal
3. Gibb, A. A. (1996). Entrepreneurship and small business management: Can we afford to neglect them in the twenty-first century business school? British Journal of Management, 7(4), 309-324.
4. Reynolds, P. D., Camp, M., Bygrave, W. D., Autio, E., & Hay, M. (2001). Global entrepreneurship monitor: 2001 executive report. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
5. Vesper, K. H., & Gartner, W.B. (1997). Measuring progress in entrepreneurship education. Journal of Business Venturing, 12(5), 403-421.
6. Solomon, G.T., Duffy, S., &Tarabishy, A. (2002). The state of entrepreneurship education in the United States: a nationwide survey and analysis. International Journal of Entrepreneurship Education, 1(1), 65-86.
7. Henry, C., Hill, F., & Leitch, C. (2003). Entrepreneurship Education and Training. Ashgate, Aldershot.
8. Politis, D. (2005). The process of entrepreneurial learning: a conceptual framework. Entrepreneurship Theory and Practice, 29(4), 399-424.
9. Solomon, G. T. (2007). An examination of entrepreneurship education in the United States. Journal of Small Business Enterprise Development, 14(2), 168-182.
10. Brockhaus, R., Hills, G., Klandt, H., & Welsch, H. (2001). Entrepreneurship education: A global view. Aldershot, U.K.: Avebury.
11. European Commission (2006). Aplicar o Programa Comunitário de Lisboa: promover o espírito empreendedor através do ensino e da aprendizagem, Comissao Europeia, Bruxelas.

conscious of the need to provide their pupils with competences in the area of management, few feel that their school does this effectively [12], [13].

Traditional teaching methods and the normal classroom context do not promote the development of capacities and skills essential in the modern business world. Scholars have written much on what should be taught in entrepreneurial education. A review of the literature shows that entrepreneurship education should include skill-building courses in negotiation, leadership, new product development, creativity and innovation [14].

Identification of opportunities has also been seen as a critical entrepreneurial skill that should be included in an entrepreneurship curriculum [15], [16]. Educating students about entrepreneurship and how to become more entrepreneurial are also significant components of entrepreneurial education [17]. Understanding the role of partnerships, clients and other stakeholders have been identified as important entrepreneurial concepts [18], [19]. New educational experiences based on project work have therefore been incorporated in curricula, in order to stimulate the skills and capacities essential in working life [20] and to respond to the greater complexity and uncertainty the individual, as a worker, has to face in a globalized world [21], [22].

In this context, Entrepreneurship Education Programmes (EEP) have proliferated in Portugal in recent years, similarly to what has happened in other European countries [23], [24], at all levels of education, promoted not only by the respective Ministries but also by private entities [25], leading to the formation of inter-organizational relations and partnerships.

Access to partnerships is a critical resource as many types of economic behavior, including change of career path and exchange of information or tangible resources

12. Anonymous. (2006). Young people feel they need better training in entrepreneurship. Education & Training, 48(2/3), 197–200.
13. Dhillon, J. K. (2013). Senior managers' perspectives of leading and managing effective, sustainable and successful partnerships. Educational Management Administration & Leadership, 41(6), 736-750.
14. McMullan, W. E., & Long, W. A. (1987). Entrepreneurship education in the nineties. Journal of Business Venturing, 2, 261–275.
15. Shane S., &Venkataraman S. (2000). The Promise of Entrepreneurship as a Field of Research. Academy of Management Review, 25, 217-226.
16. Hindle, K. (2004). A practical strategy for discovering, evaluating, and exploiting entrepreneurial opportunities: Research-based action guidelines. Journal of Small Business and Entrepreneurship, 17, 267-276.
17. Rae, D. (2000). Understanding entrepreneurial learning: a question on how. International Journal of Entrepreneurial Research, 6(3), 129-144.
18. Gibb, A. A. (1993). The enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. International Small Business Journal, 11(3), 11-34.
19. Taylor, D. W., & Thorpe, R. (2004). Entrepreneurial learning: a process of co-participation. Journal of Small Business and Enterprise Development, 11(2), 203-11.
20. Lethbridge, D., & Davies, G. (1995). An initiative for the development of creativity in science and technology (CREST): an interim report on a partnership between schools and industry. Technovation, 15(7), 453–465.
21. Gibb, A. A. (2002). In pursuit of a new enterprise and entrepreneurship paradigm of learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. International Journal of Management Reviews, 4(3), 233–269.
22. Cotton, J. C. (1993). Developing enterprising teaching and learning in Hungary. Education & Training, 35(7), 8.
23. Gibb, A. A. (1993). The enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. International Small Business Journal, 11(3), 11-34.
24. Hytti, U., & O'Gorman, C. (2004). What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. Education & Training, 46(1), 11–23.
25. Carvalho, M. I., Simões, J., Samagaio, A., & Couto, E. (2012). Enterprise Potential of Portuguese Students Fostered by an Entrepreneurship Education Program. Proceedings of ECIE12 7th European Conference on Innovation and Entrepreneurship, pp.68-78, listed in the Thomson Reuters ISI Index Social Sciences & Humanities Proceedings (ISSHP/ISI Proceedings), (ISBN: 978-1-908272-68-3).

between actors, are influenced by social relations [26], [27]. Entrepreneurial activities are likewise dependent on personal networks, as these can provide the necessary knowledge, employees or capital in situations of uncertainty [28], [29]. Interaction with entrepreneurs in partnerships can also provide inspiration and "mental models" i.e. sets of entrepreneurial behaviors, attributes and consequences that can be observed and imitated by other partnership members [30]. However, the involvement of actors from both academia and industry in partnerships can be more difficult to achieve since there are considerable differences in the norms and modes of operation between schools and firms [31], [32], [33].

This study used the concept of partnerships between School and Community to designate the relationships formed between the School and individuals, organizations and firms in the community, aiming to promote the integral development of children/teenagers, giving them significant pedagogical experiences [34], [35] which, due to the wide-ranging nature of the resources involved, the school would not be able to provide on its own. Indeed, there is a lack of literature and studies on School – Community partnerships, in promoting entrepreneurship education. Despite Entrepreneurship Education Programmes (EEP) exploring the existing literature and best practices of other regional programmes, little research and few programmes exist of this type in secondary schools.

To fill this research caveat, this study aims to understand the need to form partnerships to promote entrepreneurship education, how those partnerships are characterized, the obstacles faced in forming and maintaining these relationships and their success factors. Therefore, this study intends to respond to two research questions: (1) *What is the structure and functioning of the relationships formed by the school with local and regional bodies to promote entrepreneurship education?* and (2) *What is the contribution of the relationships formed by the school with local and regional bodies to promote entrepreneurship education?* This study intends, therefore, to make a contribution to theory in the areas of entrepreneurship and strategic management and it serves as a benchmark model for others in the development of similar regional, collaborative organizations to foster entrepreneurship education.

The remainder of the chapter is structured as follows: Section 2 presents a review of the literature on inter-organizational relationships, some characterization of school-

26. Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. American Journal of Sociology, 91(3), 481–510.
27. Granovetter, M. S. (1974). Getting a job: A study of contacts and careers. Cambridge, MA: Harvard University Press.
28. Aldrich, H., Rosen, B., & Woodward, W. (1987). The impact of social networks on business foundings and profit: A longitudinal study. In N. C. Churchil, J. A. Hornaday, B. A. Kirchhoff, O. J. Krasner, & K. H. Vesper (Eds.), Frontiers of entrepreneurship research. Proceedings of the seventh annual Babson college entrepreneurship research conference. Wellesley, MA: Babson College.
29. Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. Management Science, 48(3), 364–381.
30. Fornahl, D. (2003). Entrepreneurial activities in a regional context. In D. Fornahl& T. Brenner (Eds.), Cooperation, networks and institutions in regional innovation systems (pp. 38–57). Cheltenham, UK: Edward Elgar.
31. Klofsten, M., & Jones-Evans, D. (2000). Comparing academic entrepreneurship in Europe: The case of Sweden and Ireland. Small Business Economics, 14(4), 299–309.
32. Fisher, D., & Atkinson-Grosjean, J. (2002). Brokers on the boundary: Academy-industry liaison in Canadian universities. Higher Education, 44(3), 449–467.
33. Mosey, S., Lockett, A., &Westhead, P. (2006). Creating network bridges for university technology transfer: The medici fellowship programme. Technology Analysis & Strategic Management, 18(1), 71–91.
34. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. Peabody Journal of Education, 76(2), 204–221.
35. Sanders, M. G. (2001). The Role of " Community " in Comprehensive School, Family, and Community Partnership Programs. The Elementary School Journal, 102(1), 19–34.

community partnerships and some considerations regarding EEP. Section 3 presents the methodology used, followed by analysis and discussion of the results in Section 4. Conclusions, contributions, limitations and future lines of research are also presented.

5.2 Literature review

5.2.1 Partnerships/inter-organizational relationships

The justification for forming inter-organizational relationships is theoretically well founded, given the diversity of theoretical paradigm [36] explaining those relationships – Transaction Costs Theory [37], Resource Dependency Theory [38], Stakeholder Theory [39], Organizational Learning Theory [40] and Institutional Theory [41]. These multiple contributions coming from social sciences such as Economics, Sociology or Management, reflect the fragmentation in the literature and is also the consequence of the multi-faceted nature of inter-organizational relationships, which often involve a combination of motivations, intentions and objectives [42], [43].

Since none of these theories alone completely explain the establishment of inter-organizational relationships [44], this study takes the contributions of Resource Dependency Theory [45] and the Theory of Overlapping Spheres of Influence [46]. This author argues that schools implementing practices that promote strong school, family and community partnerships should be more able to help children succeed academically because these outreach activities create greater consistency between children's home and school contexts. School, Family and the Community are responsible for children's socialization and education and share common objectives with regard to children/young people, such as their overall development and scholastic success, which will be more easily attained through joint action [47]. The need to join forces and unite support in the community arises from the multiplicity and

36. Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. Journal of Management, 26(3), 367–403.
37. Williamson, O. E. (1981). The Economics of Organizations: The Transaction Cost Approach. American Journal of Sociology, 87, 548-577.
38. Pfeffer, J., Salancik, G. R., The External Control of Organizations: A Resource Dependence Perspective, Stanford University Press.
39. Freeman, R. E. (1994). The Politics of Stakeholder Theory: Some Future Directions. Business Ethics Quarterly, 4(4), 409-421.
40. Levinthal, D. A. & March J. G. (1993). The myopia of learning, Strategic Management Journal, Winter Special Issue, 14, 95-112.
41. DiMaggio, P., & Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 48(2), 147–160.
42. Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. Journal of Management, 26(3), 367–403.
43. Williams, T. (2005). Cooperation by design: structure and cooperation in interorganizational networks. Journal of Business Research, 58(2), 223–231.
44. Williams, T. (2005). Cooperation by design: structure and cooperation in interorganizational networks. Journal of Business Research, 58(2), 223–231.
45. Pfeffer, J., Salancik, G. R., The External Control of Organizations: A Resource Dependence Perspective, Stanford University Press.
46. Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. In K. Hurrelmann, F. Kaufmann & F. Losel (Eds.), Social intervention: Potential and constraints (pp. 121-136). New York: De Gruyter.
47. Levinthal, D. A. & March J. G. (1993). The myopia of learning, Strategic Management Journal, Winter Special Issue, 14, 95-112.

specificity of the resources required to fulfil educational projects relevant for preparing children and young people for the challenges of today's society, which are unlikely to be within the reach of each school *per se* [48], [49].

Inter-organizational relationships can take various forms, including alliances [50], inter-organizational networks [51] and others, which can be distinguished by the intensity of the connection between participants [52]. In [53] partnership structures are likely environments for implementation of educational projects aiming to develop the skills and competences that contribute to increased human capital, with this being defined from a broad perspective as the set of academic qualifications and formal and informal skills held by an individual.

In reference [54] the concept of'social partnership' as a form of collaborative, voluntary and temporary action in which organizations from different sectors, both public and private, interact to reach common objectives, namely solving complex social problems reflecting a common concern that is in some way identified as an aspect of the public policy agenda that one organization would not be able to deal with individually. The objectives of social partnerships are normally established so as to have a short or long-term impact on a given area of public policy, but their most immediate objective benefits participants directly, without which there would be no incentive for collaborative interaction.

In [55] is also presented a typology of social partnerships based on the characteristics of the problem to be solved in collaboration, namely its complexity or extent and the hierarchical level of the partner organizations for which the problem is relevant. Therefore, this author presents three types of social partnerships: systemic, federative and programmatic.

When the problem is relatively complex, the number of organizations involved will be greater and it will concern partners' highest hierarchical levels. In this case, the partnership will be of the systemic type. However, if the problems to be solved concern a specific group of actors, only a small number of key organizations will be involved and the hierarchical level concerned in solving the problem will be intermediate (or high, in the case of smaller organizations). In this case, the partnership will be of the federative type. Then again, when the problems are relatively structured, they require the interaction of fewer organizations and the lowest hierarchical level will be involved. In this case, the partnership will be of the programmatic type, since its focus will be on developing specific programmes to respond to partners' needs [56].

48. Levinthal, D. A. & March J. G. (1993). The myopia of learning, Strategic Management Journal, Winter Special Issue, 14, 95-112.
49. Lanzi, D. (2007). Capabilities, human capital and education. The Journal of Socio-Economics, 36(3), 424–435.
50. Dickson, P. H., & Weaver, K. M. (1997). Environmental determinants and individual-level moderators of alliance use. Academy of Management Journal, 40, 404–425.
51. Williams, T. (2005). Cooperation by design: structure and cooperation in interorganizational networks. Journal of Business Research, 58(2), 223–231.
52. Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. Journal of Management, 26(3), 367–403.
53. Lanzi, D. (2007). Capabilities, human capital and education. The Journal of Socio-Economics, 36(3), 424–435.
54. Waddock, S. A. (1991). A Typology of Social Partnership Organizations. Administration & Society, 22(4), 480–515.
55. Waddock, S. A. (1991). A Typology of Social Partnership Organizations. Administration & Society, 22(4), 480–515.
56. Waddock, S. A. (1991). A Typology of Social Partnership Organizations. Administration & Society, 22(4), 480–515.

5.2.2 Partnerships between school and community

The importance of space and place has been increasingly recognized in the literature on inter-organizational partnerships as an aspect of their structure and functioning. In this connection, the concept of social capital has been applied to identify social norms and customs incorporated in the social environment with the characteristic confidence of each environment, which is frequently tacit and specific to each community [57].

Face-to-face communication is an important way of creating trust between individuals due to the investments of effort, money and time manifest when people come together [58]. It has also been shown that face-to-face contacts facilitate learning, provide motivation and are an effective mode of communication due to an increased capacity for interruption and feedback [59], [60].

When developing partnerships, mobility of individuals is an effective mechanism and can even be deemed essential for initial partnership formation to take place since it is a prerequisite for face-to-face meetings and interaction [61].

In this context, partnerships between School and Community are formed based on social interaction, on mutual trust and on the relationships that promote diligence in the community, which may be susceptible to abuse in the scope of power relationships. More isolated, backward, rural communities present quite different characteristics from metropolitan areas, which may be seen as challenges and simultaneously opportunities for establishing partnerships. Those characteristics are of an economic, social, educational and scholastic nature and allow the affirmation that despite the possible shortage of human capital and economic resources in rural communities, they have great social capital as a result of existing relationships and this should be taken advantage of [62].

Higher relationship intensity between schools and firms, defined, for example, in personnel exchanges, was linked to higher levels of tangible outcomes from the relationships. The industrial experience of academics involved in school–industry partnerships is an important success factor and that mobility through visits is a fruitful way of learning about each other’s needs and wants [63].

In [64] the importance of cooperation between schools and the business sector in creating innovative pedagogical practices able to develop fundamental capacities in

57. Huggins, R., Johnston, A., & Thompson, P. (2012). Network Capital, Social Capital and Knowledge Flow: How the Nature of Inter-organizational Networks Impacts on Innovation. Industry and Innovation, 19(3), 203–232.
58. Storper, M., &Venables, A. J. (2004). Buzz: Face-to-face contact and the urban economy. Journal of Economic Geography, 4(4), 351–370.
59. Storper, M., &Venables, A. J. (2004). Buzz: Face-to-face contact and the urban economy. Journal of Economic Geography, 4(4), 351–370.
60. Nohria, N., & Eccles, R. G. (1992). Networks and organizations: Structure, form, and action. Boston: Harvard Business School Press.
61. Bienkowska, D., Larsen, K., &Sörlin, S. (2010). Public-private innovation: Mediating roles and ICT niches of industrial research institutes. Innovation: Management, Policy & Practice, 12(2), 206–216.
62. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. Peabody Journal of Education, 76(2), 204–221.
63. Starbuck, E. (2001). Optimizing university research collaborations. Research-Technology Management, 44(1), 40–44.
64. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.

young people to make them future citizens, considering partnerships between schools and the local community as essential in building the foundations of an innovative and sustainable society. In reference [65] are also mentioned learning processes, often in the form of partnerships, alliances, networks and more flexible relationships between the school and other local institutions, corroborating the possibility of moving the boundaries between systems of education, training and work pointed out by [66], in pursuing a common goal – enabling young people.

Despite these advantages, the difficulty of finding partners in a rural, economically depressed and limited region as one of the barriers to partnerships. In addition, other obstacles to the formation of partnerships with the community were identified in the study by [67], namely the non-existence of suitable leadership in schools able to develop, assess and coordinate those partnerships, the attitude of some school teachers and heads in considering the community is indifferent to, or lacking the resources that could contribute to pupils' scholastic success or the fear in schools and their professionals of being exposed to public scrutiny.

In [68] also point out tensions and challenges in establishing and maintaining partnerships between schools and other community bodies, namely, the reluctance of some organizations to cooperate with schools other than their own, and vice-versa, the obligation to provide young people with learning that has meaning for them and is valued by the job market, the need to maintain permanent communication between the school and its partners, and the difficulty in measuring the success of partnerships regarding determination of the effects of participation in them and the advantages in continuing with them.

Another challenge in forming and maintaining partnerships is the need to involve parents as partners, particularly in stimulating education programmes and obtaining their support, due to the fact that they are becoming an increasingly powerful pressure group, able to influence the school curriculum insofar as this concerns the quality of the children's education [69], [70].

Against this background, in [71] points out as an indispensable factor for the formation of a successful partnership, the school having a type of leadership that abandons traditional and behavioural models and follows relational models, promoting trust, empathy, comprehension of others' ideas and perceptions, the ability to establish commitments, dialogue and harmony. In reference [72], the need for strategic thinking in schools able to provide a cultural change in education, so that school experiences promote the development of competences appropriate to the demands of today's

65. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.
66. Konkola, R., Tuomi-Gröhn, T., Lambert, P., & Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace. Journal of Education and Work, 20(3), 211–228.
67. Sanders, M. G. (2001). The Role of " Community " in Comprehensive School, Family, and Community Partnership Programs. The Elementary School Journal, 102(1), 19–34.
68. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.
69. Cotton, J. C. (1993). Developing enterprising teaching and learning in Hungary. Education & Training, 35(7), 8.
70. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.
71. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. Peabody Journal of Education, 76(2), 204–221.
72. Lethbridge, D., & Davies, G. (1995). An initiative for the development of creativity in science and technology (CREST): an interim report on a partnership between schools and industry. Technovation, 15(7), 453–465.

society, such as the ability to solve problems, continuous learning and creative thought. The formation of partnerships implies that the parties share a common and mutual interest in a joint activity [73].

5.2.3 Education Entrepreneurship Programmes (EEP)

It is not surprising there have been a large number of initiatives developed worldwide to promote a broad range of entrepreneurial activities within academic institutions [74]. These include programmes to develop new organisations as well as projects that link the school to businesses within the region [75], [76].

In the last two decades, entrepreneurship education has expanded significantly in most industrialized countries [77], as the number of courses in entrepreneurship has continued to increase, both in Europe [78], [79], and in the United States of America [80], [81].

Compared to many other disciplines, that of entrepreneurship is in its infancy, with no standard framework or agreed best practices for entrepreneurial education [82], [83]. There is even some debate among scholars as to the wisdom of teaching students to become entrepreneurs in the light of current teaching pedagogy [84], [85]. However, there is sufficient empirical data to conclude that students can be taught entrepreneurial competencies [86], and in reference [87],"the question of whether entrepreneurship can be taught is obsolete".

Standing out among the entrepreneurial competences triggered by education, some authors [88], [89] mention increased knowledge in the field of entrepreneurship, creativity, the sense of opportunity, the ability to take on risks and cope with uncertainty and

73. Lethbridge, D., & Davies, G. (1995). An initiative for the development of creativity in science and technology (CREST): an interim report on a partnership between schools and industry. Technovation, 15(7), 453–465.
74. Slaughter, S., & Leslie, L.L. (1997). Academic capitalism: Politics, policies and the entrepreneurial university. Baltimore, MA: The Johns Hopkins University Press.
75. Bergek, A., &Norrman, C. (2008). Incubator best practice: A framework. Technovation, 28(1-2), 20.28.
76. Klofsten, M., Heydebreck, P., & Jones-Evans, D. (2010). Transferring good practice beyond organizational borders: Lessons from transferring an entrepreneurship programme. Regional Studies, 44(6), 791-799.
77. Matlay, H., & Carey, C. (2006). Entrepreneurship education in the UK: a critical perspective, ISBE Conference. Cardiff.
78. Fayolle, A., Kyro, P., & Ulijn, J. (2005). Entrepreneurship Research in Europe. Edward Elgar Publishing, Northampton, MA.
79. Nurmi, P., &Paasio, K. (2007). Entrepreneurship in Finnish universities. Education and Training, 49(1), 56-65.
80. Katz, J. (2003). The chronology and intellectual trajectory of American entrepreneurship education 1876-1999. Journal of Business Venturing, 18(2), 283–300.
81. Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. Entrepreneurship Theory and Practice, 29(5), 577-598.
82. Solomon, G. T. (2007). An examination of entrepreneurship education in the United States. Journal of Small Business Enterprise Development, 14(2), 168-182.
83. Brockhaus, R., Hills, G., Klandt, H., & Welsch, H. (2001). Entrepreneurship education: A global view. Aldershot, U.K.: Avebury.
84. Adcroft, A., Willis, R., & Dhaliwal, S. (2004). Missing the point? Management education and entrepreneurship. Management Decision, 42(3/4), 521-30.
85. Sexton, D. L., & Upton, N. B. (1987). Evaluation of an innovative approach to teaching entrepreneurship. Journal of Small Business Management, 25, 35–43.
86. Katz, J. (2003). The chronology and intellectual trajectory of American entrepreneurship education 1876-1999. Journal of Business Venturing, 18(2), 283–300.
87. Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. Entrepreneurship Theory and Practice, 29(5), 577-598.
88. Moore, S.A., & Weiler, B. (2009). Editorial-Tourism–protected area partnerships: stoking the fires of innovation. Journal of Sustainable Tourism,17(2), 129–132.
89. Yar Hamidi, D., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education. Journal of Small Business and Enterprise Development, 15(2), 304-20.

responsibility. Nevertheless, the central set of skills in this century includes the ability to solve analytical problems, innovation and creativity, taking the initiative, flexibility and adaptability, critical thought and communication and collaboration skills [90], [91], skills that are also appreciated by future employers [92], [93].

To transmit this knowledge and these competences to young people, some programmes have appeared. However, this study highlights the *EMPRE* Programme. This Project of"*EMPRE-School Entrepreneurs*", conceived from the programme of *Young European Business (EJE)*, developed by *Valnalón*, a Spanish public company, is a Programme of Education in Entrepreneurship (EEP) directed to the 3rd Cycle of Basic Education, Secondary and Professional Education, in which the methodology is based on pupils themselves creating and managing a mini-firm at school during an academic year [94].

The aim of the EMPRE Project is to instil and encourage entrepreneurial and personal skills, highlighting the following: responsibility and organization; expression and communication; initiative and creativity; teamwork and cooperation; interpersonal relations and sociability (Proposal for Pedagogical Intervention EMPRE – School Entrepreneurs AEVH 2009).

EMPRE was implemented in Portugal in the academic year of 2009/2010 in four schools (a school group) in a region in central Portugal (Mação), with a total of 202 pupils. In the 2012/2013 academic year, the project was extended to more than 400 pupils throughout the Central Region.

The project has a consultant supporting the classes involved, a collaborator from Tagusvalley, with the task of managing the period of each phase of the project-17 in total-, helping to structure the organization of classes, providing additional information and advice to both pupils and teachers, and facilitating links between teachers, schools and other bodies (Presentation of EMPRE Methodology). The project also includes a clarification session for teachers and parents/guardians.

In the 2009/2010 school year, the EMPRE project included at the initial stage visits to schools by local business-people, to share with pupils their experiences as entrepreneurs, and a visit by pupils to a firm in the region. At the end of each school year, an"EMPRE Fair" is held, an event where all participating mini-firms are present, with the objective of displaying and selling their products/services.

90. Cavanagh, R. E., Kay, K., Klein, D., & Meisinger, S. R. (2006). Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century workforce: The Conference Board, Partnership for 21st Century skills, Corporate voices for Working Families, and Society for Human Resource Management.
91. Goldin, C., & Katz, L. F. (2008). The Race Between Education and Technology. Boston: Harvard University Press.
92. Dhillon, J. K. (2013). Senior managers' perspectives of leading and managing effective, sustainable and successful partnerships. Educational Management Administration & Leadership, 41(6), 736-750.
93. Chia, R. (1996). Teaching paradigm shifting in management education: university business schools and the entrepreneurial imagination. Journal of Management Studies, 33(4), 409-28.
94. Carvalho, M. I., Simões, J., Samagaio, A., & Couto, E. (2012). Enterprise Potential of Portuguese Students Fostered by an Entrepreneurship Education Program. Proceedings of ECIE12 7th European Conference on Innovation and Entrepreneurship, pp.68-78, listed in the Thomson Reuters ISI Index Social Sciences & Humanities Proceedings (ISSHP/ISI Proceedings), (ISBN: 978-1-908272-68-3).

5.3 Methodology

5.3.1 Type of study and case selection

Given the exploratory nature of the study and the research questions, the case study– qualitative approach– is seen to be the most appropriate method. The case study method was chosen for this research because it offers a suitable mechanism for exploring in depth, areas that have little well developed theory and it has demonstrated this value in the social sciences, particularly in relation to schools and the community. Cases, especially exploratory case studies, are also an effective mechanism for the development of theory [95], [96].

This study was limited to exhaustive study of partnerships in an entity, the Verde Horizonte Group of Schools (AEVH) in Mação, Portugal, and is therefore an intensive study of a specific state education institution. The option to carry out the research in a single state school followed the criterion of analysing a school in an inland region of the country which is predominantly rural, depressed and distant from major centres, and comprehension of partnerships formed by the school with local and regional bodies to promote entrepreneurship education. Choosing this school in particular was not based on the conviction it was representative of Portuguese state schools, but rather through being a school in the inland region belonging to the Network of Schools of Excellence (ESCXEL), which has provided its pupils, at the various levels of education, with various programmes of entrepreneurial education (EEP), from the academic year of 2009/2010. One of the programmes in entrepreneurial education developed was that of"EMPRE-Business at School", promoted by Tagusvalley-Vale do Tejo Technological Centre, resulting from the formation of a set of partnerships between the School Group and various local and regional bodies, which this study aims to analyse and understand. The figure below shows the partners involved in implementing this programme to stimulate entrepreneurial education in AEVH.

95. Eisenhardt, K. (1989). Building theory from case study research. Academy of Management Review, 14(4), 532–550.
96. Yin, R. K. (2009). Case study research: Design and methods. London: Sage Publications.

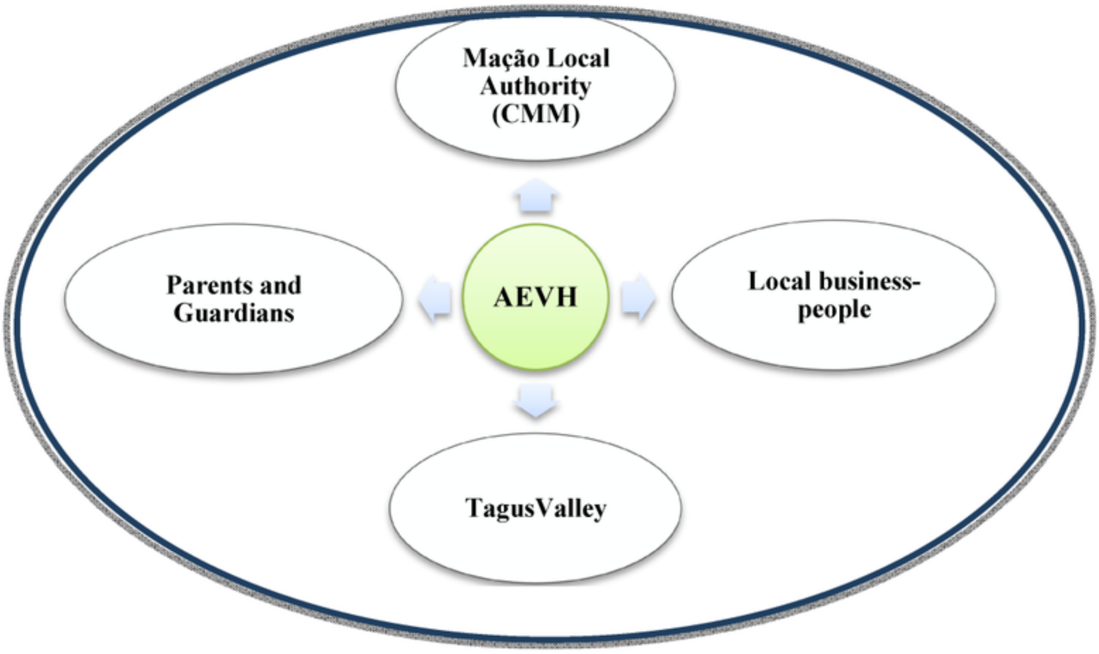

Figure 5.1 Stakeholders involved in the partnerships

5.3.2 Data-collecting instruments

The data collection process involved several documents provided by the organizations and interviews. This use of multiple data sources and the subsequent ability to examine several documents provided good triangulation [97]. Initially, therefore, data collection was carried out through documentary analysis and subsequently through interviews with some of the stakeholders/partners. Parents and business-people were not interviewed in this study. Data is triangulated [98] where possible in order to determine replicable information and denounce inconsistent information in an attempt to minimize the subjectivity of the data presented. The names of individuals/partners have been anonymized.

The first phase of data-collection began by identifying the documents that in each partner would be most likely to contain useful information for understanding the partnerships formed in the scope of promoting education in entrepreneurship. Document selection was based on criteria of their availability and their relevance for analysis of the partnerships formed by AEVH. Table 5.1 shows the documents analyzed from the three partners involved in this study.

CMM	AEVH	Tagusvalley
Article on the CMM Activity	Educational Project 2009-2011	EMPRE project's online platform (www.empre.org)

Table 5.1 Documents analysed and their institutions of origin

97. Bryman, A., & Bell, E. (2003). Business research methods. Oxford: Oxford University Press.
98. Flick, U. (2006). An Introduction to Qualitative Research, Sage Publications, London.

CMM	AEVH	Tagusvalley
Educational Charter of Mação Local Authority	Curricular Project 2010-2013	Regulations of the Vale do Tejo Technological Centre
	Proposal for EMPRE Pedagogical Intervention	

Table 5.1 Documents analysed and their institutions of origin

Then, during May and June 2013, semi-structured interviews were held with the Head of the Verde Horizonte Group of Schools, and in each of the partner organizations the person responsible for forming relations with the school group was identified, regarding the EMPRE project: in Mação Local Authority (CMM), the mayor was interviewed, and in Tagusvalley, the coordinator of the EMPRE project.

All interviews were based on the same protocol/guide. They were arranged previously by telephone, according to the interviewees' availability, and took place on the premises of the respective organizations. Each interview lasted approximately thirty minutes and was recorded, allowing data to be stored and facilitating the organization and analysis of the information (Table 5.2).

Interviewee's post	Institution	Age of interviewee	Date of interview	Place of interview	Duration of interview
Head	AEVH	48 years	21/May/2013	At AEVH, Mação	35 minutes
Coordinator of the EMPRE project	Tagusvalley	36 years	27/May/2013	At Tagus Valley, Abrantes	30 minutes
Mayor	CMM	53 years	6/June/2013	At CMM, Mação	25 minutes

Table 5.2 Interviews and key informants

5.4 Case study analysis and discussion

Regarding data treatment, due to the information sources being documents and interviews, content analysis [99] was chosen, a technique that allows analysis of the content of literary information in an objective and systematic way.

5.4.1 The term of 'partnership': Documentary analysis

A first reading of the content of the documents selected aimed to discover how inter-organizational partnerships were mentioned in the documents analyzed. To this end, specific expressions/terms were looked for, namely, *partnership, relationship, relation, network, cooperation, collaboration, agreement and protocol*. [100] - The diversity of expressions sought arises, firstly, from the multiplicity of specific forms inter-organizational relationships can take on [101], [102], and secondly, from not expecting the choice of expression used in mentioning inter-organizational partnerships in the documents selected to adhere to rigorous scientific criteria.

Table 5.3 summarizes the analysis made, indicating the number of times each expression appears in each document and in what context.

Document	Partnership	Partner	Relationship	Relation	Network	Cooperation	Collaboration	Agreement	Protocol
Article on the CMM Activity Plan				1 (with institutions in the Health sector)	1 (road network)		2 (with Associations and Forestry Office)		
Educational Charter of Mação Local Authority	1 (meals supply to schools)				8 (road, school, urban and transport network)		1 (with Community Councils)		

Table 5.3 Documentary analysis – Expressions referring to inter-organizational relations

99. Bardin, L. (2004). Content Analysis, 3rd Edition. Editions 70, Lisbon.
100. Naturally, the analysis did not consider the expressions indicated when they were not used to designate the phenomenon studied here, for example, in the following cases: "in relation to ..."and "in agreement with ...".
101. Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. Journal of Management, 26(3), 367–403.
102. Dickson, P. H., & Weaver, K. M. (1997). Environmental determinants and individual-level moderators of alliance use. Academy of Management Journal, 40, 404–425.

Document	Partnership	Partner	Relationship	Relation	Network	Cooperation	Collaboration	Agreement	Protocol
Educational Project 2009-2011	2 (with entities in the sector and Psychological Support)	1 (partner in education)	2 (interpersonal)		2 (transport and school)	3 (interpersonal and inter-institutional)	3 (with families and other partners)		1 (Psychological Support)
Curricular Project 2010-2013	2 (with health, safety, cultural and teacher-training institutions)		3 (interpersonal and between family and school)	1 (between elements making up the sector)			2 (with Parents and with teachers)	1 (with Parents)	1 (teacher-training)
Proposal for EMPRE Pedagogical Intervention	1 (Tagus Valley with Polytechnic Institute of Tomar)						2 (between teachers and classes)		
Regulations of the Vale do Tejo Technological Centre	2 (with centres of knowledge)				3 (road and urban)		1 (between firms)	1 (collection of solid waste)	
EMPRE project's online platform	3 (R&D and various entities for entrepreneurship education)				3 (of EMPRE project partners)				

Table 5.3 Documentary analysis – Expressions referring to inter-organizational relations

From the documentary analysis presented in Table 5.3, it can be observed that it is documents issued by AEVH that make most frequent reference to specific relationships concerning inter-organizational partnerships, particularly with entities in the field, and more exactly with parents and families.

As for the Local Authority (CMM) documents, despite the content denoting commitment to the educational success of pupils in the area and the will show to make CMM resources which could contribute to that end available to AEVH, in those documents there is no specific use of expressions related to partnerships with AEVH, with one exception regarding the supply of school meals.

Concerning the documents from Tagusvalley, it is of note there is only one explicit reference to partnerships with various entities in the sphere of entrepreneurship education, among which we can naturally include schools, and AEVH in particular. Despite the lack of use of expressions, there is a clear commitment to the purpose common to all the partnership organizations this study intends to analyse, which includes particularly young people's integral development and keeping them in the district.

5.4.2 Partnership characterization

Regarding classification of the type of partnerships formed by AEVH in the sphere of entrepreneurship education, we can consider these are partnerships of a pragmatic type due to the small number of actors involved and because the problem to be solved is relatively structured and its focus is the development of a specific programme. Therefore, the hierarchical level involved in the AEVH partnerships analysed is the highest in each of the partner organizations, which can be considered contrary to the characterization of [103]. However, if we take into account that both AEVH and CMM are institutes coming within Central Administration, the hierarchical level of the actors involved is relative.

Some of the documentation analysed also allowed assessment of the typology of the relations formed between the partners identified here, particularly the fact these relationships are long-lasting, habitual and wide-ranging with regard to their scope and diversity of partners, based on appreciation of the environment. In this respect, they involve geographically close organizations, and although generically foreseen in these organizations' fundamental documents, they do not need any more specific regulation to develop.

In these circumstances, there is clear evidence of cooperation among actors/partners, which although subject to legislative formalities, takes place with a considerable degree of informality in interaction in terms of transfer of knowledge, communication and information. The sharing of experiences can be informal, promoting contacts. In this way, a path to strengthening intra-network links is begun, allowing the acquisition and construction of social capital.

This informality in the partnerships formed is confirmed in the statements of the three interviewees:

- "*It is a close and informal relationship – the formality only exists to set up that relationship*" (Mayor of CMM).
- "*Annual non-formalized, automatically renewable protocol, if none of the parties backs out*" (Person in charge of Tagusvalley)
- "*Informal partnerships, but they are starting to become usual, without there being a formalized protocol – the repeated informality gives way to unwritten formalization*" (Head of AEVH).

It was also possible to characterize the relationships between the three organizations studied. Those relationships are reciprocal and long-lasting, are not limited to a single area and are based on trust between the people leading them, with bonds resulting from prolonged contact, provided by not only geographical but also ideological

103. Waddock, S. A. (1991). A Typology of Social Partnership Organizations. Administration & Society, 22(4), 480–515.

proximity. Inasmuch, the evidence of this case study corroborates the work of [104] and [105] on the importance of space and place and social capital for the type of relationships that emerge in a community, especially a rural, isolated and depressed one, such as the one studied here.

5.4.3 Reasons for forming partnerships

The three interviewees are clearly in harmony regarding the reasons at the origin of forming the partnerships analysed. There is a common purpose taken to be the fundamental motivation for each of the organizations involved, this being an increase in the region's human capital. According to the interviewee from CMM, "*there is a clear will on the part of CMM to give special prominence to the area of entrepreneurship, contributing to raising the awareness of young people, to the region's benefit (...). The target population is concentrated in the schools*". In the view of this organization, quality education allows new horizons to be opened up, with the final objective being that young people become responsible, entrepreneurial adults who return to the district to give of their best.

For the coordinator of the EMPRE programme (Tagusvalley), "*partnering with entities that pursue the same objectives (...) and improving the region's economic and business situation, stimulating the number of entrepreneurs in the medium/long term and innovation*". The partners share common goals–"*development of personal skills, the pupil's personal development and preparation for future job markets*".

Also on the motives for forming partnerships, the head of AEVH mentions"*accessing the experience and support for the logistics the project involves – human resources, financial support and transport*". The head goes on to highlight "*the opening of doors provided by the partners allows the school to participate in other forums*". In this way, the partners share common aims –"*all want to provide pupils with educational experiences that are varied, meaningful and of quality – quality of education is a goal for all the partners*".

On analyzing some documents from the organizations studied, we see a description of some of these objectives/motives in forming partnerships to promote entrepreneurship education (Table 5.4).

Article on the CMM Activity Plan of 2008	Educational Project of AEVH 2009-2011
"...the Local Authority Executive will continue to pay special attention to school-age	"The school, in assuming its prominent position in EDUCATION FOR

Table 5.4 Documentary analysis: Reasons for partnerships

104. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. Peabody Journal of Education, 76(2), 204–221.
105. Huggins, R., Johnston, A., & Thompson, P. (2012). Network Capital, Social Capital and Knowledge Flow: How the Nature of Inter-organizational Networks Impacts on Innovation. Industry and Innovation, 19(3), 203–232.

children, as was the case in previous years, supplying a set of essential services and support for their personal and academic enhancement.” **Educational Charter of Mação–Mação Local Authority (CMM):** – “… the school, as the centre of educational policies, must build its autonomy with regard to the surrounding community, its potential and problems, relying on a new attitude in Local, Regional and Central Administration that will allow a better response to the challenges of change.” –“(…) Mação Local Authority intends to attain a major objective: “to promote quality education in all its schools, providing children and young people in Mação Council with identical or better opportunities than those offered in urban areas.” – “Being considered a strategic sector for the Local Authority’s development, Education, … , so that our children have training and development facilities which can prepare them to face the future with sufficient skills on which to base the success we all desire for each one of them in particular and for the Council area in general.” – “AEVH will be provided with a set of equipment and services able to add quality to educational/training tasks at	CITIZENSHIP, will develop practices towards COMPLETE EDUCATION OF THE HUMAN BEING and will adopt strategies that allow … contributions to highlighting the role of the school in its environment, by forming partnerships with different entities” Objectives: “To provide, in collaboration with educational partners, formal and informal teaching/ learning situations that stimulate the expression of interests and aptitudes in the various domains of training.” “… the problems were identified: …lack of parental involvement in school life…”. **Curricular Project of AEVH 2010–2013** “…this new school orientation assumes it will develop a close relationship between its integral parts and the surrounding environment…” “…there is an absolute necessity for correct articulation of the curricular orientations issued nationally with the real situation of the school’s environment.” “…in this Curricular Project, the following goals are defined as priorities: (1) promoting strategies that contribute to a better relationship between the

Table 5.4 Documentary analysis: Reasons for partnerships

all levels of education (...). Besides providing this equipment and services, CMM will supply a transport network which will allow, in addition to transport to schools, a set of extra-curricular activities, in this way broadening educational horizons."	family and the school/ parental involvement; (2) establishing greater school/ community interaction; and (3) forming partnerships with various institutions in the areas of safety, health and culture." "The interests of families and the community should also be reflected in that curriculum..."

Table 5.4 Documentary analysis: Reasons for partnerships

The interviews confirm the alignment of all partners regarding a socially relevant objective, valued by all those involved – successful integrated development and the educational success of the region's children and young people. In particular, the head of AEVH stated in his interview that"*all (the partners) want to provide pupils with educational experiences that are varied, meaningful and of quality – quality in education is a goal for all the partners*". These organizations pursue certain common objectives, assuming that as a group they achieve what would not be possible individually [106].

Concerning recognition, by all partners, of a common purpose behind establishing the partnership, the evidence obtained in this case study confirms what is stated in the literature [107], [108], [109].

In the three interviews, there is evidence of recognition of the School's authority as an institution responsible for leading the educational process, and particularly in the field of entrepreneurship. The agreement by CMM and Tagusvalley, in recognizing their role as partners of AEVH, is not surprising, and considering the literature quoted [110], since this is a school within these institutions' area of influence, their willingness to cooperate could even be expected.

In the interview, the head of AEVH also mentions the need for resources to promote entrepreneurship education, which the school does not possess and therefore needs to obtain outside, pointing to the synergies between organizations as a motivation/ advantage of the partnerships formed. Indeed, the need to get hold of resources from

106. Armistead, C., & Pettigrew, P. (2004). Effective partnerships: building a sub-regional network of reflective practitioners. The International Journal of Public Sector Management, 17(6/7), 571-585.
107. Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. In K. Hurrelmann, F. Kaufmann & F. Losel (Eds.), Social intervention: Potential and constraints (pp. 121-136). New York: De Gruyter.
108. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.
109. Konkola, R., Tuomi-Gröhn, T., Lambert, P., & Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace. Journal of Education and Work, 20(3), 211–228.
110. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.

community institutions to develop educational projects at school is an aspect highlighted in the literature [111], [112].

It can also be seen from the documentary analysis that CMM refers to the dimension of the resources in at least one of the documents analysed and its willingness to provide them for educational and school use. Although the documents originating in AEVH do not refer specifically to the need for those resources, they strongly underline the intention to form and strengthen partnerships with entities in the surrounding area, recognizing the authority/influence they have or could have locally and in the educational process, particularly parents and families.

Table 5.4 confirms that all the organizations involved in the partnership clearly identify in the respective documents a socially relevant objective for the medium/long term, which is valued by all partners: the successful integrated development of the district's children and young people. Forming partnerships with other local organizations with a view to that medium and long-term objective is evident in the documents originating in AEVH. That objective is accepted as the purpose of establishing the partnerships analysed, and is common to all those involved.

5.4.4 Obstacles in forming partnerships

Through its Educational Project 2009-2011, AEVH identifies as a barrier/obstacle to partnership with families, the remoteness of parents and guardians from school life, stating that their active participation in school activities is a success factor of that partnership. On the other hand, the Local Authority's Educational Charter, a document produced by CMM, recognizes the authority/influence of the School concerning educational services, and even its autonomy, while showing the CMM organization's strategy of collaborating with the School in carrying out its mission.

It is also of note that none of the interviewees referred to the role of parents or the need to involve them in achieving education for entrepreneurship, and in particular, in the EMPRE project, despite their involvement being foreseen in the project's supporting documentation. In this particular aspect of the involvement of parents as partners in activating entrepreneurship education programmes, the evidence of this study does not confirm the conclusions of [113] and [114] that parents are becoming a pressure group able to influence the school curriculum, despite recognizing their authority and desiring their intervention and collaboration in those programmes. Indeed, in the documents guiding AEVH, there is an expressed wish to involve parents and families in school life, but their remoteness is also mentioned and considered a barrier to forming partnerships with these actors.

At this moment, the challenge for AEVH seems to be to get parents involved somehow in the activities developed at school rather than obtaining their support for decisions

111. Levinthal, D. A. & March J. G. (1993). The myopia of learning, Strategic Management Journal, Winter Special Issue, 14, 95-112.
112. Lanzi, D. (2007). Capabilities, human capital and education. The Journal of Socio-Economics, 36(3), 424–435.
113. Cotton, J. C. (1993). Developing enterprising teaching and learning in Hungary. Education & Training, 35(7), 8.
114. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.

concerning the curriculum to implement. The lack of parental effort in implementing EEP, in particular, could be due to considering it as an exclusive sphere of action for the school and its professionals, regarding the school curriculum and the trust placed in the community's institutions to lead these programmes.

This study does not confirm reluctance by the school and its professionals to be exposed to public scrutiny nor an attitude of mistrust by teachers or the head regarding the community's legitimacy to contribute to pupils' scholastic success, as has been mentioned in the literature on School-Community partnerships, namely in the study by [115]. However, in the interview with the head of AEVH, it is evident there is a certain discomfort in elements of the school caused by the loss of absolute control of the process, as a result of forming partnerships. Despite that and the merely informal appreciation of the results of the partnerships, their continuation assumes the result is positive.

The following quotations give other empirical evidence of the barriers felt by the partners involved in these inter-organizational partnerships.

- "*The universe of young people focused on could perhaps mean a limited success rate. Partners' participation in school activities could be more frequent, partners could devote more time to the relationship with the school (...). The existence of specific funding to channel to EMPRE could benefit the relationship*" (Mayor of CMM).
- "*The absence of a global strategy for the medium and long term of educational authorities to take advantage of existing resources implies work repeated annually in launching the partnership*" (Tagus Valley coordinator). Also for the person in charge of this organization, "*the EMPRE Project begins very late in each school year, due to the need to repeat each year the process of launching the partnership with the school, because of the lack of a global policy and m.l.p. of the educational authorities*". The"*lack of funds, the need to contact the school administration at the start of each school year to renew the partnership, leading to a delay in beginning the EMPRE Project in the school year*", is also pointed out by the EMPRE coordinator as a barrier forming partnerships.

In this context, the head of AEVH underlines that the "*partnerships imply a loss of absolute control of the process, a loss of decision-making capacity and immediate intervention. The EMPRE Project appears to be already formatted, necessitating adjustment without the possibility of altering the format; lack of accompaniment in the 3rd edition* (...)".

The head of this Group of Schools also highlights that"*there are not many institutions that can add unequivocal bonuses in a project of entrepreneurship education (...). There is "little diversity of partners and partners do not have enough time to deal with the school's needs*". The lack of finance was another obstacle identified by this interviewee in implementing EEP in the school.

115. Cotton, J. C. (1993). Developing enterprising teaching and learning in Hungary. Education & Training, 35(7), 8.

5.4.5 Factors of partnership success

For the success of the partnerships, the Mayor of CMM and the coordinator from Tagusvalley pointed out the style of leadership exercised by the head of AEVH, this being of a relational type. The following quotations show other success factors:

- "*The existence of careful planning, constructive dialogue between partners, appropriate school leadership that is appropriate, involved, dedicated and resilient*" (Mayor of CMM).
- "*Relationships based on personal bonds, friendship, proximity, personal and institutional trust, institutional tradition (...). Partnerships are long-lasting and should remain ad eternum, they cover various areas*", the Mayor of CMM also states.
- "*The existence of careful annual planning; constructive dialogue that has led to adaptations to the EMPRE project (...). Appropriate leadership in AEVH – the head is very focused on the matter of entrepreneurship education (...); intervention with other community actors, leading to partnership functioning, which benefits the project's application*" (Coordinator from Tagusvalley).
- "*Relationships are based on trust, personal bonds, geographical proximity, institutional tradition, they are long-lasting and not limited to the EMPRE Project*" (Tagus Valley).

This evidence agrees with the conclusions in the work by [116] and [117], who mention leadership as a determinant factor of success of partnerships between School and Community, as well as the need for strategic thinking in schools that values school experiences promoting the development of appropriate skills for the demands of today's society. It is noted that it was not possible to associate any evidence of these factors in the content of the documentation analysed.

In his interview, the head of AEVH also accepts that one of the success factors of the partnerships formed is"*the effort by those directly responsible for implementing the EMPRE project in the school, recognizing the importance and need for the involvement of human resources for partnership success and the role of intermediate leadership as determinant for the success of the partnerships formed in the scope of the EMPRE project*".

The interviewee from the School Group also stresses as factors of partnership success, "*careful planning and constructive dialogue; leadership is important, namely intermediate leadership, i.e., by the project coordinators in the school; relationships based on trust, the personal knowledge of those in charge, proximity, institutional tradition", that is to say, "long-lasting relationships that go beyond EMPRE*".

In fact, trust has also been identified as an important variable determining whether a partnership can be maintained or not. In [118] it is necessary to pay greater attention to

116. Lethbridge, D., & Davies, G. (1995). An initiative for the development of creativity in science and technology (CREST): an interim report on a partnership between schools and industry. Technovation, 15(7), 453–465.
117. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. Peabody Journal of Education, 76(2), 204–221.
118. Moore, S.A., & Weiler, B. (2009). Editorial-Tourism–protected area partnerships: stoking the fires of innovation. Journal of Sustainable Tourism,17(2), 129–132.

the partnership processes. Factors such as trust, commitment, open communication, flexibility and the capacity to manage conflicts should be considered. Indeed, in a partnership it is important to communicate easily with potential stakeholders to minimize resistance to its creation and maintenance.

Another question arising from the interviews held was the reference by the head of AEVH and the leader of Tagus Valley to "organizational learning" achieved through the partnerships formed, which ties in with the conclusion of [119]. Learning processes are often the result of partnerships between schools and local institutions, corroborating the possibility of going beyond the boundaries of education, training and work systems, as proposed by [120].

5.5 Conclusions and implications

This chapter seeks to highlight the role of partnerships in entrepreneurship education programmes to encourage the growth of entrepreneurial motivations in secondary schools. Educational institutions have the role of educating and preparing individuals to become employees [121]. Self-employment or entrepreneurship has not been traditionally viewed as a career choice for graduates. Thus, this traditional role needs to be reformed because the world is changing.

The literature highlights the importance of promoting entrepreneurial skills among students [122]. However, the overwhelming majority of curricular programmes do not contemplate contents related to entrepreneurship, teachers have no specific training in the subject and the formal educational system itself does not contribute to developing skills commonly associated with entrepreneurship. Nevertheless, schools, and particularly those in charge of them, are aware of the need to equip young people with these skills, and so they have embarked on partnerships with local and regional bodies in order to give their pupils the possibility of benefiting from Programmes of Education in Entrepreneurship.

The Verde Horizonte Group of Schools (AEVH) studied here is an example of a school organization which, to meet some needs for specific resources to activate those programmes, but contained in a collaborative strategy with local and regional actors, formed a set of partnerships with organizations that could add some unequivocal advantages regarding education in entrepreneurship. Those partnerships are based on the social network characterizing the region which is predominantly rural, depressed and remote from major centres, have an influential role in the school's organization and are founded on leadership of a relational nature exercised by the head AEVH, recognized both internally and in the community.

119. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. Education & Training, 51(2), 92–107.
120. Konkola, R., Tuomi-Gröhn, T., Lambert, P., & Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace. Journal of Education and Work, 20(3), 211–228.
121. Nurmi, P., &Paasio, K. (2007). Entrepreneurship in Finnish universities. Education and Training, 49(1), 56-65.
122. Gibb, A. A. (2002). In pursuit of a new enterprise and entrepreneurship paradigm of learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. International Journal of Management Reviews, 4(3), 233–269.

Based on the evidence obtained, alignment of all partners was found towards a socially relevant objective valued by all those involved– successful integrated development and the educational success of the region's children and young people.

This study was also able to conclude that the involvement of parents and guardians is not yet what would be wished for, according to the intentions expressed in the empirical evidence, and is not a true partnership regarding education in entrepreneurship. This fact arises from the study as the most obvious obstacle to the functioning of partnerships between the schools and community analysed, with a long way to go in relation to the influence and authority of this actor in the school context. Therefore, we believe that the Entrepreneurship Education Programme presents a viable model for fruitful inter-school collaboration and cooperation in entrepreneurship programming. The evidence so far indicates that it has been highly successful after only three years of operation. We suggest this model may be very useful to other regional groupings of entrepreneurship centres, as long as the geographical spread is not too great and the collaboration maintains its focus. We think the region will also reap the benefit of our efforts in the long run.

Several implications for policymakers and leaders of academic institutions follow on from the results presented here. There is a need to involve parents in defining a strategy of education in entrepreneurship. Entrepreneurship education should be included in the Educational Project of AEVH as an objective for the school, so that all the institution's teachers (and other actors) identify with that objective, their efforts can be assessed within that parameter and entrepreneurship education projects are not abandoned by the institution when the teachers involved leave.

There is also the need to reward the teachers involved in the dynamics of EEP (for example, through assessing their performance). There may be a risk of abandoning the defined strategy for entrepreneurship education, if and when institutional leaders are replaced in their respective posts, since the partnerships formed are based essentially on the informal and even personal bonds existing between them. It is therefore necessary/advantageous to define nationally a strategy for entrepreneurship education in state schools.

Those in charge should implant the vision that entrepreneurship education is not the exclusive responsibility of the school and that the sphere of action can and should be occupied by other institutions in the community, for example, companies and business associations, whose technical knowledge is indispensable for the dynamics of entrepreneurship education.

Students involved in such courses and programmes could serve as inspiration and role models for new and prospective students, while at the same time strengthening the ties between a school and other parts of the society/community.

This study is not without its limitations. One of them lies in the fact it was not possible to obtain statements from representatives of all the organizations identified as forming part of AEVH's relationships. This limitation prevented, for example, perception of the role represented by parents in defining the school curriculum. With parents being considered in the literature as an increasingly powerful pressure group, this is an unavoidable question in understanding the partnerships described. Inclusion of that actor is therefore suggested for analysis in future research, so that the data obtained are more wide-ranging, giving more depth to conclusions.

Another limitation of this study arises from the method used – study of a single case– which, despite being the most appropriate for this research, presents the disadvantage of not allowing generalization of conclusions. Data were analyzed for a single Group of Schools, in a specific context, and so generalization of the conclusions of this study to other cases is not possible, due to its specific characteristics, such as the social and business situation, cultural aspects, educational structure and geographical location, among other determinants of the type of relationships formed between School and Community.

As a future line of research, we suggest developing this investigation in a significant number of schools with triangulation of research methods, resorting to methods of a quantitative nature, so that a comparative analysis can be made with generalization of the results obtained.

5.6 Notes

1. Naturally, the analysis did not consider the expressions indicated when they were not used to designate the phenomenon studied here, for example, in the following cases: "in relation to …"and "in agreement with …".

5.7 Refernces

1. Gibb, A. A. (1996). Entrepreneurship and small business management: Can we afford to neglect them in the twenty-first century business school? *British Journal of Management*, 7(4), 309-324.
2. Reynolds, P. D., Camp, M., Bygrave, W. D., Autio, E., & Hay, M. (2001). *Global entrepreneurship monitor: 2001 executive report*. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
3. Vesper, K. H., & Gartner, W.B. (1997). Measuring progress in entrepreneurship education. *Journal of Business Venturing*, 12(5), 403-421.
4. Solomon, G.T., Duffy, S., &Tarabishy, A. (2002). The state of entrepreneurship education in the United States: a nationwide survey and analysis. *International Journal of Entrepreneurship Education*, 1(1), 65-86.
5. Henry, C., Hill, F., & Leitch, C. (2003). *Entrepreneurship Education and Training*. Ashgate, Aldershot.
6. Politis, D. (2005). The process of entrepreneurial learning: a conceptual framework. *Entrepreneurship Theory and Practice*, 29(4), 399-424.
7. Solomon, G. T. (2007). An examination of entrepreneurship education in the United States. *Journal of Small Business Enterprise Development*, 14(2), 168-182.
8. Brockhaus, R., Hills, G., Klandt, H., & Welsch, H. (2001). *Entrepreneurship education: A global view*. Aldershot, U.K.: Avebury.

9. European Commission (2006). Aplicar o Programa Comunitário de Lisboa: promover o espírito empreendedor através do ensino e da aprendizagem, Comissao Europeia, Bruxelas.
10. Anonymous. (2006). Young people feel they need better training in entrepreneurship. *Education & Training*, 48(2/3), 197–200.
11. Dhillon, J. K. (2013). Senior managers’ perspectives of leading and managing effective, sustainable and successful partnerships. *Educational Management Administration & Leadership*, 41(6), 736-750.
12. McMullan, W. E., & Long, W. A. (1987). Entrepreneurship education in the nineties. *Journal of Business Venturing*, 2, 261–275.
13. Shane S., &Venkataraman S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25, 217-226.
14. Hindle, K. (2004). A practical strategy for discovering, evaluating, and exploiting entrepreneurial opportunities: Research-based action guidelines. *Journal of Small Business and Entrepreneurship*, 17, 267-276.
15. Rae, D. (2000). Understanding entrepreneurial learning: a question on how. *International Journal of Entrepreneurial Research*, 6(3), 129-144.
16. Gibb, A. A. (1993). The enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. *International Small Business Journal*, 11(3), 11-34.
17. Taylor, D. W., & Thorpe, R. (2004). Entrepreneurial learning: a process of co-participation. *Journal of Small Business and Enterprise Development*, 11(2), 203-11.
18. Lethbridge, D., & Davies, G. (1995). An initiative for the development of creativity in science and technology (CREST): an interim report on a partnership between schools and industry. *Technovation*, 15(7), 453–465.
19. Gibb, A. A. (2002). In pursuit of a new enterprise and entrepreneurship paradigm of learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233–269.
20. Cotton, J. C. (1993). Developing enterprising teaching and learning in Hungary. *Education & Training*, 35(7), 8.
21. Hytti, U., & O’Gorman, C. (2004). What is “enterprise education”? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education & Training*, 46(1), 11–23.
22. Carvalho, M. I., Simões, J., Samagaio, A., & Couto, E. (2012). Enterprise Potential of Portuguese Students Fostered by an Entrepreneurship Education Program. *Proceedings of ECIE12 7th European Conference on Innovation and Entrepreneurship, pp.68-78, listed in the Thomson Reuters ISI Index Social Sciences & Humanities Proceedings (ISSHP/ISI Proceedings)*, (ISBN: 978-1-908272-68-3).
23. Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481–510.
24. Granovetter, M. S. (1974). *Getting a job: A study of contacts and careers*. Cambridge, MA: Harvard University Press.
25. Aldrich, H., Rosen, B., & Woodward, W. (1987). The impact of social networks on business foundings and profit: A longitudinal study. In N. C. Churchil, J. A. Hornaday, B. A. Kirchhoff, O. J. Krasner, & K. H. Vesper (Eds.), *Frontiers of*

entrepreneurship research. Proceedings of the seventh annual Babson college entrepreneurship research conference. Wellesley, MA: Babson College.

26. Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science*, 48(3), 364–381.
27. Fornahl, D. (2003). Entrepreneurial activities in a regional context. In D. Fornahl& T. Brenner (Eds.), *Cooperation, networks and institutions in regional innovation systems* (pp. 38–57). Cheltenham, UK: Edward Elgar.
28. Klofsten, M., & Jones-Evans, D. (2000). Comparing academic entrepreneurship in Europe: The case of Sweden and Ireland. *Small Business Economics*, 14(4), 299–309.
29. Fisher, D., & Atkinson-Grosjean, J. (2002). Brokers on the boundary: Academy-industry liaison in Canadian universities. *Higher Education*, 44(3), 449–467.
30. Mosey, S., Lockett, A., &Westhead, P. (2006). Creating network bridges for university technology transfer: The medici fellowship programme. *Technology Analysis & Strategic Management*, 18(1), 71–91.
31. Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. *Peabody Journal of Education*, 76(2), 204–221.
32. Sanders, M. G. (2001). The Role of “ Community ” in Comprehensive School, Family, and Community Partnership Programs. *The Elementary School Journal, 102*(1), 19–34.
33. Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. *Journal of Management*, 26(3), 367–403.
34. Williamson, O. E. (1981). The Economics of Organizations: The Transaction Cost Approach. *American Journal of Sociology*, 87, 548-577.
35. Pfeffer, J., Salancik, G. R., *The External Control of Organizations: A Resource Dependence Perspective*, Stanford University Press.
36. Freeman, R. E. (1994). The Politics of Stakeholder Theory: Some Future Directions. *Business Ethics Quarterly*, 4(4), 409-421.
37. Levinthal, D. A. & March J. G. (1993). The myopia of learning, *Strategic Management Journal*, Winter Special Issue, 14, 95-112.
38. DiMaggio, P., & Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147–160.
39. Williams, T. (2005). Cooperation by design: structure and cooperation in interorganizational networks. *Journal of Business Research*, 58(2), 223–231.
40. Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. In K. Hurrelmann, F. Kaufmann & F. Losel (Eds.), *Social intervention: Potential and constraints* (pp. 121-136). New York: De Gruyter.
41. Lanzi, D. (2007). Capabilities, human capital and education. *The Journal of Socio-Economics*, 36(3), 424–435.
42. Waddock, S. A. (1991). A Typology of Social Partnership Organizations. *Administration & Society*, 22(4), 480–515.
43. Huggins, R., Johnston, A., & Thompson, P. (2012). Network Capital, Social Capital and Knowledge Flow: How the Nature of Inter-organizational Networks Impacts on Innovation. *Industry and Innovation*, 19(3), 203–232.
44. Storper, M., &Venables, A. J. (2004). Buzz: Face-to-face contact and the urban economy. *Journal of Economic Geography*, 4(4), 351–370.

45. Nohria, N., & Eccles, R. G. (1992). *Networks and organizations: Structure, form, and action*. Boston: Harvard Business School Press.
46. Bienkowska, D., Larsen, K., &Sörlin, S. (2010). Public-private innovation: Mediating roles and ICT niches of industrial research institutes. *Innovation: Management, Policy & Practice*, 12(2), 206–216.
47. Starbuck, E. (2001). Optimizing university research collaborations. *Research-Technology Management*, 44(1), 40–44.
48. Harreveld, B., & Singh, M. (2009). Contextualising learning at the education-training-work interface. *Education & Training*, 51(2), 92–107.
49. Konkola, R., Tuomi-Gröhn, T., Lambert, P., & Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace. *Journal of Education and Work*, 20(3), 211–228.
50. Slaughter, S., & Leslie, L.L. (1997). *Academic capitalism: Politics, policies and the entrepreneurial university*. Baltimore, MA: The Johns Hopkins University Press.
51. Bergek, A., &Norrman, C. (2008). Incubator best practice: *A framework. Technovation*, 28(1-2), 20.28.
52. Klofsten, M., Heydebreck, P., & Jones-Evans, D. (2010). Transferring good practice beyond organizational borders: Lessons from transferring an entrepreneurship programme. *Regional Studies*, 44(6), 791-799.
53. Matlay, H., & Carey, C. (2006). Entrepreneurship education in the UK: a critical perspective, *ISBE Conference*. Cardiff.
54. Fayolle, A., Kyro, P., & Ulijn, J. (2005). *Entrepreneurship Research in Europe*. Edward Elgar Publishing, Northampton, MA.
55. Nurmi, P., &Paasio, K. (2007). Entrepreneurship in Finnish universities. *Education and Training*, 49(1), 56-65.
56. Katz, J. (2003). The chronology and intellectual trajectory of American entrepreneurship education 1876-1999. *Journal of Business Venturing*, 18(2), 283–300.
57. Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-598.
58. Adcroft, A., Willis, R., & Dhaliwal, S. (2004). Missing the point? Management education and entrepreneurship. *Management Decision*, 42(3/4), 521-30.
59. Sexton, D. L., & Upton, N. B. (1987). Evaluation of an innovative approach to teaching entrepreneurship. *Journal of Small Business Management*, 25, 35–43.
60. Moore, S.A., & Weiler, B. (2009). Editorial-Tourism–protected area partnerships: stoking the fires of innovation. *Journal of Sustainable Tourism*,17(2), 129–132.
61. Yar Hamidi, D., Wennberg, K., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, 15(2), 304-20.
62. Cavanagh, R. E., Kay, K., Klein, D., & Meisinger, S. R. (2006). Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century workforce: The Conference Board, Partnership for 21st Century skills, Corporate voices for Working Families, and Society for Human Resource Management.
63. Goldin, C., & Katz, L. F. (2008). *The Race Between Education and Technology*. Boston: Harvard University Press.

64. Chia, R. (1996). Teaching paradigm shifting in management education: university business schools and the entrepreneurial imagination. *Journal of Management Studies*, 33(4), 409-28.
65. Eisenhardt, K. (1989). Building theory from case study research. *Academy of Management Review*, 14(4), 532–550.
66. Yin, R. K. (2009). *Case study research: Design and methods*. London: Sage Publications.
67. Bryman, A., & Bell, E. (2003). *Business research methods*. Oxford: Oxford University Press.
68. Flick, U. (2006). *An Introduction to Qualitative Research*, Sage Publications, London.
69. Bardin, L. (2004). *Content Analysis*, 3rd Edition. Editions 70, Lisbon.
70. Dickson, P. H., & Weaver, K. M. (1997). Environmental determinants and individual-level moderators of alliance use. *Academy of Management Journal*, 40, 404–425.
71. Armistead, C., & Pettigrew, P. (2004). Effective partnerships: building a sub-regional network of reflective practitioners. *The International Journal of Public Sector Management*, 17(6/7), 571-585.

Chapter 6 Educating Succeeding Generation Entrepreneurs in Family Businesses – The Case of Slovenia

by Mojca Duh [1], Marina Letonja [2] and Jaka Vadnjal [3]

6.1 Introduction

Succession has been recognized as one of the major problems of family businesses and, for this reason, has become one of the most researched topics in the family business research field [4], [5], [6]. Family businesses represent an important share in the structure of all firms. According to research findings, more than 70% of all firms worldwide [7] are family ones, most of them being micro, small or medium-sized firms (SMEs). According to some research results, such as [8], [9], between 40% and 80% of Slovenian businesses are family SMEs, with the majority owned by the first generation of the family [10]. Recently, the discussion in Slovenia has focused on the problem of transferring family firms to the next generation. Family SMEs established in the 1990s are approaching the critical phase of transferring firms to the next generation. Owners/managers of these firms, mostly founders, have practically no experience in managing the succession process due to the lack of a succession tradition in Slovenia. As Slovenia is one of the innovation followers with a below average performance, the enhancement of innovativeness and entrepreneurial orientation of successors and their firms is of crucial importance for the future of Slovenia as an innovative society.

In our study, we will explore family SMEs challenged by succession in Slovenia and how entrepreneurialism (i.e., entrepreneurial competences of successors) and

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4. Bird HB, Welsch H, Astrachan JH, Pistrui D. Family Business research: The evolution of an academic field. Family Business Review 2002;15(4) 337-350.
5. Miller D, Steier L, Le Breton-Miller I. Lost in time: intergenerational succession, change, and failure in family business. Journal of Business Venturing 2003;18(4) 513-531.
6. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
7. Mandl I. Overview of Family Business Relevant Issues, Final Report, Austrian Institute for SME Research, Vienna; 2008. http://ec.europa.eu/enterprise/entrepreneurship/ craft/family_business/family_business_en.html (accessed 31 July 2009).
8. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.
9. Glas M, Herle J, Lovšin Kozina F, Vadnjal, J. The state of family firm management in Slovenia. In proceedings of 2nd Workshop on Family Firm Management Research, EIASM, Nice, Italy; 2006.
10. Duh M. Overview of family business relevant issues, Country fiche Slovenia. Research project. University of Maribor; 2008.

knowledge transfer (from founders to successors) contribute to effective succession in family SMEs. According to many authors, including [11], [12], knowledge and the processes of creating new and using existent knowledge are of crucial importance for firms' innovation capability. In our research, we propose that entrepreneurial competences are of crucial importance for the development of capable successors who should bring fresh perspectives in a firm, thereby contributing to the strategic renewal of a firm in the next generation. Our definition of factors that contribute to the formation of entrepreneurial competences is based on research findings of [13] and cognitions on entrepreneurship, knowledge, knowledge management and innovations of scholars in family businesses research field, such as [14], [15], [16], [17], [18]. Working experience outside a family firm, family context (i.e., familiness), and formal education (i.e., in entrepreneurship) are recognized in our research as an important factors in building entrepreneurial competences.

The realization of effective succession depends to a great extent on how well a succeeding generation is prepared to take over a leadership and entrepreneurial role [19], [20], [21]. For this reason many research studies have dealt with the nurturing, preparation, and development of successor(s) [22], [23], [24] as an important predictor of successful succession. Several studies, such as [25], [26], [27], have argued the importance of a successors' education level for smooth and successful realization of succession; the selection of successors is increasingly based on their experiences and skills as well as commitment to a family firm [28]. Successors' educational level should meet requirements needed to be an entrepreneur in a knowledge-based economy, where it

11. Nonaka I, Toyama R, Konno N. SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. Long Range Planning 2000;33(1) 5-34.
12. Nonaka I, von Krogh G. Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory. Organization Science 2009;20(3) 635-652.
13. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
14. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
15. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
16. Matz Carnes C, Ireland D. Familiness and Innovation: Resource Bundling as the Missing Link. Entrepreneurship Theory and Practice 2013;37(6) 1399-1419.
17. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
18. Steier L. Next generation entrepreneurs and succession: An exploratory study of modes and means of managing social capital. Family Business Review 2001;14(3) 259-276.
19. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
20. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
21. Sharma P, Rao AS. Successor Attributes and Canadian Family Firms: A Comparative Study. Family Business Review 2000;13(4) 313-322.
22. Dyck B, Mauws M, Starke FA, Mischke GA. Passing the baton. The importance of sequence, timing, technique and communication in executive succession. Journal of Business Venturing 2002;17(2) 143-162.
23. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
24. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
25. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
26. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
27. Steier L. Next generation entrepreneurs and succession: An exploratory study of modes and means of managing social capital. Family Business Review 2001;14(3) 259-276.
28. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).

is no longer enough just to know how to perform a specific activity or function. Being competitive requires being able to create new knowledge, which also depends on a successor's absorptive capacity established by academic and professional education [29]. The process of getting formal/academic education also exposes successors to new ideas and trends [30]. Successors' experiences gained by working outside the family firm have also been found to be of great importance in developing specific abilities, getting different view of the business, and learning how to do business [31], [32], [33], [34], [35]. Such experiences are of special importance as they offer exposure to new ideas and perspectives [36] and provide knowledge that is relevant for the future development of a firm's innovation capacity [37], [38]. Tightly linked to the question of preparing a competent leader are research studies dealing with the transfer of knowledge during the succession process [39]. In particular, the transfer of tacit knowledge from predecessor to successor and the successor's training to assume the top management functions have been found to be key processes in developing and protecting knowledge (especially tacit knowledge) and guaranteeing the existence and development of a family business [40], [41].

The main goal of our research is to broaden our understanding of the importance and factors of building entrepreneurial competences for effective succession in family SMEs. The role of formal education in building entrepreneurial competences of succeeding generations is introduced for two cases of educational institutions in Slovenia: the Faculty of Economics and Business, University of Maribor and GEA College, Faculty of Entrepreneurship. Twenty Slovenian family SMEs were used for the case study, which was conducted in order to explore how entrepreneurialism and the transfer of tacit knowledge between a founder and a successor contribute to effective succession in family SMEs. We limit our research on the intra-family business transfer of leadership (i.e., management succession) from the first (i.e., founder) to the second family generation.

The topic researched induced us to adopt a qualitative research approach, where we found the case studies' research method to be the most suitable. Many authors,

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29. Szulanski G. Exploring internal stickiness. Impediments to the transfer of best practice within the firm. Strategic Management Journal 1996;17(Special Winter Issue) 27-43.
30. Sardesmukh SR, Corbett AC. The Duality of Internal and External Development of Successors: Opportunity Recognition in Family Firms. Family Business Review 2011;24(2) 111-125.
31. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
32. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
33. Duh M. Family business succession as knowledge creation process. Kybernetes 2014;43(5) 699-714.
34. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
35. Ward JL. Keeping the Family Business Healthy. San Francisco: Jossey-Bass Inc. Publishers; 1987.
36. Sardesmukh SR, Corbett AC. The Duality of Internal and External Development of Successors: Opportunity Recognition in Family Firms. Family Business Review 2011;24(2) 111-125.
37. Duh M. Family business succession as knowledge creation process. Kybernetes 2014;43(5) 699-714.
38. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
39. Sharma P. An Overview of the Field of Family Business Studies: Current Status and Directions for the Future. Family Business Review 2004;17(1) 1-36.
40. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
41. Dumas C. Women's pathways to participation and leadership in family-owned firms. Family Business Review 1998;11 219-228.

including [42], [43], [44], have argued that qualitative methods are needed in the field of family business research as this type of business is characterized by complex relationships and interactions that actively construct reality. We apply a multiple-case study approach, where replication logic is possible [45]. The twenty cases were carefully selected from a database that the authors of this study have been developing for many years.

We begin our paper with the conceptual framework and an overview of existing research and literature; we continue with the presentation of methodology and empirical findings. We end our paper with conclusions and propositions for future research directions. Implications for practice are presented as well.

6.2 Effectiveness of family business succession

One of the major problems family businesses face in their lifecycle is the transfer of ownership rights and leadership to the next family generation. Some authors, such as [46], even define a family business in terms of a succession. Estimations indicate that only around 30% of family businesses survive to the second generation because of unsolved or badly solved succession [47], [48] and even less succeed to the third generation [49]. A widely accepted differentiation of succession [50], [51], [52] is between succession in management (or so-called leadership succession) and succession in ownership, although in most family SMEs both processes occur simultaneously and go hand-in-hand.

Although succession within a particular family is only one of many possibilities, a majority of family enterprises' leaders desire to retain family control past their tenure [53], [54]. A family member as a successor is especially preferable when so-called idiosyncratic, family business-specific experiential knowledge is considered highly

42. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
43. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
44. Lambrecht J, Lievens J. Pruning the Family Tree: An Unexplored Path to Family Business Continuity and Family Harmony. Family Business Review 2008;21(4) 295-313.
45. Yin KR. Case Study Research, Design and Methods. Third Edition, Thousand Oaks, CA: Sage Publications; 2003.
46. Ward JL. Keeping the Family Business Healthy. San Francisco: Jossey-Bass Inc. Publishers; 1987.
47. Miller D, Steier L, Le Breton-Miller I. Lost in time: intergenerational succession, change, and failure in family business. Journal of Business Venturing 2003;18(4) 513-531.
48. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
49. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
50. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
51. Handler WC. Succession in Family Business: A Review of the Research. Family Business Review 1994;7(2) 133-157.
52. Sharma P, Chrisman JJ, Chua JH. Succession Planning as Planned Behavior: Some Empirical Results. Family Business Review 2003;16(1) 1-14.
53. Bjuggren PO, Sund LG. Strategic Decision Making in Intergenerational Successions of Small- and Medium-Sized Family-Owned Businesses. Family Business Review 2001;14(1) 11-23.
54. Donckels R, Lambrecht J. The Re-emergence of Family-Based Enterprises in East Central Europe: What Can Be Learned from Family Business Research in the Western World? Family Business Review 1999;12(2) 171-188.

relevant for gaining a competitive advantage and ensuring the successful functioning of the enterprise [55], [56].

Research findings indicate that family business succession should be seen as a process of transferring ownership and management control to a successor [57], characterized by increasing involvement of the successor in the family business [58]. Taking the perspective of a succession as a process, various authors have proposed different models and concepts [59], [60], [61]. As many family businesses fail during or after the realization of transfer to the family's next generation, considerable research attention has been devoted to defining successful succession and identifying predictors of a successful succession process [62], [63], [64]. For example, [65] and [66] defined two dimensions of a successful succession: (1) stakeholders' satisfaction with the succession process and (2) the firm's positive performance and ultimate viability after the realization of the succession. Similarly, authors such as [67], [68] suggest that, when evaluating a family business succession, we should distinguish between the "quality" of the experience and the "effectiveness" of the succession; quality reflects how involved family members experience the succession process whereas effectiveness reflects how others judge the outcome of the succession process.

Several research studies have demonstrated that success of a transition considerably depends on how well the next family generation is prepared to take over a business. According to research findings, members of the next family generation have to develop some critical characteristics [69], [70], [71], such as business and industry knowledge, decision-making abilities, networks and social capital, passion, innovative spirit, and legitimacy and credibility from both family and non-family stakeholders. For this reason, many research studies have dealt with the nurturing, preparation, and

55. Bjuggren PO, Sund LG. Strategic Decision Making in Intergenerational Successions of Small- and Medium-Sized Family-Owned Businesses. Family Business Review 2001;14(1) 11-23.
56. Royer S, Simons R, Boyd B, Rafferty A. Promoting Family: A Contingency Model of Family Business Succession. Family Business Review 2008;21(1) 15-30.
57. Handler WC. Succession in Family Business: A Review of the Research. Family Business Review 1994;7(2) 133-157.
58. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
59. Handler WC. Succession in Family Business: A Review of the Research. Family Business Review 1994;7(2) 133-157.
60. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
61. Longenecker JG, Schoen JE. Management Succession in the Family Business. In: Aronoff CE, Astrachan JH, Ward JL. (eds.) Family Business Sourcebook II. Marietta: Business Owner Resources; 1996. p87-92.
62. Dyck B, Mauws M, Starke FA, Mischke GA. Passing the baton. The importance of sequence, timing, technique and communication in executive succession. Journal of Business Venturing 2002;17(2) 143-162.
63. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
64. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
65. Sharma P, Chrisman JJ, Chua JH. Succession Planning as Planned Behavior: Some Empirical Results. Family Business Review 2003;16(1) 1-14.
66. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
67. Handler WC. Succession in Family Business: A Review of the Research. Family Business Review 1994;7(2) 133-157.
68. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
69. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
70. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
71. Sharma P, Rao AS. Successor Attributes and Canadian Family Firms: A Comparative Study. Family Business Review 2000;13(4) 313-322.

development of successor(s) [72], [73], [74] as an important predictor of successful transition. In their research, [75] found that business transitions occur more smoothly when the heirs are better prepared, and post-transition performance is positively affected by the heirs' education level. The preparation of a competent leader is also seen as an important part of succession planning, which is expected to improve the probability of the success of the transition process [76], [77], [78], [79] and refers to the deliberate and formal process that facilitates the transfer of ownership and management control. The process of preparing a competent leader should also include knowledge transfer between family generations [80] as the transfer of tacit knowledge from a founder to a successor has been identified as one of the key processes in developing and protecting knowledge and guaranteeing the continuity of a family business [81]. Specific family knowledge has to be transferred to the next family generation, since customers believe that products are of high quality [82]. [83] points to the strategic importance of transferring tacit knowledge to the next generation in order to maintain and develop a family business after the transfer to the next generation. For this reason, different research studies address the role of career development, outside work experiences, apprenticeship, on-the-job training, formal education, and the role of training programs in the process of preparing and developing a competent leader (for references, see [84]).The role of mentoring and the selection of mentoring techniques in family firms were explored by [85]. [86] addressed the issue of training of the next-generation family members after they joined the management team; their findings indicated that involving next-generation family members in the strategic planning process brings benefits to their development. The implications of nepotism for knowledge management were explored by [87], who suggested that generalized social exchange relationships among family members are valuable for firms because they

72. Dyck B, Mauws M, Starke FA, Mischke GA. Passing the baton. The importance of sequence, timing, technique and communication in executive succession. Journal of Business Venturing 2002;17(2) 143-162.
73. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
74. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
75. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
76. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
77. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
78. Motwani J, Levenburg NM, Schwarz TV, Blankson C. Succession Planning in SMEs: An Empirical Analysis. International Small Business Journal 2006;24(5) 471-495.
79. Sharma P, Chrisman JJ, Chua JH. Succession Planning as Planned Behavior: Some Empirical Results. Family Business Review 2003;16(1) 1-14.
80. Sharma P. An Overview of the Field of Family Business Studies: Current Status and Directions for the Future. Family Business Review 2004;17(1) 1-36.
81. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
82. Dumas C. Women's pathways to participation and leadership in family-owned firms. Family Business Review 1998;11 219-228.
83. Sharma P. An Overview of the Field of Family Business Studies: Current Status and Directions for the Future. Family Business Review 2004;17(1) 1-36.
84. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
85. Boyd J, Upton N, Wircenski M. Mentoring in Family Firms: A Reflective Analysis of Senior Executives' Perception. Family Business Review 1999;12(4) 299-309.
86. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
87. Jaskiewicz P, Uhlenbruck K. Is Nepotism Good or Bad? Types of Nepotism and Implications for Knowledge Management. Family Business Review 2013;26(2) 121-139.

facilitate tacit knowledge management. [88]developed a model that outlines factors responsible for knowledge accumulation in family firms; the model, which is based on findings from four case studies, provides a platform for empirical research as well as suggestions for managers of family firms dealing with issues of knowledge accumulation in order to be successful across generations.

6.3 Family businesses and succession issues in Slovenia

Slovenia's transition from the former socialist economy to the market economy was closely connected with the development of private SMEs, also family SMEs. The social and economic changes created opportunities for establishing private enterprises and enabled family business development. Namely, during the socialist period (starting after World War II and lasting until the early 1990s), the tradition of family businesses persisted mostly within the craft sector. During that period, operating a family firm within the craft sector was not really attractive due to various obstacles (e.g., limitations in employees' number, value of productive resources) [89], [90]. However, the number of private SMEs increased dramatically since the beginning of the transition in the 1990s. According to some of the latest results for the year 2010, there were 126,965 enterprises in Slovenia, of which 99.8% were micro enterprises (0 to 9 employees), small enterprises (10 to 49 employees), and medium-sized (50 to 249 employees) enterprises. Large enterprises (more than 250 employees) represent only 0.2% of all enterprises in Slovenia and provide 30% of the nation's jobs. The size structure of enterprises and the employment share in Slovenia are comparable to those in EU-27. However, big differences exist in value added per employee: In EU-27, it is 47,080 €; in Slovenia, it is 29,840 €, indicating that Slovenian enterprises lag considerably behind EU-27 average value added per employee [91].

Different data and estimations exist regarding the share of family enterprises in Slovenia, mainly due to the use of different definitions and sampling methods. The importance of family businesses for the Slovenian economy is often measured by their share among all enterprises or SMEs (Figure 6.1). [92] estimated the share of family businesses in employment and value added based on the estimated share of family businesses among SMEs in Slovenia. According to the author's conservative (i.e., bottom-line) estimation, family businesses employ at least 26% of the active adult population and contribute 22% to the total value added in the Slovenian economy.

88. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
89. Duh M. Family enterprises as an important factor of economic development: the case of Slovenia. Journal of Enterprising Culture 2003;11(2) 111-130.
90. Glas M, Vadnjal J. Transition of businesses into the next generation in Slovenia. International project on the transfer of family firms INTERREG IIIC. University of Ljubljana; 2005.
91. Močnik D. Temeljne značilnosti slovenskega podjetništva v primerjavi z evropskim (Basic characteristics of Slovenian entrepreneurship in comparison with the European). In: Širec K, Rebernik M. (eds.) Razvojni potenciali slovenskega podjetništva: Slovenski podjetniški observatorij 2011/12 (Developmental potentials of Slovenian entrepreneurship: Slovenian entrepreneurship observatory 2011/12). Maribor: Faculty of Economics and Business, Maribor; 2012. p15-28.
92. Vadnjal J. Razvojna naravnanost družinskih podjetij v Sloveniji (Delopmental orientation of family enterprises in Slovenia). PhD thesis. University of Ljubljana; 2005.

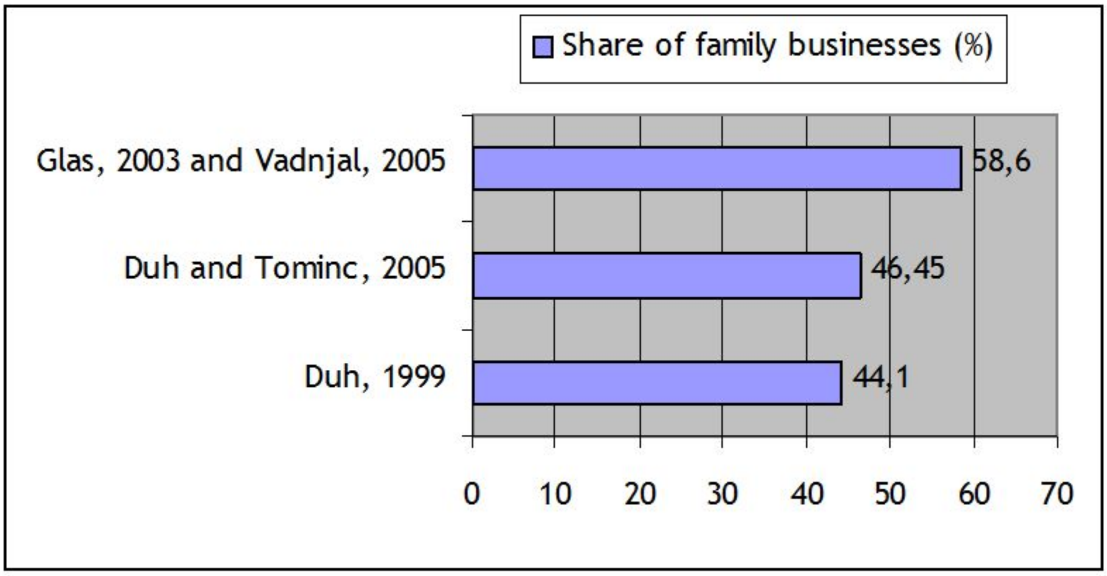

Figure 6.1 Source: [Duh M. Distinctive characteristic of family business and supporting infrastructure: comparison of Slovenia with EU and other countries. In: Širec K. (ed.) Dynamics of Slovenian entrepreneurship: Slovenian entrepreneurship observatory 2008. Maribor: Faculty of Economics and Business; 2009. p105-121.] Estimations of the share of family enterprises in Slovenia

Other estimates indicate an even higher share of family enterprises, falling in the range of 60% to 80% [93], contributing 30% of the GDP [94]. [95] estimated the number of family enterprises in different class sizes in Slovenia, finding that micro family enterprises prevail in Slovenia.

Recently, the discussion in Slovenia has turned to the problem of transferring family firms to the next generation. Family firms established in the 1990s are approaching a critical phase of transferring ownership and management to the next family generation. Research findings indicate that the majority of Slovenian owners/ managers believe that a business should stay in a family [96], [97], [98]. Regarding succession in management, research results [99] indicate that the majority of respondents decided to realize the succession within the family. Other options, such as transfer to the employees/management or closure of a firm, occur less frequently. Similarly, the majority of respondents reported on realizing ownership succession within the family and less frequently on other options.

93. Glas M, Herle J, Lovšin Kozina F, Vadnjal, J. The state of family firm management in Slovenia. In proceedings of 2nd Workshop on Family Firm Management Research, EIASM, Nice, Italy; 2006.
94. Vadnjal J. Innovativeness and inter-generational entrepreneurship in family businesses. In: Cooperation between the economic, academic and governmental spheres—mechanisms and levers proceedings of the 26th Conference on Entrepreneurship and Innovation, Maribor; 2006.
95. Duh M, Tominc P. Primerjalna analiza družinskih in nedružinskih podjetij v Sloveniji (Comparable analysis of family and non-family enterprises in Slovenia). In: Rebernik M, Tominc P, Duh M, Rus M, Pušnik K, Krošlin T, Bradač B, Močnik D. Slovenski podjetniški observatorij 2005 (Slovenian entrepreneurship observatory 2005). Maribor: Faculty of Economics and Business; 2006. p59-68.
96. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.
97. Glas M. Družinska podjetja v Sloveniji: kaj vemo o njih? (Family businesses in Slovenia: what do we know about them?). In: Proceedings of the 5th International Conference Challenges and Opportunities of EU Enlargement for SMEs in CEI Countries, Piran, Slovenia; 2003. p143-162.
98. Glas M, Vadnjal J, Čoh M. Family businesses in Slovenia—how do they differ from the EU? In: Proceedings of the International Conference An Enterprise Odyssey: Building Competitive Advantage [Compact disc ed.], Graduate School of Economics and Business, University of Zagreb, Zagreb; 2004.
99. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.

Slovenian owners/managers believe that children should be introduced into a business at an early age and be educated about the business needs. Furthermore, they believe only one successor and not a team should take over the leadership; a successor should be found among family members as a business is considered stronger with family members involved. Slovenian owners/managers are quite sure about the capabilities of their children to take over and manage a family business. They also believe that children should become co-owners when they join a business and when their parents are active in the business [100], [101]. The concept of "primogeniture," where the oldest child takes over a business, is firmly present in Slovenian family businesses, although the gender aspect is not that important. The most common way of transferring a family business is through the gift process; owner-managers are not inclined to the idea of selling a business [102]. Another research finding indicates that the succeeding generation wants to retain more freedom when deciding about entering a family business. Successors lack a proper training and mentoring and, therefore, feel uncertain about their capability to manage a firm [103]. As the majority of Slovenian family businesses are still under the ownership and management of the founding generation, many lack succession experiences [104], [105], [106].

The research findings of [107] show that less than 60% of Slovenian family business owners/managers are actually planning the succession. One fifth of Slovenian owners/managers even believe that succession planning is not necessary. Similarly, [108] found that a situation is better among owners/managers who are older than 50 years, although 20% of them still believe that succession planning is not necessary.

An analysis of institutional actors and policy actions in Slovenia demonstrates that different actors as well policy measures and actions exist that support and promote SMEs and other business organizations; however, family businesses are not recognized as a special group within SMEs. Some efforts have been undertaken in research; educational support also exists, provided mainly as special courses, and

100. Glas M. Družinska podjetja v Sloveniji: kaj vemo o njih? (Family businesses in Slovenia: what do we know about them?). In: Proceedings of the 5th International Conference Challenges and Opportunities of EU Enlargement for SMEs in CEI Countries, Piran, Slovenia; 2003. p143-162.
101. Glas M, Vadnjal J, Čoh M. Family businesses in Slovenia—how do they differ from the EU? In: Proceedings of the International Conference An Enterprise Odyssey: Building Competitive Advantage [Compact disc ed.], Graduate School of Economics and Business, University of Zagreb, Zagreb; 2004.
102. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.
103. Glas M, Čoh M, Višnar A, Vadnjal J. Transgenerational views on the success and the future development of family firms. In: Sustaining the entrepreneurial spirit over time: implications for your companies, family business and established companies. 35th EISB Conference, Barcelona, 12-14 September; 2005. http://wapp.iese.edu/eisb/papereisb.asp/ (accessed July 5, 2007).
104. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.
105. Duh M, Tominc P, Rebernik M. Succession issues within family enterprises in Slovenia. Društvena istraživanja 2007;16(4/5) 751-779.
106. Glas M, Vadnjal J. Transition of businesses into the next generation in Slovenia. International project on the transfer of family firms INTERREG IIIC. University of Ljubljana; 2005.
107. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.
108. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.

special training and consulting activities are also offered (e.g., by the Chamber of Craft of Slovenia) [109].

6.4 Preparing the next generation to take over leadership control

6.4.1 Entrepreneurial competences

According to the opinion of several authors, succession should not be treated as a threat, but rather be seen as an opportunity to more effectively address fast-changing marketing conditions when an incumbent is replaced with a more capable leader [110] and as a way of enhancing the level of entrepreneurship [111]. For this reason, not only the transfer of knowledge between family generations is of importance for the future of a family business (as explained in the next subchapter), but the next generation should also have access "to new bodies of knowledge that are relevant for the future development of firms' innovation capacity" [[112], p. 14] in order to avoid the conservatism and closeness often present in older family firms [113].

Based on these cognitions, we argue that entrepreneurial competences of successors are of crucial importance for the smooth and effective realization of succession and for the innovativeness and viability of a family business in the next family generation. According to [114], entrepreneurial competences should be understood as attitudes toward problem solving, entrepreneurship, social relationships, risk, negotiation, and teamwork as well as creativity, working commitment, communication and motivating skills, technical, marketing, and administrative knowledge and competences. Similarly, [115] identified factors leading to innovation at the individual level. The main factors contributing to the formation of successors' entrepreneurial competences are [116]: formal education (i.e., in entrepreneurship), work experiences outside the family firm, and a family context ("familiness"). These factors are explained in the following subsections.

109. Duh M. Distinctive characteristic of family business and supporting infrastructure: comparison of Slovenia with EU and other countries. In: Širec K. (ed.) Dynamics of Slovenian entrepreneurship: Slovenian entrepreneurship observatory 2008. Maribor: Faculty of Economics and Business; 2009. p105-121.
110. Dyck B, Mauws M, Starke FA, Mischke GA. Passing the baton. The importance of sequence, timing, technique and communication in executive succession. Journal of Business Venturing 2002;17(2) 143-162.
111. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
112. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
113. Zahra SA. Entrepreneurial risk taking in family firms. Family Business Review 2005;18(1) 23-40.
114. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
115. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
116. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).

6.4.1.1 Formal education

Many research findings provide support for the significant relevance of the educational level for a successor's performance and effectiveness of a succession process [117], [118], [119], and the successor's educational level is becoming an important selection criterion [120]. A successor should be trained as an entrepreneur at the academic level [121] and be exposed to new ideas and trends in management and business in the process of obtaining a formal education [122]. In the fast-changing competitive environment, it is no longer enough to know how to perform a specific activity; an ability to create new knowledge is also of crucial importance. Formal education enhances a successor's absorptive capacity, thereby also influencing his/her capability to acquire and create new knowledge [123] and enabling successors to better articulate and structure the knowledge-transfer process [124]. The formal education of successors should emphasize skills like critical thinking, creativity, communication, user orientation, and teamwork as well as using domain-specific and linguistic knowledge. As entrepreneurship studies cover all these, we present two cases of educational institutions in Slovenia in the next chapter.

6.4.1.2 Working experiences outside a family business

A successor's preparation should not be limited to knowledge transfer between the founder and the successor (although it is also very important). Successors should also be exposed to a wide range of experiences, meaning that "a junior entrepreneur should not only be socialized in the existing context of interactions, he/she should be also familiarized with other contexts" [[125], p. 14]. Working outside a family firm provides successors with "a more detached perspective over how to run and how to introduce changes and innovation in the business" [[126], p. 447]. Experiences gained in

117. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
118. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.
119. Steier L. Next generation entrepreneurs and succession: An exploratory study of modes and means of managing social capital. Family Business Review 2001;14(3) 259-276.
120. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
121. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
122. Duh M. Family business succession as knowledge creation process. Kybernetes 2014;43(5) 699-714.
123. Duh M. Family business succession as knowledge creation process. Kybernetes 2014;43(5) 699-714.
124. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
125. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
126. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.

this way enable successors to access “new bodies of knowledge that are relevant for the future development of firms’ innovation capacity” [[127], p. 14]; they also help successors replenish, increase, and upgrade the knowledge basis [128]. The right combination of internal and external training experiences are important for acquiring technical and managerial knowledge and leadership abilities [129] that play a crucial role in creativity and innovation [130]. This is of special importance as research findings indicate that family firms tend to become more conservative and less innovative over time [131], [132].

6.4.1.3 Familiness

[133] suggested that family firms are often “rich in intangible resources”. The resource-based view allows consideration of an “idiosyncratic, immobile, inimitable, sometimes intangible bundle of resources” that to varying degrees commonly resides in a family firm. Within this view the term “familiness” has been developed and widely accepted to describe the unique bundle of resources held by and particular to family firms as a result of their unique systems, interaction among the family, individual members, and the business itself, leading to positive synergies [134], [135], [136].

According to [137], familiness is a resource that is unique to family firms; it is a specific bundle of attributes derived from a family's culture [138] and a unique form of family culture [139]. It is an imperfectly substitutable/exchangeable resource in the manner described by [140]. According to [141], it is the set of resources controlled by a firm resulting from a continuous overlap of a family system with the business system in a firm.

127. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
128. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
129. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
130. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
131. Donckels R, Fröhlich E. Sind Familienbetriebe wirklich anders? Europäische STRATOS-Efahrungen. Internationales Gewerbearchiv 1991;4 219-235.
132. Zahra SA. Entrepreneurial risk taking in family firms. Family Business Review 2005;18(1) 23-40.
133. Habbershon TG, Williams ML. A resource based framework for assesing the strategic advantage of family firms. Family Business Review 1999;12(1) 27-39.
134. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
135. Chrisman JJ, Chua JH, Steier LP. An introduction to theories of family business. Journal of Business Venturing 2003;18(4) 441-448.
136. Habbershon TG, Williams ML. A resource based framework for assesing the strategic advantage of family firms. Family Business Review 1999;12(1) 27-39.
137. Sirmon DG, Hitt MA. Managing resources: Linking unique resources, management and wealth creation in family firms. Entrepreneurship Theory and Practice 2003;27(4) 339-358.
138. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.
139. Hall R. The strategic analysis of intangible resources. Strategic Management Journal 1992;13(2) 135-144.
140. Barney JB. Firm resources and sustained competitive advantage. Journal of Management 1991;17(1) 99-120.
141. Habbershon TG, Williams ML, MacMillan IC. A United Systems Perspective of Family Firm Performance. Journal of Business Venturing 2003;18(4) 451-465.

According to [142], a predecessor and a family have great influence on a successor in terms of cultural values and entrepreneurial attitudes and behaviours.

The authors agree that familiness is closely related to the concept of family business culture. Successful family firms are those which share family culture thereby remaining competitive also after transition between generations. This "effective family culture" is characterized by joined view of the world and a wish to succeed [143]. Family members (e.g., successors) who are socialized at home bring this shared culture in the family business. According to [144], this "effective family culture", provides foundation for familiness in the family firm. Since family culture's mechanisms are tacit, they are difficult to transfer to outsiders or to persist over family generations. Familiness of the business depends on whether a family succeed to transfer the tacit family culture to the family business. Since a business with more familiness will gain a competitive advantage, such owning family should be more likely to retain the family business within the founding family [145].

6.4.2 Tacit knowledge transfer

In the family business literature, the transfer of tacit knowledge from predecessor to successor has been found to be one of the key processes in developing and protecting knowledge and guaranteeing the continuity of the family business [146]. It is of crucial importance to understand how and in which way predecessors transfer their tacit knowledge to successors as this enables the successor to get hands-on knowledge about a family firm and an industry. As pointed by [[147], p. 13], "the process of knowledge sharing is fundamental because it stimulates people creativity through interactions". This is why we explored different ways and approaches of tacit knowledge transfer from founders to successors.

Several authors [148], [149] have stressed the importance of a successor's early exposure to a family business (e.g., through summer and lower category jobs) in order to provide the successor with valuable experiences and the founder's tacit knowledge; this is of particular importance during the transfer from the founding to the second generation. Conversation about a firm at home is also an approach that enables a successor to absorb tacit knowledge about the business as "conveying the psychological legacy of

142. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
143. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.
144. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.
145. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.
146. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
147. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
148. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
149. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.

the firm is an important part of child rearing from the beginning" [[150], p. 71]. Mentoring is also an important way of enhancing the successor's knowledge [151], [152] as close interactions between founders and their successors are a superior form of experience supporting the development of tacit knowledge by successors. However, no common agreement exists on whether parents are the most suitable mentors [153], and diverse opinions exist regarding the role of formal and informal mentoring [154]. Apprenticeship is found to be an effective way of transferring tacit knowledge between generations, especially in traditional industries that do not operate in environments of rapid change [155]. The learning-by-doing process can be an excellent opportunity for younger generations to learn directly from the previous generation, "especially, all the 'tricks of trade' related to the business" [[156], p. 441].

Working together (e.g., in a team) is also an important way of transferring knowledge across family generations and is particularly important as it facilitates creative interactions between generations, thereby contributing to the entrepreneurial and innovative orientation of a family firm [157], [158]. Different approaches to such joint work are identified in the literature, including the successor's active participation in decision making [159], involvement of the next-generation family members in the strategic planning process [160], and teamwork [161], [162].

6.5 Case of Slovenia

6.5.1 Case study method

We decided to apply a qualitative research approach that is significant for family business research [163]. The nature of our research and research questions addressed

150. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
151. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
152. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
153. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
154. Boyd J, Upton N, Wircenski M. Mentoring in Family Firms: A Reflective Analysis of Senior Executives' Perception. Family Business Review 1999;12(4) 299-309.
155. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
156. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
157. Chirico F, Salvato C. Knowledge Integration and Dynamic Organizational Adaptation in Family Firms. Family Business Review 2008;21(2) 169-181.
158. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
159. Kellermanns FW, Eddelston KA. Feuding Families: When Conflict Does a Family Firm Good. Entrepreneurship Theory and Practice 2004;28(3) 209-228.
160. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
161. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
162. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
163. Reay T. Publishing Qualitative Research. Family Business Review 2014;27(2) 95-102.

are the reason for the use of the case study method as it has been shown to be well-suited methodology, especially in those studies "in which there are manifold variables of interest that are embedded in the context of investigation" [[164], p. 16]. It is of particular importance for and the most adopted qualitative method in organizational studies [165] as well as in family business research studies. For example, [166] viewed "case studies as a powerful methodology that can be used in a rigorous, creative and wide-ranging variety of ways to advance family business research" [167], [168]. We applied an exploratory case study as the main aim is "to understand how phenomenon takes place" [[169], p. 16], and the research question addresses how entrepreneurialism and the transfer of tacit knowledge between a founder and a successor contribute to effective succession in family SMEs.

We applied a multiple-case study approach [170] due to its acceptance in the family business research [171], [172] as this allows us to analyse within each setting and across settings [173]. There are different opinions regarding the number of cases; for example, [174] suggests that between four and ten cases are best for increasing rigor. We selected twenty cases from the family business database, where data on Slovenian family businesses have been collected by the authors of this contribution for many years. In addition, we explore two cases of institutional support in entrepreneurship education.

6.5.2 Sampling, data collection, and analysis

Twenty cases of Slovenian family firms were carefully selected from the database. We included micro (0 to 9 employees), small (10 to 49 employees), and medium-sized family firms (50 to 249 employees) as, in these size classes, family businesses of the first generation prevail in Slovenia and the family exerts strong and direct control over the business. In addition to the firm's size, an important limitation in selecting cases was the family generation in charge. We limited our research on succession from the first to the second generation; thus, only those cases in which the founder was still employed in the firm, owned the firm, or was active in the firm (although he/she is retired) as well as when a member of the next family generation was involved in the family business were selected. As there is no common definition of a family business

164. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
165. Eisenhardt K. Building theories from the case study research. Academy of Management Review 1989;14(4) 532-550.
166. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
167. Duh M. Razvojne posebnosti družinskega podjetja (Developmental particularities of a family enterprise). PhD thesis. University of Maribor; 1999.
168. Duh M. Family enterprises as an important factor of economic development: the case of Slovenia. Journal of Enterprising Culture 2003;11(2) 111-130.
169. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
170. Yin KR. Case Study Research, Design and Methods. Third Edition, Thousand Oaks, CA: Sage Publications; 2003.
171. Chirico F, Salvato C. Knowledge Integration and Dynamic Organizational Adaptation in Family Firms. Family Business Review 2008;21(2) 169-181.
172. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
173. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
174. Eisenhardt K. Building theories from the case study research. Academy of Management Review 1989;14(4) 532-550.

[175], we defined it as any firm in which a founder (i.e., an owner/manager) considers it to be a family business.

Data were gathered through direct interviews conducted between February and March 2014; additional data were collected through direct observations and documentation, thereby enhancing data credibility [176]. We conducted at least two interviews per case, with the founder and the successor. We found them to be well-informed interviewees who "view the focal phenomenon from different perspectives" [[177], p. 19]. [178] suggested conducting 30 interviews to cover both the breadth and depth of the research topic. Therefore, we believe that the conducted interviews provided us with a sufficient quantity of high-quality data needed to ensure a strong qualitative study. All interviews took place at workplaces in family businesses on workdays.

Data gathered were analysed systematically; data collection and analysis were done several times concurrently, as is often the case in qualitative methods [179]. After organizing and arranging data, a cross-case comparison was conducted. We based the presentations of the results on the method of [180], which is "grounded in a positivist tradition and based on comparative case analysis" [[181], p. 99]; following this method, the results are presented in tables (with the exception of two institutional cases) that display "concise, consistent summary points of each case which facilitates comparisons" [[182], p. 99]. The empirical results were compared and contrasted with the established literature. The main findings are presented in the next subchapter.

6.5.3 Findings

6.5.3.1 Formal/academic entrepreneurship education of successors—Cases of the two institutions

Case 1: Faculty of Economics and Business

The Faculty of Economics and Business (FEB) is one of 17 faculties of the University of Maribor, located in Maribor, which is the second largest city in Slovenia. FEB was established in 1959 as the School of Economics and Commerce; today FEB offers several accredited and, in its environment, well-accepted study programs at the undergraduate, master's, and doctoral degree levels. These programs are prepared in accordance with the requirements of the Bologna Declaration (3+2+3 model). FEB has been implemented the first-cycle university education program "Economic and

175. Mandl I. Overview of Family Business Relevant Issues, Final Report, Austrian Institute for SME Research, Vienna; 2008. http://ec.europa.eu/enterprise/entrepreneurship/ craft/family_business/family_business_en.html (accessed 31 July 2009).
176. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
177. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
178. Reay T. Publishing Qualitative Research. Family Business Review 2014;27(2) 95-102.
179. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
180. Eisenhardt K. Building theories from the case study research. Academy of Management Review 1989;14(4) 532-550.
181. Reay T. Publishing Qualitative Research. Family Business Review 2014;27(2) 95-102.
182. Reay T. Publishing Qualitative Research. Family Business Review 2014;27(2) 95-102.

Business Sciences” and the professional higher education program “Business Administration” together with the second-cycle master’s program “Economic and Business Sciences” since 2006, while the third-cycle doctoral program “Economic and Business Sciences” has been running since 2008. Most study programs are implemented as both full-time and part-time studies [183]. Whereas the first cycle lasts three years (180 ECTS), the master program (second cycle) lasts two years (120 ECTS). The third cycle (i.e., the research-oriented doctoral program) lasts three years (180 ECTS) and is open to graduates from the second cycle.

The university program “Economic and Business Sciences” offers eight fields of study: (1) accounting, auditing and taxation, (2) business management and organization, (3) e-business, (4) economics, (5) entrepreneurship, (6) finance and banking, (7) international business economics, and (8) marketing. The university program consists of totally 30 courses. Out of these 30 courses, 16 courses are common to all study fields and 6 courses are field of study courses. 8 courses are electives and are chosen by the student. In the “Business Administration” professional higher education program, students can specialize in eight fields of study: (1) accounting and business taxation, (2) business finance and banking, (3) entrepreneurship, (4) international management, (5) management, (6) marketing, (7) public sector economics and management, and (8) tourism. The program consists of 16 common courses, 6 study field courses, and 6 elective courses in addition to practical training in the second and third years of study. In both undergraduate study programs, students prepare a final diploma project. The “Economic and Business Sciences” master’s program offers nine fields of study: (1) accounting, auditing and taxation, (2) economics, (3) entrepreneurship and innovation, (4) finance and banking, (5) information systems and e-business management, (6) international business economics, (7) management, organization and human resources, (8) marketing management, and (9) strategic and project management. The program comprises 10 courses, of which one is common to all fields of study and two are electives; the others are all field of study courses. The master’s thesis is students’ final obligation.

As our main research concern is entrepreneurship education for the family businesses' successors, a more detailed exploration of the entrepreneurship field in both undergraduate study programs as well as the entrepreneurship and innovation master’s program will be conducted. The doctoral program is not explored in detail due to its research focus. In addition, we will explore the two undergraduate courses dealing with family business topics.

The main goal of the university’s entrepreneurship program is “to acquire knowledge in entrepreneurship that enables developmental and operative management of small and medium-sized enterprises, implementation of intrapreneurship, leading of independent business plans and programs in large enterprises, establishing of own enterprises or taking-over existing family businesses” [184]. In order to realize this main goal, in addition to common and elective courses, the study program offers the specialized courses in marketing research, entrepreneurship, innovation management, dynamic entrepreneurship, managerial economics, and corporate entrepreneurship. These courses are offered in the second and third year of studies,

183. Kocijan S. Explore the world of FEB. Informational Book. Maribor: Faculty of Economics and Business; 2008.
184. BU University study program. Study field Entrepreneurship. http://www.epf.uni-mb.si/stud_prog/bu/Vsebina/podjetnistvo.aspx (accessed 8 July 2014).

while the first year covers common courses (i.e., basics of organization and management, mathematics for economists, introduction to economics and microeconomics, introduction to business information systems, business law, business economics, fundamentals of marketing, accounting, fundamentals of finance, macroeconomics); some common courses are in the second and third year as well (i.e., statistics, corporate finance, business policy, and strategic management). Foreign language as a year-long course is part of the program in all three years.

The entrepreneurship program in the professional higher education program includes common courses mainly in the first year (i.e., basics of organization and general management, foundations of business economics, business law, sociology, business mathematics, fundamentals of marketing, accounting, business information systems, finance for business, foreign language as a year-long course). In the second and third years, students attend field of study courses (i.e., entrepreneurship, business environment, European law, corporate entrepreneurship, business growth, operational management), common courses (i.e., economic policy, business statistics, basic cost and management accounting, e-business, business policy, and strategic management) and elective courses in addition to two practical trainings in selected firms.

At the master's degree level, the entrepreneurship and innovation program provides students with knowledge that enables them to manage their own enterprise and invention-innovation processes as well as make decisions in developmental oriented organizations [185]. The only common core course focuses on research methods. Students also obtain specialized knowledge in theories of the firm, invention and innovation management, technological and environmental innovations, development of a dynamic enterprise, entrepreneurship theories, international entrepreneurship, and law of intellectual property.

Family business-related topics are offered within two courses. The family business management course is an elective for second-year students of the university program. It covers family business characteristics, the role and importance of family enterprises for the economy and society, family in a family business (the role of family members, family relationships and conflicts, family values and interests), succession (family and individual lifecycle, lifecycle of a family business, succession as a process, succession planning), and management particularities. In more detail, the particularities of management are taught in the business policy and strategic management course, which is a common obligatory course in the university as well as in the professional higher educational program, although the course is more practically oriented for the latter program. Management particularities are discussed in the class from three different perspectives: management as a process (hierarchy of the process and management functions), management as institutions (e.g., structure of leading bodies, such as the board of directors, executives, their responsibilities), and management as a system of instruments (e.g., different planning tools and methods, leadership styles and techniques). In particular, the role and influence of a family in management are presented.

185. BM Master study program. Study field Entrepreneurship and Innovation. http://www.epf.uni-mb.si/stud_prog/bm/Vsebina/podjetnistvo_in_inoviranje.aspx (accessed 9 July 2014).

The FEB offers a comprehensive and quality entrepreneurship education in both undergraduate and master’s level fields of study. Potential family business successors can upgrade their knowledge with family business specifics. In particular, the two courses that address the particularities of family business functioning and management are useful providers of knowledge for all those who are going to work in or with family businesses.

Case 2: GEA College–Faculty of Entrepreneurship

GEA College–Faculty of Entrepreneurship (GEA–FE) is the leading private business school in Slovenia, with more than 20 years of experience in the provision of courses focused on entrepreneurship. Eighteen generations of students have been enrolled, culminating in more than 1400 undergraduate- and 150 master’s-level graduates. Entrepreneurship is and will remain the main study discipline of GEA–EF for those who want to learn not only about entrepreneurship, but also for entrepreneurship. The institution provides high-quality, practically oriented undergraduate (3 years, full-time study program) and postgraduate courses (master’s level, 2 years, part-time study program), but it does not offer doctoral studies. The final qualification of the first cycle of the higher professional study program is the bachelor’s degree in economics, and the second cycle of the higher professional study program’s final qualification is the master’s degree in business administration. The programs are accredited by the Ministry of Education of the Republic of Slovenia. For this reason they are recognized worldwide. The study programs are consistent with the Bologna Declaration (3+2) and the European Credit Transfer System (ETCS) thereby enabling full mobility of GEA–FE students. The first cycle is accredited with 180 ECTS, and the second with 120 ECTS. The institution is also a full member of various leading international associations of business and managements schools.

In the GEA–FE vision expresses the intent to become one of the leading schools in training and education of entrepreneurs in Central and Eastern Europe. Its evolvement into the centre for creating and implementing excellent projects in entrepreneurial education that are based on innovative entrepreneurship programs is stressed as well. Especially, innovations and entrepreneurial pragmatism are defined as the key values. The mission of the GEA–FE is to support entrepreneurs in acquiring new knowledge and skills in order to become competitive and successful in the market economy. Therefore, it searches, creates and transfers new knowledge, educates and trains young people.

The main objectives of the GEA–FE programs are to enhance business thinking among individuals and encourage business activities among young people. The main intention of the study programs is to encourage young people to think about and develop new business opportunities and eventually establish their own enterprises. It is estimated that more than 40% of the students are coming from families running family firms. Students develop both general and specific skills; general skills especially in the field of entrepreneurship, economics, and management, and specific skills for entrepreneurship (i.e., international cooperation, management, innovation, creativity, business growth, project management, marketing, and finance).

Case studies, project work, team problem solving, classroom visits and business evenings by successful entrepreneurs, and student exchanges with foreign universities are undertaken during the study process in order to combine theoretical knowledge with practical experiences. These methods proved to be excellent processes of educating students to become successful entrepreneurs. The programs are tailor-made education and training for successful entrepreneurs. GEA–FE applies the modern teaching methods that are recognized by many acknowledged universities and higher education institutions in Europe and the USA. The study process is done in small groups of students in order to promote both individuality and interactivity. Internship as the practical application of the knowledge gained is an obligatory part of students' training within the framework of study at the GEA–FE. The cooperation with small, middle, and larger companies is recognized as an important part of the study process. Students have the opportunity to actively participate in projects and research that are done for and in selected companies. This enables students to share knowledge and experiences on growth, capitalization, strategy, vision, and market research with owners and/or managers.

Family business-related topics are offered within the family entrepreneurship course, which is an elective course offered to the students of the second or third years of the first level of the higher professional study program. It covers the purpose and specifics of family firms (significance for national economies, in the EU and worldwide, main roles in family firms, the role of founders in family firms, strengths and weaknesses of family firms), conflicts in family firms (in the same generation, between generations, ways to solve conflicts, strategic and development directions of family firms and family firms' vision), growth and development of a family firm (satisfaction/dissatisfaction with economic and non-economic parameters of business operations, succession, long-term family firm orientation), legal aspects of family firms (the role of the family in human development, family as a working group, definition of healthy family relationships, basis of family therapy), and support environment for family firms (consulting and training for family firms). The course is accredited with 6 ECTS [186].

The second level of the higher professional program consists of two courses: strategic aspects in entrepreneurship and management in entrepreneurship. Each course offers 3 fundamental, 1 obligatory, and 3 elective courses (to be chosen out of 5). The fundamental courses are entrepreneurship and organizational growth management, managerial economics, and quantitative research methods. Business forecasting and growth strategies or development of HR capabilities and influence of the EU are among obligatory courses. Elective courses are standards of business ethics and culture in the EU, franchising and trademark enforcement, global marketing, private law, venture capital or operations management, strategic management, project management, business view of communication in entrepreneurship, and entrepreneurial challenges of the global economy. In the first year of study, students have to select two fundamental courses and one obligatory course as well two or three elective courses depending on their study course. Students can choose the third elective course from the courses offered by the GEA College or any other higher educational institution in Slovenia or abroad. In the second year, the course

186. GEA College of Entrepreneurship. Study program second level—Entrepreneurship. http://www.gea-college.si/fakulteta-za-podjetnistvo/studijski-programi-1-stopnje/visokosolski-studijski-program-podjetnistvo/predmetnik/ (accessed 18 July 2014).

quantitative research method is obligatory for students. The fourth semester ends with a master's thesis [187].

6.5.3.2 Twenty case studies

We interviewed family business owners/managers and their successors in 20 family firms coming from different industries from production of carpentry, textile clothing, faucets, concrete products, jewellery, sport equipment, toys, pellet stoves, car batteries from the wholesale and retail trade of cars, textiles, carpentry, organic food, sanitary equipment, transport and logistics, and other car services (Table 6.1). The sample of companies was regionally dispersed as there were 6 (30%) companies from the Podravje region, 5 (25%) from the Osrednjeslovenska region, 2 (10%) from the Gorenjska region, 2 (10%) from the Savinjska region, 2 (10%) from the Notranjska (Carst) region, 1 (5%) from the Prekmurje region, 1 (5%) from the Primorska region, and 1 (5%) from South-East Slovenia (Dolenjska region). There were 7 (35%) medium-sized companies, 8 (40%) small companies, and 5 (25%) micro companies included in the sample. All founders (100%) were active in their companies. Ownership and management had been totally transferred to the successors in 3 (15%) companies, partly transferred to the successors in 2 companies (10%), and partly (ownership) and entirely (management) transferred in 3 (15%) of the companies; in 7 (35%) of the companies, ownership and management had not been transferred to the successors, 4 (20%) founders transferred management but not ownership to their successors, and 1 (5%) partly transferred ownership but not management to the successor.

Case no.	Industry	Established (year)/current generation	Short description of company specifics
1	Production of carpentry from wood, plastic, aluminium	1990/second	A leading producer of carpentry from plastic, aluminium, and recently from wood, awarded with golden medals for their wooden and wooden–alu pasiv windows; the founders retired, present in the

Table 6.1 Data on family firms interviewed

187. Szulanski G. Exploring internal stickiness. Impediments to the transfer of best practice within the firm. Strategic Management Journal 1996;17(Special Winter Issue) 27-43.

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			supervisory board and procuration, management transferred to the son-in-law and daughters, ownership transferred partly to daughters. Medium-sized company. Podravje region.
2	Road transport and logistics	1992/first	A road transport and services provider. The founders have transferred management, but not ownership to the successors. One is retired, but is active. Medium-sized company. Gorenjska region.
3	Production of sport equipment	1987/second	A micro company developing sports equipment, holding patents, producing short skis and accessories for skis; founder just retired, has been actively present, but ownership and management are being transferred

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			to the successor. Gorenjska region.
4	Wholesale trade and production of toys	1991/first	A small company importing toys and developing and producing games for children. Management and ownership in hands of the founders. Successors are active in the company. Notranjska – Carst region.
5	Maintenance and repair of motor vehicles	1995/first	One of the leading companies in the car glass repair industry. Due to the death of one of the founders, part of the ownership is in a transition phase, successors are active in the company. Small company. Osrednjeslovenska region.
6	Production of jewellery	1999/second	The leading producer of jewellery, trading precious metals and stones.

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			Ownership and management are being transferred from founder to his successors. Founder active in the company, but retired. Medium-sized company. Savinjska region.
7	Production of pellet stoves	1994/first	A developer and producer of pellet stoves, holding patents. Management and ownership in hands of the founder. Successor is active in the company. Small company. Podravje region.
8	Production of car batteries	1974/first	A developer and producer of car batteries and garden equipment. Management has already been transferred, but not ownership; founder retired, active in the company. Small company. Dolenjska region (South-East Slovenia).

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
9	Wholesale trade	1992/first	The company is specialized for wholesale trade with Macedonian products. Management has already been transferred to the successor, but not ownership. Founder retired, but remains active in the company. Micro company. Osrednjeslovenska region.
10	Wholesale trade and services—sanitary equipment	1992/first	The company is specialized in the development of sanitary equipment. Management and ownership have been partly transferred to the successors. Founder is employed. Successors are active in the company. Small company. Primorska region.
11	Road transport, logistics, services, trade	1989/second	One of the biggest road transport companies. Ownership and management have

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			been transferred from the founder to the wife and successive children. Founder retired, but active in the company. Medium-sized company. Osrednjeslovenska region.
12	Retail trade—cars, service	1990/second	One of the strongest car traders. Management has been transferred to the external manager and the successive children. Ownership has been partly transferred. Founders have retired and are active in supervisory board. Medium-sized company. Podravje region.
13	Production of products from concrete for construction industry	1990/first	A company with a strong tradition in production of concrete products. Management and ownership have been partly transferred to the

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			successors. Founders and successors are active. Small company. Notranjska region.
14	Wholesale and retail trade with car spare parts and services	1986/first	The leading car-glass repair company. Ownership and management are in the hands of founders. Founders active. Successors employed and involved in management. Small company. Podravje region.
15	Wholesale and retail trade with metal products, production of faucets	1996/first	A developer and producer of faucets. Holding patents. Founder retired, active in the company. Ownership and management not transferred. Successors active in the company. Micro company. Podravje region.
16	Production of working clothing	1978/first	A developer and producer of working clothing.

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			Ownership and management not transferred, although both founders retired. Successors active in the company. Medium-sized company. Savinjska region.
17	Sauna, cosmetics, wholesale and retail trade	1971/second	A long tradition of the first sauna and later cosmetics studio. The founder is retired but active in the company. Successors are managing the company, ownership has been partly transferred. Small company. Osrednjeslovenska region.
18	Wholesale and retail trade textile	1992/first	Company is present throughout Slovenia through own shops. Ownership and management have not been transferred. Successor is active in the company. Medium-sized

Table 6.1 Data on family firms interviewed

Case no.	Industry	Established (year)/current generation	Short description of company specifics
			company. Prekmurje region.
19	Sport club, restaurant	2009/first	Company is active in the field of sports activities (sport club), accounting, and family runs a restaurant. Ownership and management have not been transferred. Successor is active in the company. Micro company. Osrednjeslovenska region.
20	Retail trade—organic food	1989/first	A pioneer on the field of trading organic products in Slovenia. Ownership not transferred. Management transferred to the successor. Founder active and in procuration. Micro company. Podravje region.

Table 6.1 Data on family firms interviewed

Table 6.2 introduces the characteristics of the sample from the aspects of the founders' and the successors' formal education, external working experiences, and "familiness" as well as the importance of each of them in the eyes of founders and successors.

Entrepreneurial competences	Founder (comment frequency)		Successor (comment frequency)	
	Done	Found important	Done	Found important
Formal education	6 (30%) vocational, 5 (25%) high school, 9 (45%) higher professional or university degree	17 (85%)	16 (80%) higher professional or university degree, 1 (5%) high school, 3 (15%) students	20 (100%)
External working experiences	18 (90%)	18 (90%)	8 (40%)	20 (100%)
"Familiness"		20 (100%)		20 (100%)

Table 6.2 Formal education, external working experiences, and "familiness"

Formal education is not as important for 3 (15%) of the founders. Instead, they emphasized the importance of experience and a broad understanding of the business. The rest of the interviewed founders found formal education to be especially important for the generation of successors. Successors are mostly very well educated, although mostly in the fields of economics and business/entrepreneurship, which are less technical fields.

Regarding external work experiences, the research results show that only 2 (10%) of the founders started their business with no previous experience; all others (90%) had previous work experience, albeit not always from relevant fields, although they all found the experiences to be very important. Twelve (60%) successors had no previous work experience in other firms, whether in the same or different industries. Three (15%) had experience in other firms, in the same and different industries. Six (30%) completed internships in other firms, mostly in different industries, and 4 (20%) completed internships abroad, mostly as Erasmus exchange students or as part of their training as business partners.

According to the founders, familiness is a unique resource and highly important for the sustainability of a family firm. Sixteen (80%) successors found familiness to be very important for developing working commitment, 14 (70%) for developing attitude toward entrepreneurship, 20 (100%) for the development of social relationships, and 10 (50%) for the development of attitude toward risk.

The following quotes were taken from the interviews.

“Formally educated people are more open to the external environment. They have a lot of general knowledge, but at the professional level they all fail the exam. Practice, practice, practice: it is extremely important.”

“...academic knowledge broadens young people's horizons and gives a good basis for using knowledge in practice... thus, you can more easily compete with your competition....”

“...I could not afford to study myself, and I gladly support my child's education... ”

“The next generation must study to understand new technologies, they have to acquire maximum theoretical knowledge, but then—experiences count more and more...”

“...academic knowledge helps you recognize more potential solutions...”

“I would love to work in another company and get external experience and insight into other working environments, especially in a large firm, but the economic situation in the country does not enable this experience.... And the family firm needs me...”

Most founders and successors concluded that familiness is a matter of trust.

Table 6.3 reveals the picture of the knowledge transfer in the studied sample from the aspect of founders and successors and how important they found each form of knowledge transfer for the successful integration of successors in family firms.

Knowledge transfer	Founder (comment frequency)		Successor (comment frequency)	
	Done	Found important	Done	Found important
Early exposure	19(95%)	20(100%)	19(95%)	20(100%)
Mentoring	9(45%)	19(95%)	17(85%)	20(100%)
Apprenticeship	10(50%)	6(30%)	10(50%)	10(50%)
Learning by doing	17(85%)	20(100%)	17(85%)	20(100%)

Table 6.3 Knowledge transfer

Participation in decision making	0	0	13(65%)	13(65%)
Involvement in strategic planning	0	0	13(65%)	13(65%)
Teamwork	15(75%)	15(75%)	15(75%)	16(80%)

Table 6.3 Knowledge transfer

Nineteen (95%) founders exposed their children early to the family firm's environment; only in one case was the son-in-law not exposed early to the family firm environment. In the case of successors, the sample matches. According to successors, early exposure to the family firm is crucial for their interest in the family business. Nine (45%) founders mentored their children, while 8 successors were mentored by a non-family member; one of the founders (5%) compared apprenticeship to mentoring. Seventeen (85%) successors reported being mentored or coached by a parent or nonfamily member, and one successor mentioned an external professional. The case studies revealed that apprenticeship is not a common way of transferring knowledge in Slovenian family firms. Learning by doing is seen as a very important way of transferring knowledge to the successors: Founders believed that letting children observe them at work and simply throwing them in the water to swim is a very good way of getting experience.

The founders did not report on the involvement of successors in the decision making. However, 13 (65%) successors indicated that they participated in decision-making processes after they became actively involved in a family firm. Founders did not report involvement of successors in strategic planning processes. However, again, 15 (75%) successors believed that they were involved in strategic planning processes, but not before their active involvement in the family firm. Fifteen (75%) founders reported that they involved their children in teamwork. In the case of successors, the sample matches. Sixteen (80%) successors found teamwork to be an important form of knowledge transfer.

6.6 Conclusions

Based on the results of our interviews with 20 founders (owners/managers) and their successors in family SMEs in Slovenia, we believe that entrepreneurialism (entrepreneurial competences of successors) and knowledge transfer (especially tacit knowledge, from founders to successors) in different forms are very important and crucial for effective succession in family SMEs, thereby contributing to the long-term sustainability of the family firms.

In terms of factors contributing to the formation and building of entrepreneurial competences, we identified work experience outside a family firm, family context (e.g., familiness), and formal education (i.e., in entrepreneurship), thus following the research findings of [188].

In the interviews, we researched how to prepare a competent leader, which included dealing with the transfer of knowledge (tacit knowledge) from the founders to the successors. We followed different authors in defining ways to transfer knowledge across family generations: early exposure of children to a family business [189], [190], mentoring [191], [192], apprenticeship [193], learning-by-doing process [194], teamwork [195], [196], participation in decision making [197], and involvement in the strategic planning processes [198].

Most of our findings are not unique, but follow similar results of previously mentioned authors. For example, according to [199], [200], founders believe that children's early exposure to the business is of particular importance in order to absorb tacit knowledge. Our interviewees confirmed that 95% of them were involved in a family firm since childhood, learning about the business through daily conversations at home as well. All (100%) founders and successors found that the successors' early exposure to the family business environment was highly important for the development of their interest for the family firm.

188. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
189. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
190. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
191. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
192. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
193. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
194. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
195. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
196. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
197. Kellermanns FW, Eddelston KA. Feuding Families: When Conflict Does a Family Firm Good. Entrepreneurship Theory and Practice 2004;28(3) 209-228.
198. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
199. Glas M. Družinska podjetja v Sloveniji: kaj vemo o njih? (Family businesses in Slovenia: what do we know about them?). In: Proceedings of the 5th International Conference Challenges and Opportunities of EU Enlargement for SMEs in CEI Countries, Piran, Slovenia; 2003. p143-162.
200. Glas M, Vadnjal J, Čoh M. Family businesses in Slovenia—how do they differ from the EU? In: Proceedings of the International Conference An Enterprise Odyssey: Building Competitive Advantage [Compact disc ed.], Graduate School of Economics and Business, University of Zagreb, Zagreb; 2004.

According to [201], [202], children should become co-owners when they join a business while their parents are still active in a business. This finding also correlates with results of our research. Indeed, 45% of the founders had already transferred the ownership of the family firm entirely or partly to their successors. According to the same authors, successors should be found among family members as a business is considered stronger with family members involved. In our 20 cases, all founders found successors in their sons and daughters, but in 2 cases (10%) the founders had to delegate top managerial functions to a non-family member (due to the request of the bank) or to a son-in-law, as the founder did not want to expose his three daughters to the top managerial position. Gender is not an issue of succession in family firms according to [203], and in our 20 cases this was confirmed.

Yet certain findings differ. According to [204], less than 60% of founders in Slovenia plan succession. Our results show that 65% of founders already transferred management and/or ownership to their successors; it was entirely transferred in 15% of family SMEs. According to [205], [206], [207], family firms lack succession experiences. Our study revealed that the succession process is active in 60% of family SMEs, as in these firms management is already in the hands of successors or they have already become actively involved in management functions. In addition, 65% of family firms have female successors, following potential successors' capabilities and not the rule that the oldest child takes over a business, thereby contradicting [208].

[209] suggested that successors lack mentoring and proper training and feel uncertain about their capabilities to manage the firm, while our research results show that 85% of successors have been mentored informally or formally by their parent or a non-family member and are active in the family business. All (100%) successors and 95% of founders indicated that mentoring is very important to support the development of tacit knowledge by successors. Other forms of transferring knowledge (e.g., learning by doing) is very high on the priority ladder among founders and successors (100% found it important, 85% practice it), as it is a perfect way of learning the tricks of the trade [210]. However, apprenticeship is not implemented as often as mentoring (50%);

201. Glas M. Družinska podjetja v Sloveniji: kaj vemo o njih? (Family businesses in Slovenia: what do we know about them?). In: Proceedings of the 5th International Conference Challenges and Opportunities of EU Enlargement for SMEs in CEI Countries, Piran, Slovenia; 2003. p143-162.
202. Glas M, Vadnjal J, Čoh M. Family businesses in Slovenia—how do they differ from the EU? In: Proceedings of the International Conference An Enterprise Odyssey: Building Competitive Advantage [Compact disc ed.], Graduate School of Economics and Business, University of Zagreb, Zagreb; 2004.
203. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.
204. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.
205. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2. del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.
206. Duh M, Tominc P, Rebernik M. Succession issues within family enterprises in Slovenia. Društvena istraživanja 2007;16(4/5) 751-779.
207. Glas M, Vadnjal J. Transition of businesses into the next generation in Slovenia. International project on the transfer of family firms INTERREG IIIC. University of Ljubljana; 2005.
208. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.
209. Glas M, Čoh M, Višnar A, Vadnjal J. Transgenerational views on the success and the future development of family firms. In: Sustaining the entrepreneurial spirit over time: implications for your companies, family business and established companies. 35th EISB Conference, Barcelona, 12-14 September; 2005. http://wapp.iese.edu/eisb/papereisb.asp/ (accessed July 5, 2007).
210. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.

teamwork and participation in decision making and strategic planning processes are more common once successors become actively involved in a family firm (65%).

The authors argue that successors' entrepreneurial competences are of crucial importance for the smooth and effective realization of succession and for the innovativeness and viability of a family business in the next family generation. The research revealed factors contributing to the development of entrepreneurial competences: Formal education, work experience outside a family firm, and familiness are all very important and contribute significantly to the effective succession in family firms.

In our cases, all successors (100%) believe that formal education—especially in the business field—is very important; they are very well educated (80% hold a higher professional or university degree) and are trained at the academic level and thus exposed to new ideas and trends in management and business [211].

Experiences from both of the academic institutions, EBF and GEA–FE, offering undergraduate and postgraduate programs in entrepreneurship show students' growing interest in entrepreneurship at both levels. Part-time students especially expect know-how to upgrade their insights into the entrepreneurial world and to gain from pragmatic experience from different fields of activities and from different aspects that faculty shares with them. They also look for networking. Full-time students, many of them children from family business owners, appreciate theoretical background in their major business fields (e.g., marketing, finances, strategic planning, business planning) and want to combine theoretical platforms with project work.

External working experiences are very appreciated by the successors as they enable a more detached perspective over how to run and how to introduce changes and innovation in the business [212], but in our cases we ran into a problem of an economic situation that does not offer many opportunities and access to fresh knowledge in other firms. As a result, 60% of successors have no working experience in other firms, and most of the others have completed only short internships or obligatory training in other firms. All founders and successors (100%) found familiness to be highly important for sustainability of a family firm and agreed that familiness is a competitive advantage of the family firm [213].

Building on our research, we can propose several areas for further study. In combination with our quantitative data collection, we propose the quantitative measurement of the constructs of familiness, entrepreneurial competences, and the transfer of knowledge and their relationship with innovativeness as well. Future research should address the impact of social capital and social networks as facilitators of know-how mobility and sharing between firms and individuals, contributing to the promotion of innovation in family firms. The question of the relationship between the stated constructs and a family firm's performance should be addressed in future studies as well.

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211. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
212. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
213. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.

Our research findings have implications for practice as they provide useful cognitions for stakeholders involved in the succession process (i.e., family members) as well as professionals dealing with family firms' succession issues and innovativeness. The evidences from the research indicate that importance of finding balance between the interests of a family on the one side and needs of a business on the other side. There is a danger of inefficient use of the entrepreneurial spirit, potential and family values, with available resources that should contribute to better business performance and/or satisfaction of a family. When doing forecasts for the future, family businesss' owners/managers may discover that no opportunities exist for the development of the mature business. In such a case they should reconsider the family attitude towards inclusion of the outside shareholders and/or even decide on selling a part of the family business.

Based on the findings, family businesses are found to be more customer-oriented. They might even consider using their family business specific feature as the marketing opportunity. Family businesses tend to spend more resources on their innovation activities suggesting that they are well aware of the importance of innovations for the development and long-term survival of a family business. Although the majority of participants reported that they had already started with the transition processes, one can claim that the transition of family businesses to the next generation has thus far not been a common practice in both Slovenia and other transition economies. This indicates a possible gap in knowledge as well as experiences regarding succession that might cause serious problem in the near future. Therefore, adequate measures are necessary on the national level in order to provide support to family businesses when preparing the transfer of ownership and leadership to the next generation.

This also suggests that knowledge about the family businesses succession should be improved at all levels. Education and training have important role in raising awareness of the succession issues and in creating and disseminating knowledge to the family businesses owners/managers. This is of special importance in Slovenia due to the fact that family business succession is quite a new issue.

From the point of view of both academic institutions studied, which already offer within their specialized programs courses on family entrepreneurship, it is advisable to renew the existing programs and provide more courses focused on innovativeness and innovation management, especially sources of innovation with concepts of commercially viable innovation, strategy of innovation, marketing of innovation, and the financing and controlling of innovation, thereby partly filling the knowledge gap. Knowledge on innovation management is crucial and contributes to the increased competitiveness of family firms and successful succession of potential successors of family businesses in dynamic, changing business environments.

6.7 References

1. Barney JB. Firm resources and sustained competitive advantage. Journal of Management 1991;17(1) 99-120.

2. Bird HB, Welsch H, Astrachan JH, Pistrui D. Family Business research: The evolution of an academic field. Family Business Review 2002;15(4) 337-350.
3. Bjuggren PO, Sund LG. Strategic Decision Making in Intergenerational Successions of Small- and Medium-Sized Family-Owned Businesses. Family Business Review 2001;14(1) 11-23.
4. Boyd J, Upton N, Wircenski M. Mentoring in Family Firms: A Reflective Analysis of Senior Executives' Perception. Family Business Review 1999;12(4) 299-309.
5. BU University study program. Study field Entrepreneurship. http://www.epf.uni-mb.si/stud_prog/bu/Vsebina/podjetnistvo.aspx (accessed 8 July 2014).
6. BM Master study program. Study field Entrepreneurship and Innovation. http://www.epf.uni-mb.si/stud_prog/bm/Vsebina/podjetnistvo_in_inoviranje.aspx (accessed 9 July 2014).
7. Cabrera-Suárez K, De Saa-Pérez P, García-Almeida D. The succession process from a resource and knowledge-based view of the family firm. Family Business Review 2001;14(1) 37-46.
8. Campbell ND, Heriot KC, Welsh DHB. The black box: Unraveling family business succession. New England Journal of Entrepreneurship 2007;10(2) 9-14.
9. Chirico F. Knowledge accumulation in family firms: Evidence from four case studies. International Small Business Journal 2008;26(4) 433-462.
10. Chirico F, Salvato C. Knowledge Integration and Dynamic Organizational Adaptation in Family Firms. Family Business Review 2008;21(2) 169-181.
11. Chrisman JJ, Chua JH, Steier LP. An introduction to theories of family business. Journal of Business Venturing 2003;18(4) 441-448.
12. De Massis A, Kotlar A. The case study method in family business research: Guidelines for qualitative scholarship. Journal of Family Business Strategy 2014;5(1) 15-29.
13. Donckels R, Fröhlich E. Sind Familienbetriebe wirklich anders? Europäische STRATOS-Efrahrungen. Internationales Gewerbearchiv 1991;4 219-235.
14. Donckels R, Lambrecht J. The Re-emergence of Family-Based Enterprises in East Central Europe: What Can Be Learned from Family Business Research in the Western World? Family Business Review 1999;12(2) 171-188.
15. Duh M. Razvojne posebnosti družinskega podjetja (Developmental particularities of a family enterprise). PhD thesis. University of Maribor; 1999.
16. Duh M. Family enterprises as an important factor of economic development: the case of Slovenia. Journal of Enterprising Culture 2003;11(2) 111-130.
17. Duh M. Overview of family business relevant issues, Country fiche Slovenia. Research project. University of Maribor; 2008.
18. Duh M. Distinctive characteristic of family business and supporting infrastructure: comparison of Slovenia with EU and other countries. In: Širec K. (ed.) Dynamics of Slovenian entrepreneurship: Slovenian entrepreneurship observatory 2008. Maribor: Faculty of Economics and Business; 2009. p105-121.
19. Duh M. Family business succession as knowledge creation process. Kybernetes 2014;43(5) 699-714.
20. Duh M, Tominc P. Pomen, značilnosti in prihodnost družinskih podjetij (Importance, characteristics and future of family enterprises). In: Rebernik M, Tominc P, Duh M, Krošlin T, Radonjič G. Slovenski podjetniški observatorij 2004, 2.

del (Slovenian entrepreneurship observatory 2004, 2. part). Maribor: Faculty of Economics and of Maribor; 2005. p19-31.

21. Duh M, Tominc P. Primerjalna analiza družinskih in nedružinskih podjetij v Sloveniji (Comparable analysis of family and non-family enterprises in Slovenia). In: Rebernik M, Tominc P, Duh M, Rus M, Pušnik K, Krošlin T, Bradač B, Močnik D. Slovenski podjetniški observatorij 2005 (Slovenian entrepreneurship observatory 2005). Maribor: Faculty of Economics and Business; 2006. p59-68.
22. Duh M, Tominc P, Rebernik M. Succession issues within family enterprises in Slovenia. Društvena istraživanja 2007;16(4/5) 751-779.
23. Dumas C. Women’s pathways to participation and leadership in family-owned firms. Family Business Review 1998;11 219-228.
24. Dyck B, Mauws M, Starke FA, Mischke GA. Passing the baton. The importance of sequence, timing, technique and communication in executive succession. Journal of Business Venturing 2002;17(2) 143-162.
25. Eisenhardt K. Building theories from the case study research. Academy of Management Review 1989;14(4) 532-550.
26. Ganzaroli A, Fiscato G, Pilotti L. Does business succession enhance firm's innovation capacity? Results from an exploratory analysis in Italian SMEs. Working paper [n. 2006-29], 2nd Workshop on Family Firm Management Research. Nice, Italy; 2006. http://ideas.repec.org/p/mil/wpdepa/2006.29.html (accessed 5 February 2014).
27. Gersick KE, Davis JA, McCollom Hampton M, Lansberg I. Generation to Generation. Life Cycles of the Family Business. Boston: Harvard Business School Press; 1997.
28. Glas M. Družinska podjetja v Sloveniji: kaj vemo o njih? (Family businesses in Slovenia: what do we know about them?). In: Proceedings of the 5th International Conference Challenges and Opportunities of EU Enlargement for SMEs in CEI Countries, Piran, Slovenia; 2003. p143-162.
29. Glas M, Vadnjal J. Transition of businesses into the next generation in Slovenia. International project on the transfer of family firms INTERREG IIIC. University of Ljubljana; 2005.
30. Glas M, Vadnjal J, Čoh M. Family businesses in Slovenia—how do they differ from the EU? In: Proceedings of the International Conference An Enterprise Odyssey: Building Competitive Advantage [Compact disc ed.], Graduate School of Economics and Business, University of Zagreb, Zagreb; 2004.
31. Glas M, Čoh M, Višnar A, Vadnjal J. Transgenerational views on the success and the future development of family firms. In: Sustaining the entrepreneurial spirit over time: implications for your companies, family business and established companies. 35th EISB Conference, Barcelona, 12-14 September; 2005. http://wapp.iese.edu/eisb/papereisb.asp/ (accessed July 5, 2007).
32. Glas M, Herle J, Lovšin Kozina F, Vadnjal, J. The state of family firm management in Slovenia. In proceedings of 2nd Workshop on Family Firm Management Research, EIASM, Nice, Italy; 2006.
33. Habbershon TG, Williams ML. A resource based framework for assesing the strategic advantage of family firms. Family Business Review 1999;12(1) 27-39.
34. Habbershon TG, Williams ML, MacMillan IC. A United Systems Perspective of Family Firm Performance. Journal of Business Venturing 2003;18(4) 451-465.

35. Hall R. The strategic analysis of intangible resources. Strategic Management Journal 1992;13(2) 135-144.
36. Handler WC. Succession in Family Business: A Review of the Research. Family Business Review 1994;7(2) 133-157.
37. Jaskiewicz P, Uhlenbruck K. Is Nepotism Good or Bad? Types of Nepotism and Implications for Knowledge Management. Family Business Review 2013;26(2) 121-139.
38. Kellermanns FW, Eddelston KA. Feuding Families: When Conflict Does a Family Firm Good. Entrepreneurship Theory and Practice 2004;28(3) 209-228.
39. Kocijan S. Explore the world of FEB. Informational Book. Maribor: Faculty of Economics and Business; 2008.
40. Lambrecht J, Lievens J. Pruning the Family Tree: An Unexplored Path to Family Business Continuity and Family Harmony. Family Business Review 2008;21(4) 295-313.
41. Le Breton-Miller I, Miller D, Steier LP. Toward an integrative model of effective FOB succession. Entrepreneurship Theory and Practice 2004;28(3) 305-328.
42. Litz RA, Kleysen RF. Your Old Men Shall Dream Dreams, Your Young Men Shall See Visions: Toward a Theory of Family Firm Innovation with Help from the Brubeck Family. Family Business Review 2001;14(4) 335-352.
43. Longenecker JG, Schoen JE. Management Succession in the Family Business. In: Aronoff CE, Astrachan JH, Ward JL. (eds.) Family Business Sourcebook II. Marietta: Business Owner Resources; 1996. p87-92.
44. Lovšin Kozina F. Kritične točke uspešnega medgeneracijskega prehoda v slovenskih družinskih podjetjih (Critical points of successful intergenerational transfer in Slovenian family businesses). PhD thesis. University of Ljubljana; 2006.
45. Mandl I. Overview of Family Business Relevant Issues, Final Report, Austrian Institute for SME Research, Vienna; 2008. http://ec.europa.eu/enterprise/entrepreneurship/ craft/family_business/family_business_en.html (http://ec.europa.eu/enterprise/entrepreneurship/%20craft/family_business/family_business_en.html) (accessed 31 July 2009).
46. Matz Carnes C, Ireland D. Familiness and Innovation: Resource Bundling as the Missing Link. Entrepreneurship Theory and Practice 2013;37(6) 1399-1419.
47. Mazzola P, Marchision G, Astrachan J. Strategic planning in family business: A powerful developmental tool for the next generation. Family Business Review 2008;21(3) 239-258.
48. Miller D, Steier L, Le Breton-Miller I. Lost in time: intergenerational succession, change, and failure in family business. Journal of Business Venturing 2003;18(4) 513-531.
49. Močnik D. Temeljne značilnosti slovenskega podjetništva v primerjavi z evropskim (Basic characteristics of Slovenian entrepreneurship in comparison with the European). In: Širec K, Rebernik M. (eds.) Razvojni potenciali slovenskega podjetništva: Slovenski podjetniški observatorij 2011/12 (Developmental potentials of Slovenian entrepreneurship: Slovenian entrepreneurship observatory 2011/12). Maribor: Faculty of Economics and Business, Maribor; 2012. p15-28.
50. Morris MH, Williams RO, Allen JA, Avila RA. Correlates of success in family business transitions. Journal of Business Venturing 1997;12(5) 385-401.

51. Motwani J, Levenburg NM, Schwarz TV, Blankson C. Succession Planning in SMEs: An Empirical Analysis. International Small Business Journal 2006;24(5) 471-495.
52. Nonaka I, Toyama R, Konno N. SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. Long Range Planning 2000;33(1) 5-34.
53. Nonaka I, von Krogh G. Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory. Organization Science 2009;20(3) 635-652.
54. Reay T. Publishing Qualitative Research. Family Business Review 2014;27(2) 95-102.
55. Royer S, Simons R, Boyd B, Rafferty A. Promoting Family: A Contingency Model of Family Business Succession. Family Business Review 2008;21(1) 15-30.
56. Sardesmukh SR, Corbett AC. The Duality of Internal and External Development of Successors: Opportunity Recognition in Family Firms. Family Business Review 2011;24(2) 111-125.
57. Sharma P. An Overview of the Field of Family Business Studies: Current Status and Directions for the Future. Family Business Review 2004;17(1) 1-36.
58. Sharma P, Rao AS. Successor Attributes and Canadian Family Firms: A Comparative Study. Family Business Review 2000;13(4) 313-322.
59. Sharma P, Chrisman JJ, Chua JH. Succession Planning as Planned Behavior: Some Empirical Results. Family Business Review 2003;16(1) 1-14.
60. Sirmon DG, Hitt MA. Managing resources: Linking unique resources, management and wealth creation in family firms. Entrepreneurship Theory and Practice 2003;27(4) 339-358.
61. Steier L. Next generation entrepreneurs and succession: An exploratory study of modes and means of managing social capital. Family Business Review 2001;14(3) 259-276.
62. GEA College of Entrepreneurship. Study program first level—Entrepreneurship. http://www.gea-college.si/fakulteta-za-podjetnistvo/studijski-programi-1-stopnje/visokosolski-studijski-program-podjetnistvo/predmetnik/ (accessed 18 July 2014).
63. GEA College of Entrepreneurship. Study program second level—Entrepreneurship. http://www.gea-college.si/fakulteta-za-podjetnistvo/studijski-programi-1-stopnje/visokosolski-studijski-program-podjetnistvo/predmetnik/ (accessed 18 July 2014).
64. Szulanski G. Exploring internal stickiness. Impediments to the transfer of best practice within the firm. Strategic Management Journal 1996;17(Special Winter Issue) 27-43.
65. Vadnjal J. Razvojna naravnanost družinskih podjetij v Sloveniji (Delopmental orientation of family enterprises in Slovenia). PhD thesis. University of Ljubljana; 2005.
66. Vadnjal J. Innovativeness and inter-generational entrepreneurship in family businesses. In: Cooperation between the economic, academic and governmental spheres—mechanisms and levers proceedings of the 26th Conference on Entrepreneurship and Innovation, Maribor; 2006.
67. Ward JL. Keeping the Family Business Healthy. San Francisco: Jossey-Bass Inc. Publishers; 1987.
68. Zahra SA. Entrepreneurial risk taking in family firms. Family Business Review 2005;18(1) 23-40.

69. Yin KR. Case Study Research, Design and Methods. Third Edition, Thousand Oaks, CA: Sage Publications; 2003.

Chapter 7 Promoting Entrepreneurship Education through University Networks — A Case Study in Mozambique

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7.1 Introduction

Entrepreneurship education is a growing concern within political and academic fields [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [18], [19]. A large number of initiatives have been developed worldwide to promote a broad range of entrepreneurial activities within academic institutions [20], [21], [22]. This is even truer for developing countries such as those in sub-Saharan Africa, where entrepreneurship is frequently presented as a solution to life

5. Fiet, J.O. (2000a). The theoretical side of teaching entrepreneurship. Journal of Business Venturing, 16(1), 1-24.
6. Low, M. (2001). The adolescence of entrepreneurship research: specification of purpose. Entrepreneurship Theory and Practice, 25(4), 17-26.
7. Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education. Journal of Business Venturing, 18(3), 283-300.
8. Kirby, D. (2005). A case for teaching entrepreneurship in Higher Education. In: http://ncge/communities/education/reference/index/rptpub10. (02/04/2013).
9. Kuratko, D.F. (2005). The emergence of entrepreneurship education: development, trends and challenges. Entrepreneurship Theory and Practice, 29(5), 577-597.
10. Carrier, C. (2007). Strategies for teaching entrepreneurship: what else beyond lectures, case studies and business plan?". In Fayolle, A. (Ed.). Handbook of Research in Entrepreneurship Education, Vol. 1, Edward Elgar Publishing, Aldershot.
11. Fayolle, A. (2007b). Handbook of Research in Entrepreneurship Education – A General Perspective, Vol.1, Edward Elgar Publishing, Aldershot.
12. Fayolle, A. and Gailly, B. (2008). From Craft to Science: Teaching models and learning processes in entrepreneurship education. Journal of European Industrial Training, 32(7), 569-593.
13. Fayolle, A. and Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence, Journal of Small Business Management, Article first published online: 16 SEP 2013, DOI: 10.1111/jsbm.12065, available in http://onlinelibrary.wiley.com/doi/10.1111/jsbm.12065/pdf
14. Matlay, H. (2008). The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development, 15(2), 382-396.
15. Redford, D.T. (2008). The state of entrepreneurship education in Portugal. An empirical study on a nascent system in the European Union policy framework, ISCTE - Business School, Lisbon.
16. Dutta, D.K., Li, J. and Merenda, M. (2010). Fostering entrepreneurship: impact of specialization and diversity in education. International Entrepreneurship and Management Journal, 7(2), 163-179.
17. Rodrigues, R., Dinis, A. Paço, A., Ferreira, J. and Raposo, M. (2012); The effect of an entrepreneurial training programme on entrepreneurial traits and intentions of secondary students, (Chapter 5), in Entrepreneurship - Born, Made and Educated (Book 2), Burger-Helmchen, Thierry (Ed.) Intech, Open Access Publisher, 14 de Março 2012, ISBN 978-953-51-0210-6, DOI: 10.5772/2649. p.77-92.; Available in http://www.intechopen.com/books/entrepreneurship-born-made-and-educated/the-effect-of-an-entrepreneurial-training-programme-on-entrepreneurial-traits-and-intention-of-secon
18. Dinis, A. Paço, A., Ferreira, J., Raposo, M. and Rodrigues, R., (2013) Psychological Characteristics and Entrepreneurial Intentions Among Secondary students, Education and Training, 55(8-9), 763-780(18).
19. Paço, A, Ferreira, J., Raposo, M., Rodrigues, R. and Dinis, A. (2013) "Entrepreneurial intentions: is education enough?" International Entrepreneurship and Management Journal (http://link.springer.com/article/10.1007/2Fs11365-013-0280-5).
20. Kirby, D. (2005). A case for teaching entrepreneurship in Higher Education. In: http://ncge/communities/education/reference/index/rptpub10. (02/04/2013).
21. Woollard, D., Zhang, M. and Jones, O (2007). Creating Entrepreneurial Universities: insights from a new university business school. Institute for Small Business & Entrepreneurship, 7 – 9, 1-20.
22. Gibb, A., Haskins, G. Hannon, P. and Roberson, I. (2009 updated 2012) Leading the entrepreneurial University. Meeting the entrepreneurial development needs of higher education institutions, National Centre for Entrepreneurship in Education (NCEE), Saïd Business School, University of Oxford.

and livelihood obstacles for different segments of the population [23], [24], [25], [26], [27], [28], [29], [30]. Entrepreneurship is also envisaged by politicians as the solution for inclusive economic growth and for social inclusion [31], [32], [33], [34]. However, the business landscape of sub-Saharan Africa is very different from the contexts of more developed countries, as it is mainly based on local markets, with underdeveloped regional integration and a high level of informal businesses. Furthermore, in these countries, the business and entrepreneurial environment is particularly hostile because of legal barriers, regulations, insecurity, corruption, inadequate infrastructure and poor financial systems, which inhibit the creation and development of businesses and firms [35], [36], [37], [38], [39]. Given the unfavourable conditions for entrepreneurship and the weak quality of entrepreneurship, some governments and institutions are beginning to invest in public policies and programmes that promote entrepreneurship and aim at improving business environments [40], [41], [42], [43], [44], [45], [46], [47], [48].

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23. Elkan, W. (1988). Entrepreneurs and Entrepreneurship in Africa. The World Bank Research Observer, 3(2), 171-188
24. Fick, D.S (2002). Entrepreneurship in Africa: A study of Successes, Quarum Books, WestPort.
25. Naudé, W. and Havenga, J. (2005). An overview of African Entrepreneurship and Small Business Research. Journal of Small Business & Entrepreneurship, 18(2), 101-120.
26. Feliciano, J.F. and Fonseca-Statter, G. (2008). Empresariado, Empreendedorismo e Desenvolvimento em Angola e Moçambique. Centro de Estudos Africanos, Lisbon.
27. William, M. (2009). Managerial Skills for Small to Medium Enterprises and the Informal Sector to Enhance Development and Business Growth, Zimbabwe. file:///H:managerial%20skills204%20sme.htm. 12/04/2013.
28. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
29. Naudé, W. (2011). Entrepreneurship is Not a Binding Constrains on Growth and development in the Poorest Countries. World Development, 39(1), 33-44.
30. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
31. ECA (2001). Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
32. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
33. Africa Competitiveness Report (2007). The Africa Competitiveness Report, World Economic Forum, The World Bank and the African Development Bank, ISBN-13: 978-92-95044-03-6.
34. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
35. Gibb, A., Haskins, G. Hannon, P. and Roberson, I. (2009 updated 2012) Leading the entrepreneurial University. Meeting the entrepreneurial development needs of higher education institutions, National Centre for Entrepreneurship in Education (NCEE), Saïd Business School, University of Oxford.
36. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
37. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
38. Valá, S.C. (2009). Desenvolvimento Rural em Moçambique: Um desafio ao Nosso Alcance. Editorial Marimbique e Ussivane, Maputo.
39. Lucky, I.O., Olusegun, A.I. and Bakar, M.S. (2012). Determinants of Business Success: Trust or Business Policy? Journal of Arts, Science & Commerce, 3(3), 37-42.
40. William, M. (2009). Managerial Skills for Small to Medium Enterprises and the Informal Sector to Enhance Development and Business Growth, Zimbabwe. file:///H:managerial%20skills204%20sme.htm. 12/04/2013.
41. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
42. ECA (2001). Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
43. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
44. Valá, S.C. (2009). Desenvolvimento Rural em Moçambique: Um desafio ao Nosso Alcance. Editorial Marimbique e Ussivane, Maputo.
45. Lucky, I.O., Olusegun, A.I. and Bakar, M.S. (2012). Determinants of Business Success: Trust or Business Policy? Journal of Arts, Science & Commerce, 3(3), 37-42.
46. Okpara, J.O. and Wynn, P. (2007). Determinants of Small Business Growth Constraints in a Sub-Saharan African Economy. SAM Advanced Management Journal, 72(2), 24-35.
47. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. International Business Research, 2(2), 62-71.
48. Ugwushi, B.I. (2009). SMEs Key Failure-Factors: A Comparison between the united kingdom and Nigeria. Journal Social Science, 18(3), 199-207.

This is also the case for Mozambique. In recent years, the Mozambican Government and other institutions within civil society have promoted several initiatives to support entrepreneurship and ultimately to improve its level of development in the country. Within the framework of the National Agenda to Combat Poverty [49], a programme for poverty reduction and the creation of new jobs, one of the vectors is the promotion of entrepreneurship through the education system with an emphasis on entrepreneurship support at the level of higher education institutions (HEI), including the incubation of new businesses in order to "strengthen the intervention of the network of institutions engaged in a development capacity to manage and implement business" [[50], p. 212].

In fact, in the current context of globalization and intense competition, cooperative networks between organizations – here defined as a group of organizations who generally seek common goals related to their survival and sustainability – contribute to the strengthening of competitiveness, the creation of new knowledge, developing new skills and organizational learning.

Much of the literature on cooperation networks has pointed out the rationale of cooperating in terms of business motivations. The latest research on cooperation, however, places the focus on the integration of resources through cooperation as an opportunity for learning and not only to minimize costs [51], [52], [53]. This area of literature argues that these relationships have contributed to the emergence of the information age and to the creation of knowledge networks for learning [54], [55], [56].

This study considers this issue to be particularly important in the context of developing countries, since networks and cooperation and their role in the integration of resources and/or organizational learning can function as an important strategy for skills development in organizations in terms of benefiting from globalization and the technological developments that affect all organizations, societies and economies. More specifically, this study focuses on Mozambique, where in recent times, within the framework of the National Strategy for Development – which includes a strong investment in human capital development – HEI have developed cooperation agreements for developing teachers and students' skills, thereby addressing issues pertaining to the quality of (education) services, to combat unemployment as a result of lacking competencies and for responding to new market demands.

Based on a literature pertaining to a Mozambican case, this study discusses the issue of cooperation networks as a learning instrument and how they can be used for the development of the entrepreneurial skills of teachers in higher education. More specifically, it seeks to identify how these types of university networks can be decisive

49. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
50. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
51. Balestrin, A. and Verschoore, J. (2008). Redes de cooperação empresarial: estratégias de gestão na nova economia. Porto Alegre: Bookman.
52. Littler, D.A. (1993). Risks and Rewards of collaboration, UMIST.
53. Hamel, G. (1991). Learning in international alliances, Strategic Management Journal, 12, 91.
54. Dodgson, M. (1993). Learn, trust and technological collaboration, Human Relations, 46(1), 77-95.
55. Nonaka, I., Von Krogh, G. and Voelpel, S. (2006). Organizational knowledge creation theory: Evolutionary paths and future advances, Organization Studies, 27, 1179-1208.
56. Nonaka, I. and Von Krogh, G. (2009). Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory, Organization Science, 20(3), 635-652.

for the development of teachers' skills and for the promotion of entrepreneurship in particular within the context of developing countries.

This chapter includes a theoretical discussion and presentation of a case study. The theoretical discussion includes a literature review on the importance of entrepreneurship education in HEI in the context of developing countries and particularly, in Mozambique. It follows the approach of collaborative networks as a tool for promoting learning and developing organizational skills, ending with a discussion on the importance of cooperative networks between educational institutions, and between them and other organizations as a key element for the development of teaching and learning about entrepreneurship. The case presented, in the context of a developing country – Mozambique – is that of Chibuto's School of Business and Entrepreneurship (Escola Superior de Negócios e Empreendedorismo de Chibuto – ESNEC), one of the five schools of the University Eduardo Mondlane and one of the few HEIs specifically dedicated to entrepreneurship education in Mozambique. Data about this case resulted from participant observation of one of the researchers and data collected between February and June 2013 through an exploratory interview with the director (network manager); documental sources were also consulted.

From a theoretical point of view, this study contributes to a deeper understanding of the theme of entrepreneurship by integrating the specific contexts of developing countries. The theoretical contribution also arises from the intersection of entrepreneurship theory and more specifically, the juncture between entrepreneurship education and the theory of networks and cooperation. In practical terms, this study contributes to the heads of HEIs' understanding of the importance of cooperation between institutions/organizations for the development of skills among both teachers and students.

7.2 Entrepreneurship education in the higher education institution (HEI): An emerging sector in developing countries

The HEI, in addition to its teaching function, assumes research as a basic element of knowledge creation, innovation and development [57]. Currently, HEIs face new challenges due to the emergence of the idea that entrepreneurship is the main engine for the creation of economic, social and ethical value, i.e., it is one of the key drivers for economic growth and wealth creation [58], [59]. These circumstances have forced universities and other HEIs to approach the business community, to develop interactions with entrepreneurs at local, regional and national levels, and to make

57. Bramwell, A. and Wolfe, D. A. (2008). Universities and Regional Economic Development: the entrepreneurial University of Waterloo, Research Policy, 37, 1175-1187.
58. Shane, S. (2004). A general Theory of entrepreneurship: the individual-opportunity nexus. Cheltenham: Edward Elgar.
59. Lee, J.H. and Venkataraman, S. (2006). Aspirations, market offerings, and the pursuit of entrepreneurial opportunities. Journal of Business Venturing, 21, 107-123.

them important sources of knowledge [60], [61], [62]. Furthermore, due to changes within the economy and society, reflected by fewer available job opportunities (even for graduates) [63] and the need for self-employment and innovation, entrepreneurship education and entrepreneurial behaviour have become central issues in HEIs. This concern is reflected not only in the growing literature about entrepreneurship education and entrepreneurial universities, but also in public policies and programmes aimed at promoting entrepreneurial behaviour through education.

The theme of entrepreneurship education is not consensual and includes several areas of discussion. One of these discussions focused on the question of whether entrepreneurship can or cannot be taught [64], [65], [66]. Some authors feel that entrepreneurship cannot be taught, because there is a lack of accepted theories or paradigms pertaining to entrepreneurship education [67], [68], [69]. Other discussions have focused on what the purpose and content should be of entrepreneurship education [70], [71], [72], [73], [74]; should it only be concerned with the creation of new enterprises and jobs or should it focus more on behavioural and cognitive processes like creative thinking and problem solving? In recent decades, studies on entrepreneurship have indicated that:

Entrepreneurship can indeed be taught and learned [75], [76], [77], though its success depends on internal (individual) and external (contextual) factors [78], and should also

60. Cristóbal, R.P. (2006)."La Creación de Empresas como Programa de Investigación Científica: implicaciones y retos para la Universidad – Catédra de Empreendedores y Nueva Economia, Universidad de Sevilla.
61. Veciana, J.M. (2006). Creación de Empresas y Desarrollo Economico como campo de pesquis. In: 1ª Jornada Técnica Fundación CYD: Creación de empresas, desarrollo territorial y el papel de la Universidad, Colección Documentos CYD, 4:28-49.
62. Veciana, J.M. (2008). La Investigación en el Campo de la Creación de Empresas y PYMES: evolución, tendencias y problemas. Curso de Verano Internacional UEX 2008: Función Empresarial: Investigación y Aplicaciones, Universidad de Estremadura, Spain.
63. Gibb, A.A. and Hannon, P. (2007). Towards entrepreneurial University? International Journal of Entrepreneurship Education, 4, 73-110.
64. Henry, C., Hill, F. and Leicht, C. (2005). Entrepreneurship education and training: can entrepreneurship be taught? Education and Training, 47 (2), 98-111.
65. O'Connor, A. (2012). A conceptual framework for entrepreneurship education policy: meeting government and economic purposes. Journal of Business Venturing, 28(4), 546-563.
66. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
67. Fiet, J.O. (2000a). The theoretical side of teaching entrepreneurship. Journal of Business Venturing, 16(1), 1-24.
68. Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education. Journal of Business Venturing, 18(3), 283-300.
69. Kuratko, D.F. (2005). The emergence of entrepreneurship education: development, trends and challenges. Entrepreneurship Theory and Practice, 29(5), 577-597.
70. Carrier, C. (2007). Strategies for teaching entrepreneurship: what else beyond lectures, case studies and business plan?". In Fayolle, A. (Ed.). Handbook of Research in Entrepreneurship Education, Vol. 1, Edward Elgar Publishing, Aldershot.
71. Fayolle, A. (2007b). Handbook of Research in Entrepreneurship Education – A General Perspective, Vol.1, Edward Elgar Publishing, Aldershot.
72. Fayolle, A. and Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence, Journal of Small Business Management, Article first published online: 16 SEP 2013, DOI: 10.1111/jsbm.12065, available in http://onlinelibrary.wiley.com/doi/10.1111/jsbm.12065/pdf
73. Dornelas, J.C. (2001). Empreendedorismo: Transformando Ideias em Negócios. Rio de Janeiro, Campus.
74. Dolabela, F. (2003). Pedagogia Empreendedora. São Paulo, Editora de Cultura.
75. Low, M. (2001). The adolescence of entrepreneurship research: specification of purpose. Entrepreneurship Theory and Practice, 25(4), 17-26.
76. Woollard, D., Zhang, M. and Jones, O (2007). Creating Entrepreneurial Universities: insights from a new university business school. Institute for Small Business & Entrepreneurship, 7 – 9, 1-20.
77. Dornelas, J.C. (2001). Empreendedorismo: Transformando Ideias em Negócios. Rio de Janeiro, Campus.
78. Davidsson, P. (2003). The Domain of Entrepreneurship Research: Some suggestions. In Katz, J. and & Shepherd, D. (eds.). Advances in Entrepreneurship, Firm Emergence and Growth, Vol. 6, 315-372. Oxford, UK: Elsevier/JAI Press.

be related to the development of entrepreneurial behaviour [79], [80], [81]. In this sense, an enterprising person may not necessarily be an entrepreneur and their skills and characteristics may be exercised in different contexts (e.g., in a social context as a family or local community) instead of in the market.

Globally, entrepreneurship has become a subject of research [82], [83], [84], [85] at many universities through programmes and courses in entrepreneurship [86], [87], [88], although with little uniformity in content and approach among these programmes and courses. In reference to [89], three different types of entrepreneurship education were distinguished: education 'for', 'through' and 'about' enterprise.

In recent years, there has been a growing trend in the emergence of professionals and teachers of entrepreneurship [90].

Although research and entrepreneurship education still shows slow progress [91], [92], for students in HIE, there is considerable interest pertaining to the creation of new business as a career option [93], [94]. To meet the challenges of future human resources, HEIs should promote critical and creative thinking [95] in order to stimulate among students the development of an entrepreneurial culture that can respond to the pressures of globalization. Thus, one of the challenges facing HEIs is the definition of creative teaching methods and approaches for students that will assist them to acquire knowledge, skills and entrepreneurial behaviour through individual constructs and collective practices [96].

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79. Fayolle, A. (2007b). Handbook of Research in Entrepreneurship Education – A General Perspective, Vol.1, Edward Elgar Publishing, Aldershot.
80. Fayolle, A. and Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence, Journal of Small Business Management, Article first published online: 16 SEP 2013, DOI: 10.1111/jsbm.12065, available in http://onlinelibrary.wiley.com/doi/10.1111/jsbm.12065/pdf
81. O'Connor, A. (2012). A conceptual framework for entrepreneurship education policy: meeting government and economic purposes. Journal of Business Venturing, 28(4), 546-563.
82. Fayolle, A. and Gailly, B. (2008). From Craft to Science: Teaching models and learning processes in entrepreneurship education. Journal of European Industrial Training, 32(7), 569-593.
83. Veciana, J.M. (2006). Creación de Empresas y Desarrollo Economico como campo de pesquis. In: 1ª Jornada Técnica Fundación CYD: Creación de empresas, desarrollo territorial y el papel de la Universidad, Colección Documentos CYD, 4:28-49.
84. Veciana, J.M. (2008). La Investigación en el Campo de la Creación de Empresas y PYMES: evolución, tendencias y problemas. Curso de Verano Internacional UEX 2008: Función Empresarial: Investigación y Aplicaciones, Universidad de Estremadura, Spain.
85. Davidsson, P. (2003). The Domain of Entrepreneurship Research: Some suggestions. In Katz, J. and & Shepherd, D. (eds.). Advances in Entrepreneurship, Firm Emergence and Growth, Vol. 6, 315-372. Oxford, UK: Elsevier/JAI Press.
86. Fiet, J.O. (2000a). The theoretical side of teaching entrepreneurship. Journal of Business Venturing, 16(1), 1-24.
87. Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education. Journal of Business Venturing, 18(3), 283-300.
88. Kuratko, D.F. (2005). The emergence of entrepreneurship education: development, trends and challenges. Entrepreneurship Theory and Practice, 29(5), 577-597.
89. O'Connor, A. (2012). A conceptual framework for entrepreneurship education policy: meeting government and economic purposes. Journal of Business Venturing, 28(4), 546-563.
90. Redford, D.T. (2008). The state of entrepreneurship education in Portugal. An empirical study on a nascent system in the European Union policy framework, ISCTE - Business School, Lisbon.
91. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. International Business Research, 2(2), 62-71.
92. Saini, J.S. (2001). Economic Development and Entrepreneurship. In Saini, J.S. and Gurjar, B.R. (eds.). Entrepreneurship & Education: Challenges and Strategies. Jaipur: Rawat Publications.
93. Fayolle, A. (2007b). Handbook of Research in Entrepreneurship Education – A General Perspective, Vol.1, Edward Elgar Publishing, Aldershot.
94. Lee, J.H. and Venkataraman, S. (2006). Aspirations, market offerings, and the pursuit of entrepreneurial opportunities. Journal of Business Venturing, 21, 107-123.
95. Saini, J.S. (2001). Economic Development and Entrepreneurship. In Saini, J.S. and Gurjar, B.R. (eds.). Entrepreneurship & Education: Challenges and Strategies. Jaipur: Rawat Publications.
96. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.

Knowledge about the cognitive processes of entrepreneurs allows HEIs to design courses aimed at helping students with entrepreneurial initiatives for improving their decision-making and risk management capabilities [97]. In other words, it is important that the university helps students to understand the world and the lives of entrepreneurs [98], so that they are aware of the attractiveness of the challenges and opportunities, as well as the uncertainty, complexity and limitations of their activities [99], [100].

The emphasis in sudent´s context makes evident the importance of context for entrepreneurship. In [101], it was argued that "context is important for understanding when, how, and why entrepreneurship happens and who becomes involved" (p.166). Welter considers what she calls an "omnibus context", a broad perspective, drawing attention to "who, what, when, where and why" (p.167).

In the context of developing countries, entrepreneurship is frequently viewed as a catalyst for development, the solution for inclusive economic growth and for social inclusion [102], [103], [104], [105]. Despite some authors being sceptic about the link between entrepreneurship and development in the context of developing countries [106], [107], [108], most consider entrepreneurship, if not as a panacea for development, at least as a part of the solution [109].

The interest in entrepreneurship in this context is observable mainly within public policies [110], [111], [112], [113], although within academia, this interest has also exhibited growth during the past few decades [114], [115], [116].

97. b, A.A. (2002). In pursuit of a new "enterprise" and "entrepreneurship" paradigm of learning: Creative deconstruction, new values, new ways of doing things and new combinations of knowledge. International Journal of Management Review, 4(3), 213-231.
98. Forbes, D. (2005). Are some entrepreneurs more overconfident than others? Journal of Business Venturing, 20, 623-640.
99. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
100. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. International Business Research, 2(2), 62-71.
101. Gibb, A.A. (2005). Towards the Entrepreneurial University. Entrepreneurship Education as a lever for change. NCGE Policy paper series, In: www.ncge.org.uk.
102. Feliciano, J.F. and Fonseca-Statter, G. (2008). Empresariado, Empreendedorismo e Desenvolvimento em Angola e Moçambique. Centro de Estudos Africanos, Lisbon.
103. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
104. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
105. ECA (2001). Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
106. Naudé, W. (2011). Entrepreneurship is Not a Binding Constrains on Growth and development in the Poorest Countries. World Development, 39(1), 33-44.
107. Freiling, J. (2004). A Competence-based Theory of Firm, Management Revue, 15(1), 27-52.
108. Naudé, W. and Krugell (2002). African Economic Growth: Wrong to rely on Small Business? Journal of Small Business & Entrepreneurship, 16(2), 21-44
109. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
110. ECA (2001). Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
111. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
112. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
113. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
114. Fick, D.S (2002). Entrepreneurship in Africa: A study of Successes, Quarum Books, WestPort.
115. Naudé, W. and Havenga, J. (2005). An overview of African Entrepreneurship and Small Business Research. Journal of Small Business & Entrepreneurship, 18(2), 101-120.
116. Sautet, F. (2013). Local and Systemic Entrepreneurship: Solving the Puzzle of Entrepreneurship and Economic Development, Entrepreneurship Theory and Practice, 37(2): 387-402.

However, in developing countries the business conditions are not favourable because of legal barriers, regulations, insecurity, corruption, inadequate infrastructure and poor financial systems that inhibit the development and growth of many companies [117], [118], [119], [120], [121], [122], [123], [124], [125], [126]. Furthermore, the quality of entrepreneurship is viewed as being weak. Entrepreneurship is largely represented by micro-small informal businesses with little or no innovation, which compromises its function as an engine for development. Thus, in these countries, some governments are becoming aware of the need for intervention in the business environment [127], [128], [129], [130], [131], [132], [133], [134] and that a key issue is to promote a different kind of entrepreneurship: with skilled entrepreneurs, able to innovate and structure a company and its growth. As mentioned in [135], skilled entrepreneurship offers potential rewards for individuals across the socioeconomic spectrum, including vulnerable populations and workers in the informal sector, for whom entrepreneurship signifies potentially more stable income flows, increased profits and more secure employment. For this reason, educational institutions are increasingly seen as tools for the development of an entrepreneurial culture. Some studies [136], [137], [138], [139] show evidence of the growing sub-Saharan African governments' investments in entrepreneurial education and training.

117. William, M. (2009). Managerial Skills for Small to Medium Enterprises and the Informal Sector to Enhance Development and Business Growth, Zimbabwe. file:///H:managerial%20skills204%20sme.htm. 12/04/2013.
118. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
119. ECA (2001). Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
120. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
121. Okpara, J.O. and Wynn, P. (2007). Determinants of Small Business Growth Constraints in a Sub-Saharan African Economy. SAM Advanced Management Journal, 72(2), 24-35.
122. Valá, S.C. (2009). Desenvolvimento Rural em Moçambique: Um desafio ao Nosso Alcance. Editorial Marimbique e Ussivane, Maputo.
123. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. International Business Research, 2(2), 62-71.
124. Ugwushi, B.I. (2009). SMEs Key Failure-Factors: A Comparison between the united kingdom and Nigeria. Journal Social Science, 18(3), 199-207.
125. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
126. Abor, J. and Quartey, P. (2010). Issues in SME Development in Ghana and South Africa, International Research Journal of Finance and Economics, 39, 218-228
127. William, M. (2009). Managerial Skills for Small to Medium Enterprises and the Informal Sector to Enhance Development and Business Growth, Zimbabwe. file:///H:managerial%20skills204%20sme.htm. 12/04/2013.
128. Legatum Institute (2011). The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
129. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
130. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
131. Lucky, I.O., Olusegun, A.I. and Bakar, M.S. (2012). Determinants of Business Success: Trust or Business Policy? Journal of Arts, Science & Commerce, 3(3), 37-42.
132. Okpara, J.O. and Wynn, P. (2007). Determinants of Small Business Growth Constraints in a Sub-Saharan African Economy. SAM Advanced Management Journal, 72(2), 24-35.
133. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. International Business Research, 2(2), 62-71.
134. Ugwushi, B.I. (2009). SMEs Key Failure-Factors: A Comparison between the united kingdom and Nigeria. Journal Social Science, 18(3), 199-207.
135. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
136. Herrington, M. and Kelley, D. (2012). African Entrepreneurship: Sub-Saharan African Regional Report, IDRC/CDRI and GEM.
137. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
138. Weimer, B. (2012). Moçambique: Descentralizar o Centralismo, Economia Política, Recursos e Resultados. Instituto de Estudos Sociais e Económicos, Maputo.
139. Landzani, W. and Vuuren, J. (2002). Entrepreneurship training for emerging SMEs in South Africa. Journal of Small Business Management, 40(2), 154-161

In general and despite of the difficulty of measuring the impact of entrepreneurship education, primarily due to its long-term effects [140], [141], several studies have concluded that government policies for developing entrepreneurship within the education system help to instil entrepreneurial values and attitudes in students [142], [143], [144], [145]. The importance of these policies lies mainly in promoting a strong educational system for the teaching of entrepreneurship, aimed at a constant incentive for delivering innovation [146].To create these policies, [147] suggested a list of actions that aim at transforming the educational system of countries that wish to induce entrepreneurial actions in their students. Among the items the authors suggest are: (i) developing national education plans for entrepreneurship; (ii) creating inter-ministerial work groups (education, economy, research and technology, etc.); (iii) creating public or private agencies to stimulate entrepreneurial education; (iv) teaching leadership in educational institutions; (v) reassessing rules and regulations in universities. These elements represent not only an investment in entrepreneurship education, but also a change within HEIs toward more entrepreneurial behaviour. The institutional culture of the higher education institution, together with its practices and policies, play a fundamental role in preparing the student for the employment market [148], which in turn highlighted the importance of a more dynamic and entrepreneurial institutional profile. Furthermore, the principle that the institution is important in the training of students is intrinsically linked to the fact that universities must be prepared to change teaching paradigms toward more global and business-like dynamics, in this way changing the culture of these institutions [149].

7.3 Cooperation networks in HEIs as a tool for promoting entrepreneurial learning and developing organizational skills in developing countries

As discussed in the previous section, in recent times, the development of entrepreneurial competences in universities have appeared as a response to curricular challenges (that require curricular components to be linked to behavioural

140. Landzani, W. and Vuuren, J. (2002). Entrepreneurship training for emerging SMEs in South Africa. Journal of Small Business Management, 40(2), 154-161
141. Dinis, A. Paço, A., Rodrigues, R., Ferreira, J. and Raposo, M. (2014) Does Entrepreneurship Education to teenagers have different impacts over time? Some evidences based on Entrepreneurship Education Programme on Mozambique Youth, Proceedings of the ICSB, World Conference on Entrepreneurship "Entrepreneurship and Sustainability, Dublin, 11-14 June.
142. Fayolle, A., Benoît, G. and Lassas-Clerc, N. (2006). Effect and counter-effect of Entrepreneurship Education and social context on student' intention. Estudios de Economía Aplicada, 24 (2), 509-523.
143. Audretsch, D.B. and Beckmann, I. A. M. (2007). From small business to entrepreneurship policy. Handbook of Research on Entrepreneurship Policy (pp. 36-53). Cheltenham: Edward Elgar Publishing Limited.
144. Greene, F.J. and Storey, D.J. (2007). Issues in evaluation: the case of Shell Livewire. Handbook of Research on Entrepreneurship Policy (pp. 213-233). Cheltenham: Edward Elgar Publishing Limited.
145. Parker, S.C. (2007). Policymakers beware! Handbook of Research on Entrepreneurship Policy (pp. 54-63). Cheltenham: Edward Elgar Publishing Limited.
146. Stevenson, L. and Lundström, A. (2007). Dressing the emperor: the fabric of entrepreneurship policy. Handbook of Research on Entrepreneurship Policy (pp. 94-129). Cheltenham: Edward Elgar Publishing Limited.
147. Acs, Z. J. and Szerb, L. (2006). Entrepreneurship, Economic Growth and Public Policy. Small Business Economics, 28(2-3), 109-122.
148. Thomas, H. and Kelley, D. (2012). Entrepreneurship Education in Asia. UK: Edward Elgar Publishing.
149. European Commission. (2006). Entrepreneurship education in Europe: Fostering entrepreneurial mindsets through education and learning. Final Proceedings of the Conference on Entrepreneurship Education in Oslo (pp. 1-94).

and attitudinal components valued by the business world) [150], as well as challenges pertaining to business and/or organizational performance [151], [152], [153]. This requires new working (professional, social and personal) scenarios in a new generation of workers, representing a bonus and differentiating element in human resource management. Thus, it is expected that university graduates show a wide range of technical, professional and behavioural skills, which potentiate individual values that in turn contribute to the quality of firms/organizations [154], [155]. Furthermore, nowadays, a range of challenges impact on HEIs such as dwindling financial resources, demographic changes among the student population, the need to attract students and remain engaged with the community, etc. [156], [157].

Due to the growing emergence of these new challenges and therefore the need to establish an educational and entrepreneurial culture at the heart of universities, the adoption of cooperative networks appears as one possible response to these challenges by reinforcing resources of a diverse nature. To this end, universities engage in a wide range of networks and relationships with both private and public organizations, which serve as additional sources for collaboration and co-operation [158]

In recent times, HEIs, along with other organizations, have felt the need to act jointly and in association, sharing resources that may be material, financial, technological or human. University networks can be a crucial strategy for overcoming the current constraints within HEIs, since they are considered to have a primary importance for the transfer of knowledge between universities, universities and young entrepreneurs and between universities and other actors [159], [160], [161], [162]. Networks can take on activities that will exceed the capacity of individual institutions and the intention is often to establish a longer-term, more sustainable set of relationships than what is typical in university-to-university partnering arrangements [163].

150. Handscombe, R.D., Rodriguez-Falcon, E. and Patterson, E.A. (2009). Embedding enterprise in engineering. International Journal of Mechanical Engineering Education, 37(4), 263-274.
151. Kirby, D. (2005). A case for teaching entrepreneurship in Higher Education. In: http://ncge/communities/education/reference/index/rptpub10. (02/04/2013).
152. Gibb, A., Haskins, G. Hannon, P. and Roberson, I. (2009 updated 2012) Leading the entrepreneurial University. Meeting the entrepreneurial development needs of higher education institutions, National Centre for Entrepreneurship in Education (NCEE), Saïd Business School, University of Oxford.
153. Saini, J.S. (2001). Economic Development and Entrepreneurship. In Saini, J.S. and Gurjar, B.R. (eds.). Entrepreneurship & Education: Challenges and Strategies. Jaipur: Rawat Publications.
154. Pinheiro, M.M., Sarrico, C.S. and Santiago, R.A. (2010). Desenvolvimento de competências no Ensino Superior Profissionalizante pela utilização de metodologias de ensino-aprendizagem do tipo PBL: Um estudo de caso de um curso de contabilidade, Revista de Educação, 17(2), 43-60.
155. Whitchurch, C. (2008). Shifting identities and blurring boundaries: the emergence of third space professionals in UK higher education. Higher Education Quarterly, 62(4), 377-396.
156. Araújo, U.F. and Sastre, G. (2009). Aprendizagem baseada em problemas. São Paulo: Summus Editorial.
157. Kogan, M., Bauer, M., Bleiklie, I. and Henkel, M. (2006). Transforming Higher Education: A Comparative Study. Higher Education Dynamics, 13, 25-46.
158. Shapiro, H. (2005). A Larger Sense of Purpose: Higher Education and Society, Princeton. New Jersey: Princeton University Press.
159. Bramwell, A. and Wolfe, D. A. (2008). Universities and Regional Economic Development: the entrepreneurial University of Waterloo, Research Policy, 37, 1175-1187.
160. Inzelt, A. (2004). The evolution of university-industry-government relationships during transition. Research Policy, 33, 975-995.
161. Uzzi, B. (1996). The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: the network effect. American Sociological Review, 61, 674-698.
162. Gilbert, B.A., McDougall, P.P. and Audretsch, D.B. (2008). Clusters, Knowledge Spillovers and New Venture Performance: an empirical examination. Journal of Business Venturing, 23, 405-422.
163. Huggins, R., Jones, M. and Upton, S. (2008). Universities as Drivers of Knowledge-Based Regional Development: a triple helix analysis of Wales. International Journal of Innovation and regional Development, 1(1), 24-47.

In any type of network, it is assumed that two or more organizations are working together to solve common problems for a given period of interaction [164]. In this sense, the notion of the network implicates the notion of cooperation. In fact, the term 'cooperation' has been described by various investigators as a cooperative relationship, strategic cooperation, network or collaboration, as well as the formal or informal communication agreements between two or more organizations that allow the parties involved to obtain mutual benefits from said cooperation [165], [166], [167]. In reference to [168], it is stated that the result of this process can be designated symbiotic entrepreneurship, which they define as “an enterprising effort by multiple parties, each of which benefits from the joint effort, such that added value is created” (p. 110).

Cooperation networks are formed by a group of actors – people, services, organizations and countries – interacting and maintaining structural relationships, which can be familial, social, communicative, financial, strategic and/or commercial [169]. A cooperation network consist of an agreement that establishes relationships that allow the different actors to not only reduce market uncertainty and turbulence, but also create advantages, with the view that the overall benefit is greater than the individual action. Cooperation networks can be established for various reasons. For [170], a partnership concerns agreements in which two or more partners share the commitment for reaching a common objective, joining all their capacities and resources and coordinating their activities to be successful. Cooperation networks serve as a response to globalization and growing market uncertainty and complexity, implying the sharing of knowledge and experiences, the reduction of risks and costs and the development of new technology [171], [172], [173], [174], [175], [176]. More important in the context of HEIs, cooperation networks can be seen and used as a strategy or opportunity for learning new competences, i.e., embedding a partner’s know-how [177]. In general, cooperation is seen as a means for developing an opportunity to learn new competences and knowledge.

Competence is defined here as the recognized ability to act responsibly, which implies the individual’s capacity to mobilize, integrate, transfer knowledge, resources and skills that add economic and social value to the organization [178]. Organizational

164. ADB (Asian Development Bank). (2012). Regional cooperation and cross-border collaboration in higher education in Asia: Ensuring that everyone wins. Manila: ADB.
165. Huggins, R. (2001). Inter-firm network policies and firm performance: evaluating the impact of initiatives in the United Kingdom, Research Policy, 30, 443-458.
166. Go, F.M. and Williams, A.P. (1993). Competing and Co-Operating in the Changing Tourism Channel System”, Journal of Travel and Tourism Marketing, 2(2-3), 229-248.
167. Lynch, R.P. (1990). Building Alliances to Penetrate European Markets. Journal of Business Strategy, 11(2), 4-8.
168. Mak, B. and Go, F.M. (1995). Matching global Competition: Co-Operation Among Asian Airlines. Tourism Management, 16(1), 61-65.
169. Dana, L.P., Etemad, H. and Wright, R.W. (2008). Toward a paradigm of symbiotic entrepreneurship. International Journal of Entrepreneurship and Small Business, 5(2), 109-126.
170. Dana, L.P., Etemad, H. and Wright, R.W. (2008). Toward a paradigm of symbiotic entrepreneurship. International Journal of Entrepreneurship and Small Business, 5(2), 109-126.
171. Balestrin, A. and Verschoore, J. (2008). Redes de cooperação empresarial: estratégias de gestão na nova economia. Porto Alegre: Bookman.
172. Littler, D.A. (1993). Risks and Rewards of collaboration, UMIST.
173. Iacobbuci, D. (1996). Networks in Marketing, Thousand Oaks: SAGE Publications.
174. Teece, D.J. (1992). Competition, cooperation, and innovation: organizational arrangements for regimes of rapid technological progress. Journal of Economic Behavior and Organization, 18, 1-25.
175. Moreira, P. and Corvelo, S. (2002). Cooperação interorganizacional: das trajectórias às redes. INOFOR, Lisbon.
176. Tidd, J., Bessant, J. and Pavitt, K. (2003). Gestão da Inovação: Integração das Mudanças Tecnológicas, de Mercado e Organizações, Lisbon, Monitor.
177. Narula, R. (2004). R&D Collaboration by SMEs: new opportunities and limitations in the face of globalization. Technovation, 24(2), 153-161.
178. Isoraite, M. (2009). Importance of Strategic Alliances in Company`s Activity. Intellectual Economics, 1(5), 39-46.

competence is defined as the ability to coordinate the distribution of the organization's resources and capacities in an established direction in order to attain its objectives. These two definitions are set in the theory based on organizational competencies, which considers that competencies do not only lie with individuals, but depend on the organizational context and have a social and organic quality that often depends on shared experiences and interactions within the organization, so that this is seen as a complex, structured and dynamic combination of assets, organizational resources and competencies [179].

In [180] it is proposed that cooperation networks should be seen as learning opportunities, while several later studies have confirmed this point of view [181], [182]. Learning networks are formed above all by partner organizations with the aim of learning from each other's knowledge base [183]. This type of cooperation serves as the basis through which organizations intensively interact and gradually absorb knowledge from their partners [184]. As opposed to opportunistically stealing knowledge, learning networks allow for specified and encouraged knowledge. The knowledge network allows for the accumulation, storage and sharing of organizational knowledge. Through the interaction between different groups from different cultures, sources of learning and innovation are provided and in this way, the organizational structure and culture will also determine the capacity for absorbing inter-organizational learning [185], [186].

The most prevalent traditional methods for teaching entrepreneurship include the business plan, case studies, presentation and discussion of case studies and training by entrepreneurs who act as role models for the students [187]. However, some authors consider these traditional methods of teaching entrepreneurship as lacking the innovation component [188], as not promoting entrepreneurial skills in students [189] and inhibiting the ability of teachers to take risks, to take on new practices and to implement new methodologies extended to new publics and new contexts (Gibb, 2002a), i.e., they do not promote entrepreneurial behaviour [190].

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179. Gibb, A.A. (2005). Towards the Entrepreneurial University. Entrepreneurship Education as a lever for change. NCGE Policy paper series, In: www.ncge.org.uk.
180. Tidd, J. and Izumimoto, Y. (2001). Knowledge exchange and learning through international joint ventures: an Anglo Japanese experience, Technovation, 21(2).
181. Fleury, A.C. and Fleury, M.T. (2004). Estratégias empresariais e formação de competências: Um quebra – cabeça caleidoscópico da indústria brasileira, Atlas, São Paulo.
182. Hamel, G., Doz, Y.L. and Prahalad, C.K. (1989). Collaborate with your competitors – and win. Harvard Business Review, 67, 133-139.
183. Gulati, R. (1995). Does familiarity breed trust? The implication of repeated ties for contractual choice in alliances. Academy of Management Journal, 38(1), 85-112.
184. Eisenhardt, K. and Schoonhoven, C. (1996). Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms. Organization Science, 7(2), 136-150.
185. Nonaka, I., Von Krogh, G. and Voelpel, S. (2006). Organizational knowledge creation theory: Evolutionary paths and future advances, Organization Studies, 27, 1179-1208.
186. Nonaka, I. and Von Krogh, G. (2009). Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory, Organization Science, 20(3), 635-652.
187. Khanna, T., Gulati, R. and Nohria, N. (1998). The dynamics of learning alliances: competition, cooperation, and relative scope. Strategic Management Journal, 19(3), 193-210.
188. Kirby, D. (2005). A case for teaching entrepreneurship in Higher Education. In: http://ncge/communities/education/reference/index/rptpub10. (02/04/2013).
189. Henry, C., Hill, F. and Leicht, C. (2005). Entrepreneurship education and training: can entrepreneurship be taught? Education and Training, 47 (2), 98-111.
190. Doz, Y. L. (1996). The evolution of cooperation in strategic alliances: initial conditions or learning processes? Strategic Management Journal, 17, 55-83.

In [191], the importance of cooperation between universities and the business sector in terms of creating innovative pedagogical practices that able to develop fundamental capacities in young people for making them successful future citizens is noted. These authors consider that networks between schools/universities and the local community is essential for creating the foundations of an innovative and sustainable society. They focus on the learning processes, often in the form of cooperation networks and more flexible relationships between the university and other local institutions, corroborating the potential for moving the boundaries between systems of education, training and work, as pointed out by [192], within the pursuit a common goal – enabling young people both to develop work practices and to contribute to community development.

One approach in the field of teaching entrepreneurship is associated with preparing trainers to transmit more solid knowledge about the subject. When speaking about trainers linked to entrepreneurship, not only lecturers should be considered, but also a network of business-people, ex-students or even students with an entrepreneurial profile, all of whom can serve as models in classes [193]. The impact of teaching entrepreneurship can be greater when we make a connection between theory and practice, which the above-mentioned network individuals can transmit during the learning process [194], [195]. Educators responsible for teaching entrepreneurship tend to bring in outside examples to present diverse classes involving theory and practice, in this way improving the learning of entrepreneurship [196]. In this way, the educator becomes more of a facilitating agent than a lecturer, as they provide students with wider experience in terms of transmitting knowledge about entrepreneurship [197]. This fact is corroborated for the teaching of those students who have entrepreneurship as an intrinsic characteristic, as studies such as [198] prove that these students are searching for practical knowledge in addition to theoretical knowledge to formulate their business ideas.

Therefore, cooperation networks become a viable and stable strategy for achieving certain objectives that the organization might not be able to reach on its own [199]. These objectives emerge as a result of the influence of the organization's external environment (the organization's social and economic surroundings), as well as its internal conditions [200], [201], [202].

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191. Audet, J. (2004). A longitudinal study of the entrepreneurial intentions of University students. Academy of Entrepreneurial Journal, 10(1-2), 3-16.
192. Kirby, D. (2006). Creating entrepreneurial universities in the UK: Applying entrepreneurial theory to practice. Journal of Technology Transfer, 31(5), 599-603.
193. Thomas, H. and Kelley, D. (2012). Entrepreneurship Education in Asia. UK: Edward Elgar Publishing.
194. Harreveld, B. and Singh, M. (2009). Contextualising learning at the education-training-work interface. Education + Training, 51(2), 92-107.
195. Konkola, R., Tuomi-Gröhn, T., Lambert, P. and Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace, Journal of Education and Work, 20(3), 211-228.
196. Harreveld, B. and Singh, M. (2009). Contextualising learning at the education-training-work interface. Education + Training, 51(2), 92-107.
197. Konkola, R., Tuomi-Gröhn, T., Lambert, P. and Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace, Journal of Education and Work, 20(3), 211-228.
198. Kabongo, J.D. and McCaskey, P.H. (2011). An examination of entrepreneurship educator profiles in business programs in the United States. Journal of Small Business and Enterprise Development, 18(1), 27-42.
199. Tidd, J., Bessant, J. and Pavitt, K. (2003). Gestão da Inovação: Integração das Mudanças Tecnológicas, de Mercado e Organizações, Lisbon, Monitor.
200. Neck, H.M. and Greene, P.G. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. Journal of Small Business Management, 49(1), 55-70.
201. Hytti, U., Stenholm, P., Heinonen, J. and Seikkula-Leino, J. (2010). Perceived learning outcomes in entrepreneurship education: The impact of student motivation and team behaviour. Education + Training, 52(8/9), 587-606.
202. Todeva, E. and Knoke, D. (2005). Strategic Alliances & Models of Collaboration. Management Decision, 43(1), 123-148.

Governments and international organizations alike are promoting multi-university networks as a mechanism for strengthening higher education in low- and middle-income countries, while also promoting the greater engagement of universities in high-priority national development issues [203]. Concerning HEIs in developing countries, these objectives include both the improvement of entrepreneurship education and the development of more entrepreneurial and competent (qualified) institutions. In these countries, where entrepreneurial culture and knowledge is low as it pertains to historical and cultural circumstances, cooperative networks with other national and international institutions can foster the creation and dissemination of entrepreneurship knowledge and competences.

7.4 The case of Mozambique and the School of Business and Entrepreneurship Chibuto (ESNEC)

Mozambique is a developing country in sub-Saharan Africa, where the theme of entrepreneurship is assuming particular importance.

Mozambique became independent from Portugal in 1975, after which FRELIMO (*Frente de Libertação de Moçambique*/ Mozambique Liberation Front), the independence movement, implemented and lead a single-party, socialist regime. During this time, beginning in 1977, Mozambique suffered a devastating civil war, as a result of opposing FRELIMO and RENAMO (*Resistencia Nacional Moçambicana*/Mozambican National Resistance). In 1990, through a new constitution, the country introduced a multiparty democracy and recognized the role of market forces in efficiently allocating resources. The civil war ended in 1992, with an agreement to hold multiparty elections. In 1994, the country held its first multiparty elections, in which FRELIMO was elected as the majority party in parliament. Since then, the country has remained relatively stable as a presidential republic.

Mozambique has experienced sustained economic growth since the end of the war, increased foreign direct investment and the diversification of its private sector [204].

Due to the stable macroeconomic environment and the implementation of programmes and socio-economic reforms, Mozambique recorded an annual average economic GDP growth of 8.1% during the period 1995 to 2012, representing one of the highest in the world. This strong real GDP growth has been influenced by increased foreign and domestic investment, access to finance, technology transfer and gains through investment in education and infrastructure. Since 2000, growth has also been driven by investments in large projects [205]. In the past 10 years, the economy has proved to be increasingly robust and resilient to external and internal shocks. Despite the financial and food crisis that had an impact on the national economy, the country

203. Soares, I., Moreira, J., Pinho, C. and Couto, J. (2008). Decisões de Investimento – Análise Financeira de Projectos. Lisbon: Edições Sílabo.
204. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
205. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. Revista de Administração Contemporânea, 14(4), 722-737.

continued to show high and stable economic growth. Over the past four years, the average inflation was 7.1% and real GDP grew on average by about 7.0% per year. In 2012, real GDP grew by 7.2% and the GDP per capita was USD608.1 Agriculture is the sector that has most contributed to domestic production. Over the past 10 years, agriculture had an average GDP share of 23.3%. The manufacturing sector is the second largest contributor with a share of 13.5%. Sectors of trade and transport and communication services contributed 10.9% and 10.5%, respectively [206].

While the Mozambican economy has made significant progress in the past 10 years in its reported growth and its efforts to improve the investment climate, it still has a low ranking among international indicators of competitiveness and business environment (see Table 7.1). This is related to poor access to finance, the perceived prevalence of corruption, inefficient government bureaucracy, an inadequate infrastructure and the lacking education level of the workforce [207]. Additionally, among the population, there is a perceived inferiority of entrepreneurship as a career choice [208]

Ease of doing business rank (among 185 countries)	146
Ease of doing business rank (among 46 African countries)	20
Among 46 African countries	
Starting a business	10
Dealing with constructions permits	29
Getting electricity	40
Registering property	31
Getting credit	22
Protecting investors	5

Table 7.1 "Ease of Doing Business" rankings in Mozambique. Source: World Bank (Adapted from Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C., p. 24).

206. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. Revista de Administração Contemporânea, 14(4), 722-737.
207. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
208. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

Paying taxes	17
Trading across borders	16
Enforcing contracts	22
Resolving insolvency	28

Table 7.1 "Ease of Doing Business" rankings in Mozambique.
Source: World Bank (Adapted from Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C., p. 24).

Human development indicators, namely the Human Development Index (HDI) and the Human Development Index Adjusted Gender (IDG), has shown positive trend results in Mozambique primarily from the results achieved in economic growth, access to education, longevity and reduced gender inequality in terms of access to income (INE and PNUD in [209]). However, this evolution coexists with high levels of informal sectors, high rates of unemployment (especially among the youth) and a large part of the population living in poverty. According to the Population Census 2007, the Mozambican population was estimated at 20.6 million inhabitants, of which nearly 10 million live in poverty, with problems related to food insecurity, low incomes and unemployment. The Mozambican population has been growing at a rate of 2.4%. The National Institute of Statistics' (INE) population projections indicate that by 2035, the final year of implementation of the National Development Strategy, the country will have a population of roughly 41.5 million [210].

The poverty rate of the population decreased from 69.4% in 1997 to 54.7% in 2008, but the poverty situation stagnated from 2003 to 2008. In this context, the government is accelerating measures aimed at reducing poverty levels by adopting policies and actions conducive to human capital development, including the improvement of basic social services and increased business initiatives that will contribute to increased production and the generation of employment and incomes for Mozambicans, particularly for the youth and women.

Meanwhile, domestic small and medium enterprises and locally owned business ventures lag behind and experience low labour productivity. The formal sector employs only 11.1% of the total labour force, 4.1% of which is in the public sector. With a total labour force of 10.1 million, it is estimated that 52.3% of Mozambicans are self-employed informal workers and that 11.5% are family workers that do not receive remunerations. The unemployment rate remains above 21% and is higher among

209. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. Revista de Administração Contemporânea, 14(4), 722-737.
210. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. Revista de Administração Contemporânea, 14(4), 722-737.

young adults, including university graduates. It is estimated that about 300 000 youth enter the labour market each year [211].

In recent years, initiatives by the Mozambican Government and other civil society organizations for supporting entrepreneurship has multiplied with the aim of improving the level of development, reducing poverty and enhancing social inclusion. Many of these programmes target vulnerable potential entrepreneurs, aiming at poverty reduction rather than skill acquisition (see Table 7.2).

The introduction of the Economic Rehabilitation Programme (PRES) in 1987, targeted at demobilizing soldiers when the civil war ended, constituted the first step towards Mozambique moving away from a centrally planned economy. Seen as a potential catalyst for peace and stability through the support of self-employment initiatives, the programmes were later expanded to target vulnerable groups, particularly women, former refugees and those who had been severely affected by the war [212]. Development partners also became increasingly active in entrepreneurship education and training in the late 1990s through two key development institutions: the United Nations Development Programme's (UNDPs) Enterprise Mozambique, the United Nations Industrial Development Organization (UNIDO) and the All India Manufactors' Organization (AIMO) Industrial Development Advisory Centre (CADI) [213].

Programmes focused on youth, often making job acquisition a priority. In the case of the Entrepreneurship Education Programme, a secondary school programme, an entrepreneurship curricula has been introduced in secondary and professional schools since 2004 (see [214]), which is aimed at developing an understanding of business principles and to encourage the development of entrepreneurial attitudes and behaviours. Other programmes target higher education students as potential high-growth entrepreneurs.

Programme Type	Programme Name
Entrepreneurship Education: Secondary Education Students	DNET– Entrepreneurship Modules in Professional and Technical Schools PIREP – Technical and Vocational Education Reform Project MINED: Entrepreneurship Education:

Table 7.2 Programme landscape in Mozambique. Source: World Bank in Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

211. Chapman, D.W., Pekol, A. and Wilson, E. (2014). Cross-border university networks as a development strategy: Lessons from three university networks focused on emerging pandemic threats. International Review Education, published online on 5 august 2014.
212. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
213. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
214. Landzani, W. and Vuuren, J. (2002). Entrepreneurship training for emerging SMEs in South Africa. Journal of Small Business Management, 40(2), 154-161

Programme Type	Programme Name
Entrepreneurship Education: Secondary Education Students	UP/ESTEC – Entrepreneurship Courses Empresa Junior/ISCTEM ESNEC – Business Entrepreneurship Higher Ed. School in Chibuto Business Management (UEM)
Entrepreneurship Training: Potential Entrepreneurs	NEC and Management of SMEs Pro-Jovem *Fundo de Desenvolvimento* ILO *Comece o seu Negócio e Desenvolva o seu Negócio* INEFP – Professional Training Centres Aga Khan Foundation – EDI Cabo Delgado Internet Solutions- IS ESSOR RIC/ISPM – Research and Incubation Centre ACIANA – Industrial and Agricultural Association GAPI Youth Entrepreneurship Programme IAC – Chimoio Agricultural Institute – CSDC
Entrepreneurship Training: Practicing Entrepreneurs	Institute of the Promotion of SMEs (IPEME) Programme of Cooperation in Science, Technology and Innovation between Finland and Mozambique (STIFIMO) Investment and Financing Company (GAPI) MOZLINK

Table 7.2 Programme landscape in Mozambique. Source: World Bank in Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

Programme Type	Programme Name
	Institute for Export Promotion (IPEX) USAD – Technoserve *Negócios Inclusivos* Support in Competitiveness and Enterprise Development Project (PACDI)

Table 7.2 Programme landscape in Mozambique. Source: World Bank in Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

In the National Development Strategy (2015 to 2035) document [215], under the challenges and opportunities for development, knowledge is pointed out as "crucial to the achievement of socio-economic dynamics that occur in the country as it allows for creating new capabilities and patterns of economic development. Thus, investments in education and research, allied to science and technology are key factors for catalysing the production process and the economic competitiveness of the country" (p. 10). Moreover, included among the challenges for the development of the private sector is market-oriented training. It is not surprising therefore that the first pillar of the National Development Strategy is the "Development of human capital (training oriented to market establishment and expansion of vocational education...)" (p. vi).

The change towards a more entrepreneurial mindset and attitudes are also expressed as one of the fundamental factors for the success of the National Development Strategy: "The change in mentality is also meant to instil a proactive spirit in Mozambicans toward work and especially in the search for efficient and peaceful solutions to the challenges facing the development of the country. Assuming a posture of proactivity and creativity in seeking solutions to the country's development means looking at the individual and collective future in a promising and encouraging manner, where Mozambicans can, through work, access development opportunities that arise in the country and thereby improve their welfare" (p.52). To achieve this goal, the government also makes evident the importance of collaborative networks between different actors of the society: "To develop, a society depends on... individual action, as partnerships between citizens, civil society representatives and elected officials, administration and utilities, businesses, as well as unions, all contributing in different ways" (p. 52).

Thus, for both economic and social reasons, entrepreneurship education represents one of the main concerns of the Mozambican Government. One of axes of the National Agenda to Combat Poverty is to promote entrepreneurship through the

215. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. Revista de Administração Contemporânea, 14(4), 722-737.

education system, highlighting the support of entrepreneurship at the level of HEIs [216]. This support includes the introduction of entrepreneurship courses and courses related to business creation and local development, in order to both prepare and motivate graduate students to consider entrepreneurship as a possible professional career and to develop entrepreneurial behaviour. One of the main challenges of this agenda is the expansion of the higher education system, as well as the improvement of its quality and internal efficiency. Indeed, reports regarding the results of the National Programme for the Fight Against Poverty in Mozambique makes it evident that the results of the government's financial support, "about 7 million" (including many failures among the projects funded) include gaps concerning the implementation of teaching entrepreneurship in higher education institutions, as well as its objectives and its effectiveness with respect to providing guidance to students to learn to become entrepreneurs, or to be scholars in entrepreneurship. Thus, it is expected that all HEIs, regardless of location and curriculum content, act as incubators for entrepreneurial skills and innovative ideas capable of transforming various resources into wealth. For this reason, in some cases, beyond school education about entrepreneurship, HEIs have also promoted the incubation of new businesses in order to "strengthen the intervention of the network of institutions engaged in the development capacity to manage and implement business" ([217], p. 212).

Thus, entrepreneurship education is increasingly prevalent in Mozambique’s higher education institutions. In [218], three institutions are identified that combined, enrol more than half of the country’s higher education students: *Instituto Superior de Ciências e Tecnologia de Moçambique* (Higher Education Institute of Science and Technology of Mozambique), the Pedagogical University and Eduardo Mondlane University. The first of these institutions hosts the Empresa Junior programme, which includes workshops and a business plan competition for providing students exposure to entrepreneurship processes. The Pedagogical University, in partnership with UNIDO, designed an entrepreneurship course for training teachers about entrepreneurship in 2009 (for secondary schools). In this university, “entrepreneurship” is both a degree and a cross-course discipline within the curriculum of different degrees. At Eduardo Mondlane University, students take a required entrepreneurship course regardless of their area of study. This latter university also opened an Entrepreneurship Higher Education School, the *Escola Superior de Negócios e Empreendedorismo de Chibuto* (ESNEC), which conducts courses on business management and leadership. This school is the focus of the following paragraphs.

The ESNEC, one of the five schools of the University Eduardo Mondlane, was created by the approval of the University Council at its meeting on 25 November 2008 and its mission is: "To develop the human resource capacity in the identification of business opportunities and transforming them into wealth". This school began its activities on 2 March 2009 and currently has about 790 students and 52 teachers (47 full-time and five part-time) teaching courses in Finance, Management and Leadership, Agro-Business, Retail and Commercial Agriculture.

216. Valá, S.C. (2009). Desenvolvimento Rural em Moçambique: Um desafio ao Nosso Alcance. Editorial Marimbique e Ussivane, Maputo.
217. Valá, S.C. (2012). Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos. Edição Índico Editores, Maputo.
218. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

One of the distinctive aspects of this school, compared to other schools of the University Eduardo Mondlane, as well as other HEIs in Mozambique, is the introduction of "entrepreneurship and business creation" and "business plan" courses in all the degrees taught in the school. Another strength of this school as it relates to entrepreneurship education is the development of business projects, not only with students, but also with local small and medium-sized entrepreneurs, thereby creating a space for interaction with local communities.

The school has been implementing agreements/projects for developing the skills of teachers, students and local entrepreneurs, e.g., SMETOOLKIT, which enables students, teachers and small businesses to use management tools for SMEs. *Business Edge* aims to enable teachers, businessmen and students in organizations, administration and business management, as well as in other short training projects related to hotel services, namely English and computer training. Since 2011 [219] - , the school has implemented the NICHE project, which includes the Development of a Sustainable Trade Academy, the aim of which is empower teachers and enable graduate students to develop a business through a business incubator. This incubator intends to serve as "a space where theory and practice can coexist and where different actors in the public and private sector can complement their interests". This is a project whose goals are to develop a sustainable business academy that guides graduates to respond to the expectations of the growth and development of agriculture and trade in the country. Another objective of this project is to allow staff and students to participate in courses of action pertaining to research and sustainable business management in order to obtain the ability to advise the various actors such as associations of producers, traders and financial institutions in the agricultural sector, as well as commercial actors through a model of student-centred teaching. Thus, the NICHE project aims to guarantee results in the form of the improvement of the profile of its graduates, thereby adapting them to market needs.

With the above in mind, interviews were conducted with stakeholders in order to assess its sensitivity to the agribusiness sector in Mozambique, expectations for future graduates of the ESNEC (expected competencies), the possibility of establishing collaboration protocols with companies related to the sector, as well as to receive interns. It also aims to create a regional network of sustainable trade development in cooperation with other actors in the sector. In 2011, ESNEC was able to strengthen its institutional capacity through the training of more than 50 students, 30 teachers and 20 employees on various topics, and has also developed partnerships with other institutions such as BINDZO, ARPONE, Millennium Villages and IIAM. To enforce local and regional experiences, the NICHE project uses the local expertise of research institutes such as Institute of Agricultural Research of Mozambique (IIAM) and HICEP (Hydraulic Chókwe), agricultural enterprises in Chokwe, Xai-Xai and Maputo. However, greater involvement is expected in the coming years, since other service providers will be included through the Business Incubation Centre for the private sector. This project has already enabled the purchase of two vehicles, a minibus with 32 seats and another with eight seats. It has also allowed for the mobilization of bibliographic material for ESNEC courses valued at over 8.000 USD and the purchase of miscellaneous equipment such as computers, printers, cameras and office supplies.

219. Source: http://esnec.uem.mz/index.php?option=com_content&view=article&id=53:projecto-niche-vai-garantir-academia-de-negocios-sustentaveis-na-esnec-&catid=2:anuncios-e-eventos&Itemid=6

ESNEC also recently launched an internal competition for graduate students to submit business plans that, within the framework of cooperation with a bank, may be financed.

These projects contribute to the collaboration of diverse entities, namely: FUNDEC (skills development fund) (a public programme funded by the World Bank), National Institute for Training and Employment, the National Institute of Tourism, the Centre for Academic Development and the Institute of Languages.

As reported in [220], a focus group and interviews suggested the lack of qualified teachers in business and entrepreneurship subjects. To overcome this difficulty, ESNEC has established cooperative relationships with several other national and international academic institutions, especially with Portuguese-speaking countries, for the development of teacher skills, namely the School of Hospitality and Tourism Inhambane. (Mozambique), the Polytechnic Institute of Gaza (Mozambique), the Pedagogical University (Mozambique), the University of Saint-Thomas-Gaza (Mozambique), the Federal University of Rio Grande do Norte (Brazil), the University of Goiás (Brazil), the University of Aveiro (Portugal), the University of Beira Interior (Portugal) and the University Van Hall Larenstein (Netherlands). As a result of these cooperative networks, 20 teachers attended or are attending Masters courses and three are attending doctoral programmes in entrepreneurship or management. Twelve of these teachers have already attained a Masters degree and only two failed to complete their studies. Only 11 teachers of the institution did not receive further training or qualifications.

According to the Director of ESNEC (manager of cooperation networks), “cooperation includes help or mutual collaboration between two or more parties without profit interests or other monetary benefits... help may be based on agreements between the parties and networks are seen as “connections between different institutions to exchange relations of mutual information for use with available resources" (extract from interview). This statement emphasis the non-profit aspect of cooperation found in the content of the cooperation agreements that the school has established. Networks were established in order to exchange information and knowledge and to potentiate the available resources of the total network. In this sense, the networks are used not to create an immediate profit or market advantage, but to enable the mobility of resources for the specific purpose of improving entrepreneurship education competencies (cooperation in other universities), as well as to promote business knowledge dissemination and innovation (in the case of other collaborative projects).

7.5 Concluding remarks

In this chapter, the importance of entrepreneurial competencies and entrepreneurial education in developing countries was discussed. Furthermore, collaborative networks

220. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

were presented as effective instruments for promoting the entrepreneurial competencies of both HEI students and teachers. The primary argument presented in this work is that, especially in countries with major weaknesses concerning entrepreneurial culture and human capital, collaborative partnerships with other international and national universities and organizations are fundamental to the generation and dissemination of knowledge and an entrepreneurial mindset. In fact, the literature review showed that university networks are considered one of the most important vehicles of knowledge transfer between universities and between universities, young entrepreneurs and other economic actors.

The case of Mozambique was presented, a country where the national strategy for development is heavily centred in the human capital development and where entrepreneurship education plays a fundamental role. In fact, in its public communications, the Mozambican Government emphasize the importance of collaboration between the different sectors of society and cooperation with international organizations in order to promote learning and change attitudes. In line with this, since the 1990s, governments have strongly invested in entrepreneurship education and training with the collaboration of other national and international organizations. Investment in entrepreneurship education in HEIs represents a central issue of this strategy.

This study focused in the ESNEC case, which represents one of the more important and recent developments of entrepreneurship education in Mozambique. This case showed how collaborative university networks have been used as tools for the development of the entrepreneurial competencies of both teachers and students and as a vehicle for knowledge dissemination within the community. More specifically, cooperation with other universities is being used to promote the mobility of resources for the specific purpose of improving teachers' entrepreneurship knowledge and competencies; other collaborative projects have been implemented in order to promote innovation and the dissemination of business knowledge among students and entrepreneurs in the surrounding community.

How far these investments in entrepreneurship education, especially those in HEIs have been effective as a strategy for development is beyond the scope of this work; however, in the medium-long term, this will be an important issue to address within the continuity of the debate about whether entrepreneurship can or cannot be taught and learned.

Finally, it must be noted, as mentioned by [221], that there are two important dimensions that affect successful entrepreneurship: the human capital of the individual and the business environment in which individuals operate. In this sense, entrepreneurs' ability to succeed based on their own skills and abilities is moderated by the context in which they operate. In spite of the fact that there is some cause for optimism in Mozambique, the challenges for achieving a vibrant entrepreneurial economy in Mozambique are significant. Entrepreneurship education can only address some of these challenges [222]. Despite the increasing importance given to entrepreneurship

221. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.
222. Robb, A., Valerio, A. and Parton, B. (2014). Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique. The World Bank. Washighton D.C.

education, networks and cooperation, Mozambique has many shortcomings in terms of infrastructure, human capital, financial capital, organizational structure, technological development and also in terms of organizational development agreements, often associated with lack of confidence, lack of fidelity and opportunistic behaviour, i.e., the lack of an organizational culture. All of these constraints have an impact on entrepreneurial outcomes. Therefore, the improvement of organizational culture in Mozambique should also be seen as one of the contributions or earnings resulting from cooperative networks. In reference to [223], it was argued that "learning organisations require a culture where all individuals, without exception, share organizational values. A climate of trust and respect between all acceptable stakeholders and aspects like change/adaptation, innovation and creativity are factors to take into consideration" (p.1729). On the other hand, issues related to access to and the cost of financial capital, as well as integration into markets though market information, regulatory regimes and infrastructure constraints are beyond the scope of what any single programme of entrepreneurship education can address; however, these programmes will clearly benefit from greater attention to the links between improvements in knowledge and skills and other enterprise development mechanisms, including access to funding and market intelligence. In these contexts, networks and HEIs play a fundamental role.

7.6 Notes

1. Source: http://esnec.uem.mz/index.php?option=com_content&view=article&id=53:projecto-niche-vai-garantir-academia-de-negocios-sustentaveis-na-esnec-&catid=2:anuncios-e-eventos&Itemid=6 (http://esnec.uem.mz/index.php?option=com_content&view=article&id=53:projecto-niche-vai-garantir-academia-de-negocios-sustentaveis-na-esnec-&catid=2:anuncios-e-eventos&Itemid=6)

7.7 References

1. Fiet, J.O. (2000a). The theoretical side of teaching entrepreneurship. *Journal of Business Venturing*, 16(1), 1-24.
2. Low, M. (2001). The adolescence of entrepreneurship research: specification of purpose. *Entrepreneurship Theory and Practice*, 25(4), 17-26.
3. Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education. *Journal of Business Venturing*, 18(3), 283-300.
4. Kirby, D. (2005). *A case for teaching entrepreneurship in Higher Education*. In: http://ncge/communities/education/reference/index/rptpub10. (02/04/2013).

223. Government of Mozambique, (2014). Estratégia Nacional de Desenvolvimento (2015-2035), Republica de Moçambique, Julho 2014, http://www.mpd.gov.mz/; http://www.mpd.gov.mz/index.php?option=com_docman&task=doc_details&Itemid=50&gid=418&lang=pt

5. Kuratko, D.F. (2005). The emergence of entrepreneurship education: development, trends and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597.
6. Carrier, C. (2007). Strategies for teaching entrepreneurship: what else beyond lectures, case studies and business plan?". In Fayolle, A. (Ed.). *Handbook of Research in Entrepreneurship Education*, Vol. 1, Edward Elgar Publishing, Aldershot.
7. Fayolle, A. (2007b). *Handbook of Research in Entrepreneurship Education – A General Perspective*, Vol.1, Edward Elgar Publishing, Aldershot.
8. Fayolle, A. and Gailly, B. (2008). From Craft to Science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569-593.
9. Fayolle, A. and Gailly, B. (2013). The Impact of Entrepreneurship Education on Entrepreneurial Attitudes and Intention: Hysteresis and Persistence, *Journal of Small Business Management*, Article first published online*: 16 SEP 2013, DOI: 10.1111/jsbm.12065,* available in *http://onlinelibrary.wiley.com/doi/10.1111/jsbm.12065/pdf*
10. Matlay, H. (2008). The impact of entrepreneurship education on entrepreneurial outcomes. *Journal of Small Business and Enterprise Development*, *15*(2), 382-396.
11. Redford, D.T. (2008). *The state of entrepreneurship education in Portugal. An empirical study on a nascent system in the European Union policy framework*, ISCTE - Business School, Lisbon.
12. Dutta, D.K., Li, J. and Merenda, M. (2010). Fostering entrepreneurship: impact of specialization and diversity in education. *International Entrepreneurship and Management Journal*, *7*(2), 163-179.
13. Rodrigues, R., Dinis, A. Paço, A., Ferreira, J. and Raposo, M. (2012); The effect of an entrepreneurial training programme on entrepreneurial traits and intentions of secondary students, (Chapter 5), in *Entrepreneurship - Born, Made and Educated* (Book 2), Burger-Helmchen, Thierry (Ed.) Intech, Open Access Publisher, 14 de Março 2012, ISBN 978-953-51-0210-6, DOI: 10.5772/2649. p.77-92.; Available in http://www.intechopen.com/books/entrepreneurship-born-made-and-educated/the-effect-of-an-entrepreneurial-training-programme-on-entrepreneurial-traits-and-intention-of-secon
14. Dinis, A. Paço, A., Ferreira, J., Raposo, M. and Rodrigues, R., (2013) Psychological Characteristics and Entrepreneurial Intentions Among Secondary students, *Education and Training*, 55(8-9), 763-780(18).
15. Paço, A, Ferreira, J., Raposo, M., Rodrigues, R. and Dinis, A. (2013) "Entrepreneurial intentions: is education enough*?" International Entrepreneurship and Management* Journal (http://link.springer.com/article/10.1007/2Fs11365-013-0280-5).
16. Woollard, D., Zhang, M. and Jones, O (2007). *Creating Entrepreneurial Universities: insights from a new university business school*. Institute for Small Business & Entrepreneurship, 7 – 9, 1-20.
17. Gibb, A., Haskins, G. Hannon, P. and Roberson, I. (2009 updated 2012) *Leading the entrepreneurial University. Meeting the entrepreneurial development needs of higher education institutions*, National Centre for Entrepreneurship in Education (NCEE), Saïd Business School, University of Oxford.
18. Elkan, W. (1988). Entrepreneurs and Entrepreneurship in Africa. *The World Bank Research Observer*, 3(2), 171-188

19. Fick, D.S (2002). *Entrepreneurship in Africa: A study of Successes*, Quarum Books, WestPort.
20. Naudé, W. and Havenga, J. (2005). An overview of African Entrepreneurship and Small Business Research. *Journal of Small Business & Entrepreneurship*, 18(2), 101-120.
21. Feliciano, J.F. and Fonseca-Statter, G. (2008). *Empresariado, Empreendedorismo e Desenvolvimento em Angola e Moçambique.* Centro de Estudos Africanos, Lisbon.
22. William, M. (2009). Managerial Skills for Small to Medium Enterprises and the Informal Sector to Enhance Development and Business Growth, Zimbabwe. file:///H:managerial%20skills204%20sme.htm. 12/04/2013.
23. Legatum Institute (2011). *The Prosperity Index in Africa: The Role of Entrepreneurship and Opportunity in Sub-Saharan Africa*, United Kingdom. In: http://mediaflip.files.wordpress.com/2011/06/20110531-report-the-prosperity-index-in-africa-1.pdf.
24. Naudé, W. (2011). Entrepreneurship is Not a Binding Constrains on Growth and development in the Poorest Countries. *World Development*, 39(1), 33-44.
25. Valá, S.C. (2012). *Temas sobre Desenvolvimento Económico Local: Pontos e Contrapontos*. Edição Índico Editores, Maputo.
26. ECA (2001). *Enhancing the competitiveness of SMEs in Africa: Strategic Framework for Support Services*, Discussion Paper ECA/DMD/PSD/TP/00/04, Economic Commission for Africa.
27. Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insights, In: www.oecd.org/dev/insights (03/04/2013).
28. Africa Competitiveness Report (2007). The Africa Competitiveness Report, World Economic Forum, The World Bank and the African Development Bank, ISBN-13: 978-92-95044-03-6.
29. Herrington, M. and Kelley, D. (2012). *African Entrepreneurship: Sub-Saharan African Regional Report*, IDRC/CDRI and GEM.
30. Valá, S.C. (2009). Desenvolvimento Rural em Moçambique: Um desafio ao Nosso Alcance. Editorial Marimbique e Ussivane, Maputo.
31. Lucky, I.O., Olusegun, A.I. and Bakar, M.S. (2012). Determinants of Business Success: Trust or Business Policy? *Journal of Arts, Science & Commerce*, 3(3), 37-42.
32. Okpara, J.O. and Wynn, P. (2007). Determinants of Small Business Growth Constraints in a Sub-Saharan African Economy. *SAM Advanced Management Journal*, 72(2), 24-35.
33. Rebecca, E.O. and Benjamin, J. I. (2009). Entrepreneurial competencies: The missing links to successful entrepreneurship in Nigeria. *International Business Research*, 2(2), 62-71.
34. Ugwushi, B.I. (2009). SMEs Key Failure-Factors: A Comparison between the united kingdom and Nigeria. *Journal Social Science*, 18(3), 199-207.
35. Balestrin, A. and Verschoore, J. (2008). *Redes de cooperação empresarial: estratégias de gestão na nova economia*. Porto Alegre: Bookman.
36. Littler, D.A. (1993). *Risks and Rewards of collaboration*, UMIST.
37. Hamel, G. (1991). Learning in international alliances, *Strategic Management Journal*, 12, 91.
38. Dodgson, M. (1993). Learn, trust and technological collaboration, *Human Relations*, 46(1), 77-95.

39. Nonaka, I., Von Krogh, G. and Voelpel, S. (2006). Organizational knowledge creation theory: Evolutionary paths and future advances, *Organization Studies*, 27, 1179-1208.
40. Nonaka, I. and Von Krogh, G. (2009). Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory, *Organization Science*, 20(3), 635-652.
41. Bramwell, A. and Wolfe, D. A. (2008). Universities and Regional Economic Development: the entrepreneurial University of Waterloo*, Research Policy*, 37, 1175-1187.
42. Shane, S. (2004). *A general Theory of entrepreneurship: the individual-opportunity nexus*. Cheltenham: Edward Elgar.
43. Lee, J.H. and Venkataraman, S. (2006). Aspirations, market offerings, and the pursuit of entrepreneurial opportunities. *Journal of Business Venturing*, 21, 107-123.
44. Cristóbal, R.P. (2006).“La Creación de Empresas como Programa de Investigación Científica: implicaciones y retos para la Universidad – Catédra de Empreendedores y Nueva Economia, Universidad de Sevilla.
45. Veciana, J.M. (2006). *Creación de Empresas y Desarrollo Economico como campo de pesquis*. In: 1ª Jornada Técnica Fundación CYD: Creación de empresas, desarrollo territorial y el papel de la Universidad, Colección Documentos CYD, 4:28-49.
46. Veciana, J.M. (2008). La Investigación en el Campo de la Creación de Empresas y PYMES: evolución, tendencias y problemas. Curso de Verano Internacional UEX 2008: Función Empresarial: Investigación y Aplicaciones, Universidad de Estremadura, Spain.
47. Gibb, A.A. and Hannon, P. (2007). Towards entrepreneurial University? *International Journal of Entrepreneurship Education*, 4, 73-110.
48. Henry, C., Hill, F. and Leicht, C. (2005). Entrepreneurship education and training: can entrepreneurship be taught? *Education and Training,* 47 (2), 98-111.
49. O’Connor, A. (2012). A conceptual framework for entrepreneurship education policy: meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546-563.
50. Robb, A., Valerio, A. and Parton, B. (2014). *Entrepreneurship and Education and Training: Insights from Ghana, Kenya and Mozambique*. The World Bank. Washighton D.C.
51. Dornelas, J.C. (2001). *Empreendedorismo: Transformando Ideias em Negócios*. Rio de Janeiro, Campus.
52. Dolabela, F. (2003). *Pedagogia Empreendedora*. São Paulo, Editora de Cultura.
53. Davidsson, P. (2003). The Domain of Entrepreneurship Research: Some suggestions. In Katz, J. and & Shepherd, D. (eds.). *Advances in Entrepreneurship, Firm Emergence and Growth*, Vol. 6, 315-372. Oxford, UK: Elsevier/JAI Press.
54. Saini, J.S. (2001). Economic Development and Entrepreneurship. In Saini, J.S. and Gurjar, B.R. (eds.). *Entrepreneurship & Education: Challenges and Strategies*. Jaipur: *Rawat Publications*.
55. b, A.A. (2002). In pursuit of a new “enterprise” and “entrepreneurship” paradigm of learning: Creative deconstruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Review*, 4(3), 213-231.

56. Forbes, D. (2005). Are some entrepreneurs more overconfident than others? *Journal of Business Venturing*, 20, 623-640.
57. Gibb, Ar.A. (2005). *Towards the Entrepreneurial University. Entrepreneurship Education as a lever for change*. NCGE Policy paper series, In: www.ncge.org.uk.
58. Freiling, J. (2004). A Competence-based Theory of Firm, *Management Revue*, 15(1), 27-52.
59. Naudé, W. and Krugell (2002). African Economic Growth: Wrong to rely on Small Business? *Journal of Small Business & Entrepreneurship*, 16(2), 21-44
60. Sautet, F. (2013). Local and Systemic Entrepreneurship: Solving the Puzzle of Entrepreneurship and Economic Development, *Entrepreneurship Theory and Practice,* 37(2): 387-402.
61. Abor, J. and Quartey, P. (2010). Issues in SME Development in Ghana and South Africa, *International Research Journal of Finance and Economics*, 39, 218-228
62. Weimer, B. (2012). *Moçambique: Descentralizar o Centralismo, Economia Política, Recursos e Resultados*. Instituto de Estudos Sociais e Económicos, Maputo.
63. Landzani, W. and Vuuren, J. (2002). Entrepreneurship training for emerging SMEs in South Africa. *Journal of Small Business Management*, 40(2), 154-161
64. Dinis, A. Paço, A., Rodrigues, R., Ferreira, J. and Raposo, M. (2014) Does Entrepreneurship Education to teenagers have different impacts over time? Some evidences based on Entrepreneurship Education Programme on Mozambique Youth, Proceedings of the *ICSB, World Conference on Entrepreneurship* "Entrepreneurship and Sustainability, Dublin, 11-14 June.
65. Fayolle, A., Benoît, G. and Lassas-Clerc, N. (2006). Effect and counter-effect of Entrepreneurship Education and social context on student' intention. *Estudios de Economía Aplicada*, 24 (2), 509-523.
66. Audretsch, D.B. and Beckmann, I. A. M. (2007). From small business to entrepreneurship policy. *Handbook of Research on Entrepreneurship Policy* (pp. 36-53). Cheltenham: Edward Elgar Publishing Limited.
67. Greene, F.J. and Storey, D.J. (2007). Issues in evaluation: the case of Shell Livewire. *Handbook of Research on Entrepreneurship Policy* (pp. 213-233). Cheltenham: Edward Elgar Publishing Limited.
68. Parker, S.C. (2007). Policymakers beware! *Handbook of Research on Entrepreneurship Policy* (pp. 54-63). Cheltenham: Edward Elgar Publishing Limited.
69. Stevenson, L. and Lundström, A. (2007). Dressing the emperor: the fabric of entrepreneurship policy. *Handbook of Research on Entrepreneurship Policy* (pp. 94-129). Cheltenham: Edward Elgar Publishing Limited.
70. Acs, Z. J. and Szerb, L. (2006). *Entrepreneurship, Economic Growth and Public Policy. Small Business Economics*, *28*(2-3), 109-122.
71. Thomas, H. and Kelley, D. (2012). *Entrepreneurship Education in Asia*. UK: Edward Elgar Publishing.
72. European Commission. (2006). Entrepreneurship education in Europe: Fostering entrepreneurial mindsets through education and learning. *Final Proceedings of the Conference on Entrepreneurship Education in Oslo* (pp. 1-94).
73. Handscombe, R.D., Rodriguez-Falcon, E. and Patterson, E.A. (2009). Embedding enterprise in engineering. International Journal *of Mechanical Engineering Education*, 37(4), 263-274.

74. Pinheiro, M.M., Sarrico, C.S. and Santiago, R.A. (2010). Desenvolvimento de competências no Ensino Superior Profissionalizante pela utilização de metodologias de ensino-aprendizagem do tipo PBL: Um estudo de caso de um curso de contabilidade, *Revista de Educação*, 17(2), 43-60.
75. Whitchurch, C. (2008). Shifting identities and blurring boundaries: the emergence of third space professionals in UK higher education. *Higher Education Quarterly*, 62(4), 377-396.
76. Araújo, U.F. and Sastre, G. (2009). *Aprendizagem baseada em problemas*. São Paulo: Summus Editorial.
77. Kogan, M., Bauer, M., Bleiklie, I. and Henkel, M. (2006). Transforming Higher Education: A Comparative Study. *Higher Education Dynamics*, 13, 25-46.
78. Shapiro, H. (2005). *A Larger Sense of Purpose: Higher Education and Society*, Princeton. New Jersey: Princeton University Press.
79. Inzelt, A. (2004). The evolution of university-industry-government relationships during transition. *Research Policy*, 33, 975-995.
80. Uzzi, B. (1996). The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: the network effect. *American Sociological Review*, 61, 674-698.
81. Gilbert, B.A., McDougall, P.P. and Audretsch, D.B. (2008). Clusters, Knowledge Spillovers and New Venture Performance: an empirical examination. *Journal of Business Venturing*, 23, 405-422.
82. Huggins, R., Jones, M. and Upton, S. (2008). Universities as Drivers of Knowledge-Based Regional Development: a triple helix analysis of Wales. *International Journal of Innovation and regional Development*, 1(1), 24-47.
83. ADB (Asian Development Bank). (2012). *Regional cooperation and cross-border collaboration in higher education in Asia: Ensuring that everyone wins*. Manila: ADB.
84. Huggins, R. (2001). Inter-firm network policies and firm performance: evaluating the impact of initiatives in the United Kingdom, *Research Policy*, 30, 443-458.
85. Go, F.M. and Williams, A.P. (1993). Competing and Co-Operating in the Changing Tourism Channel System", *Journal of Travel and Tourism Marketing*, 2(2-3), 229-248.
86. Lynch, R.P. (1990). Building Alliances to Penetrate European Markets. *Journal of Business Strategy*, 11(2), 4-8.
87. Mak, B. and Go, F.M. (1995). Matching global Competition: Co-Operation Among Asian Airlines. *Tourism Management*, 16(1), 61-65.
88. Dana, L.P., Etemad, H. and Wright, R.W. (2008). Toward a paradigm of symbiotic entrepreneurship. International *Journal of Entrepreneurship and Small Business, 5(2),* 109-126.
89. Iacobbuci, D. (1996). *Networks in Marketing*, Thousand Oaks: SAGE Publications.
90. Teece, D.J. (1992). Competition, cooperation, and innovation: organizational arrangements for regimes of rapid technological progress. *Journal of Economic Behavior and Organization,* 18, 1-25.
91. Moreira, P. and Corvelo, S. (2002). *Cooperação interorganizacional: das trajectórias às redes*. INOFOR, Lisbon.
92. Tidd, J., Bessant, J. and Pavitt, K. (2003). *Gestão da Inovação: Integração das Mudanças Tecnológicas, de Mercado e Organizações*, Lisbon, Monitor.
93. Narula, R. (2004). R&D Collaboration by SMEs: new opportunities and limitations in the face of globalization. *Technovation*, 24(2), 153-161.

94. Isoraite, M. (2009). Importance of Strategic Alliances in Company`s Activity. *Intellectual Economics*, 1(5), 39-46.
95. Tidd, J. and Izumimoto, Y. (2001). Knowledge exchange and learning through international joint ventures: an Anglo Japanese experience, *Technovation*, 21(2).
96. Fleury, A.C. and Fleury, M.T. (2004). *Estratégias empresariais e formação de competências: Um quebra – cabeça caleidoscópico da indústria brasileira*, Atlas, São Paulo.
97. Hamel, G., Doz, Y.L. and Prahalad, C.K. (1989). Collaborate with your competitors – and win. *Harvard Business Review*, 67, 133-139.
98. Gulati, R. (1995). Does familiarity breed trust? The implication of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38(1), 85-112.
99. Eisenhardt, K. and Schoonhoven, C. (1996). Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms. *Organization Science*, 7(2), 136-150.
100. Khanna, T., Gulati, R. and Nohria, N. (1998). The dynamics of learning alliances: competition, cooperation, and relative scope. *Strategic Management Journal*, 19(3), 193-210.
101. Doz, Y. L. (1996). The evolution of cooperation in strategic alliances: initial conditions or learning processes? *Strategic Management Journal*, 17, 55-83.
102. Audet, J. (2004). A longitudinal study of the entrepreneurial intentions of University students. *Academy of Entrepreneurial Journal*, 10(1-2), 3-16.
103. Kirby, D. (2006). Creating entrepreneurial universities in the UK: Applying entrepreneurial theory to practice. *Journal of Technology Transfer*, 31(5), 599-603.
104. Harreveld, B. and Singh, M. (2009). Contextualising learning at the education-training-work interface. *Education + Training, 51*(2), 92-107.
105. Konkola, R., Tuomi-Gröhn, T., Lambert, P. and Ludvigsen, S. (2007). Promoting learning and transfer between school and workplace, *Journal of Education and Work*, 20(3), 211-228.
106. Kabongo, J.D. and McCaskey, P.H. (2011). An examination of entrepreneurship educator profiles in business programs in the United States. *Journal of Small Business and Enterprise Development*, *18*(1), 27-42.
107. Neck, H.M. and Greene, P.G. (2011). Entrepreneurship Education: Known Worlds and New Frontiers. *Journal of Small Business Management*, *49*(1), 55-70.
108. Hytti, U., Stenholm, P., Heinonen, J. and Seikkula-Leino, J. (2010). Perceived learning outcomes in entrepreneurship education: The impact of student motivation and team behaviour. *Education + Training*, *52*(8/9), 587-606.
109. Todeva, E. and Knoke, D. (2005). Strategic Alliances & Models of Collaboration. *Management Decision*, 43(1), 123-148.
110. Soares, I., Moreira, J., Pinho, C. and Couto, J. (2008). *Decisões de Investimento – Análise Financeira de Projectos*. Lisbon: Edições Sílabo.
111. Vale, G.M. and Lopes, H.E. (2010). Cooperação e Alianças: Perspectivas Teóricas e suas Articulações no Contexto do Pensamento Estratégico. *Revista de Administração Contemporânea*, 14(4), 722-737.
112. Chapman, D.W., Pekol, A. and Wilson, E. (2014). Cross-border university networks as a development strategy: Lessons from three university networks focused on emerging pandemic threats. *International Review Education*, published online on 5 august 2014.

113. Government of Mozambique, (2014). Estratégia Nacional de Desenvolvimento (2015-2035), Republica de Moçambique, Julho 2014, http://www.mpd.gov.mz/; http://www.mpd.gov.mz/index.php?option=com_docman&task=doc_details&Itemid=50&gid=418&lang=pt
114. Government of Mozambique. (2006). "Estratégia de Emprego e formação Profissional 2006-2015." www.portaldogoverno.gov.mz.docs_gov/estratégia/trabalho/estratégiadeemprego.pdf
115. Frranco, M. and Ferreira, T. (2007). Um Estudo de Caso sobre Organizações que Aprendem. Revista Comportamento Organizacional e Gestão, 13(2), 169-189.

Chapter 8 Customer Orientation of Current and Future Entrepreneurs in Research Using Projection Methods — Implications for Education

by Anna Pawłowska [1]

8.1 Introduction

Changes in the economy and labour market mean that the process of teaching entrepreneurship is becoming increasingly important and is subject to impacts on a wide scale. For example, entrepreneurship is becoming an instrument for the European Union [2], supporting, inter alia, the solution to the problem of youth unemployment. The correctness of this trend is confirmed, for example, by Matlay's study [3], which followed the fate of 64 graduates from a school of entrepreneurship. It turned out that "over the ten-year period under scrutiny, none of the graduates became unemployed or acquired employee status."

The Polish operational program for 2014-2020 schedules a Program of Knowledge, Education and Development with 4.69 billion Euros allocated to it [4]. The effectiveness of programs and methods of teaching entrepreneurship are therefore becoming crucial for their optimum utilization.

This study analysed the results of a diagnosis carried out using the methods of projection, on the shaping of consumer orientation competence that is being developed in the recipients of these educational activities. Areas were also identified areas where attention should be focused and which should be impacted on, and ways are identified in which this can be done in the course of teaching. It is a response to the objection to the schools of entrepreneurship from some researchers that the programs and teaching methods do not fully meet the needs of people who are to lead companies in the future.

1. Department of Organizational Sociology, Faculty of Management, University of Warsaw, Warsaw, Poland
2. The European Commision Press releases database http://europa.eu/rapid/press-release_IP-12-1233_pl.htm
3. Matlay H. The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development 2008; 15 (1) pp. 382-396.
4. Ministry of Infrastructure and Development http://www.mir.gov.pl/fundusze/Fundusze_Europejskie_2014_2020/Documents/PO_WER_08012014.pdf

8.2 Education and the development of entrepreneurship

Entrepreneurship researchers have indicated that the process of teaching entrepreneurship does not proceed satisfactorily enough to help enterprising individuals cope effectively in business. Rae [5] suggests that "... the skills traditionally taught in business schools are essential but not sufficient to make a successful entrepreneur". Similarly, Kirby [6] asserts that: ...often such programmes equate entrepreneurship with new venture creation or/and small business management and educate “about” entrepreneurship and enterprise rather than educating “for” entrepreneurship [...]”.

Some facts from the development of Polish entrepreneurship can confirm this. According to the Polish Agency for Enterprise Development report [7] on the state of the small and medium-sized enterprise sector in Poland in 2011-2012, Poles are generally an enterprising nation. The level of entrepreneurship measured as a proportion of entrepreneurs or those among the employed who are planning to start a business is above the EU average. According to Eurostat data, in Poland there are 1.52 million enterprises, which puts the Polish economy in sixth place in the EU in terms of numbers. This clearly reveals a high propensity to establish businesses. Poland is one of the EU countries with the highest number of newly established enterprises in 2010, ranking second after France. Poland definitely excels in this respect, because "the intention to start your own business" is declared by 22% of adults, in comparison with the EU where there are 13%. At the same time the number of new companies formed over the entire period 2003-2012 was higher than those liquidated.

Nevertheless, although both categories showed an upward trend, the number of liquidated companies increased slightly faster compared to those emerging. According to CSO data [8] three out of four companies in Poland survive the first year of operation (in 2011, the survival rate was 76.6%). In subsequent years, the survival rate clearly falls – to 54% in the second, and 32% in the fifth year of operation. In any case, this is not just a characteristic of Polish entrepreneurship. Sveinn Vidar Gudmundsson and Christian Lechner reported that according to Nobel [9] in general, from 30 to 40% of entrepreneurial firms are complete failures and many are bought out or never bring the expected return on investment, meaning that the real failure rate can be 70 to 80%.

The possible causes of such a situation are interesting. Some indication may be that Poland achieves lower than the EU average results for the index "percentage of adults

5. in: Matlay H. The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development 2008; 15 (1) pp. 382-396.
6. Kirby, D. Entrepreneurship education: can business schools meet the challenge?. Education+Training 2004; 46 (8/9), pp. 510-2.
7. Polish Agency for Enterprise Development http://en.parp.gov.pl)
8. Polish Agency for Enterprise Development http://en.parp.gov.pl)
9. Nobel, C. Why companies fail-and how their founders can bounce back. HBS Working Knowledge 2011, March 7 cyt. za: Gudmundsson, S.V., Lechner C., Cognitive biases, organization, and entrepreneurial firm survival. European Management Journal 2013; 31, pp. 278– 294.

who agree that school education helped them develop a sense of entrepreneurship" (Poland – 45%, EU – 50%) [10]. Perhaps the motivation to start your own business does not go hand in hand with the skills to run it, for which education is at least in part responsible.

In Poland, entrepreneurship in formal education begins in secondary school, starting with ages 14-16 years and continues in high school. According to the Eurydice Report [11], Poland is one of the eight countries that have introduced Entrepreneurship as a compulsory subject. Moreover, in high schools, there is a new complementary additional subject "Economics in practice." At this stage of education, in the reports prepared for the European Commission, Poland is highly evaluated in terms of implementation of the recommendations in the field of Entrepreneurial Education. At an academic level, the situation is already much less optimistic and difficult to assess reliably due to the lack of detailed research in this area. Because education at university level in Poland, as in other European countries is still decentralized, implemented training standards for Economics and Management negligibly reflect the recommendations of the European Commission. [12] Particularly disadvantageous is the fact, that the content of entrepreneurial education has been introduced into the standards of education uneconomically especially in non-business studies according to the report of the European Commission Enterprise and Industry Directorate-General: Entrepreneurship education in non-business schools is almost non-existent, and tends to be viewed as low priority and as a "soft" subject compared with the hard sciences. A recent initiative is the nationwide programme "Dynamic entrepreneurship", geared primarily to students in the non-business field. In Poland, the Ministry of Science and Higher Education has provided financial support to the Dynamic Entrepreneurship Programme to train entrepreneurship lecturers from 20 nonbusiness institutions. " [13]

The effects of entrepreneurial education are still rated negatively by business representatives: "I disagree with anyone's view who says that everything is well with the entrepreneurship education in Poland. Truthfully the subject exists, but it is too academic, and most of those who have experienced this, complain of it being over-theoretical and boring. " [14]

10. Polish Agency for Enterprise Development http://en.parp.gov.pl)
11. Raport of Eurydice "Entrepreneurship Education at School in Europe. National Strategies, Curricula and Learning Outcomes" March 2012 http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/135en.pdf
12. Wach K. Kształtowanie postaw przedsiębiorczych w programach nauczania. Stan obecny i proponowane kierunki zmian. Conference of University of Economics in Katowice: Shaping entrepreneurial attitudes versus education of economics; Jun 2007 http://fundacja.edu.pl/przedsiebiorczosc/index.php?DOC=program
13. Report of European Commission Enterprise and Industry Directorate-General "Entrepreneurship in higher education, especially in non-business studies" March 2008 http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/entr_highed_en.pdf
14. Gajewski Z. Vice-General Manager of the Polish Confederation of Private Employers Lewiatan http://rynekpracy.org/wiadomosc/764239.html; April 2012

8.3 Restrictions on the effectiveness of entrepreneurship education

However, the problem arises of where to look for the sources of limitations on the effectiveness of entrepreneurial education. The situation is complicated to the extent that directly questioning participants, graduates, or entrepreneurs about their educational needs provides no guarantee of obtaining information that would help solve the problem. The more so that a "number of factors can influence their perceptions of, and need for entrepreneurship education and/or vocational training" [15]. For this reason, when improving entrepreneurship programs, we cannot rely solely on the needs expressed by the participants, as it is highly likely they are not able to fully reliably formulate these needs. So let's take a closer look, examining the scientific achievements, then identify and examine potential sources of restrictions on the effectiveness of entrepreneurship education.

The first hypothesis to emerge – that the cause lies in the personality traits of the learners – is unsatisfactory. This is indicated, for example, by Hansemark's study [16]. He diagnosed the achievement motivation and locus of control in participants in projects supporting the development of entrepreneurship, and eleven years later checked to see whether they were doing business for themselves. It turned out that there was no relationship between achievement motivation and propensity to start their own business. In the case of locus of control (LOC) there was a correlation, but it only occurred in the case of men, suggesting that for women other variables are likely to be more important. Hansemark [17] formulates an interesting explanation of the reasons for this result. He draws attention to the fact that the features identified in the model of an effective entrepreneur have been established in studies of entrepreneurs, i.e. people who already run their own business. The author hypothesizes that perhaps many of the characteristics are formed in the course of business, among which may be achievement motivation and locus of control. This does not mean at all that before starting any economic activity the individual must be at a comparable level. It can therefore be assumed that personality is an important factor in determining efficiency in business, as shown by many studies, but is not sufficient. Therefore it is a foundation, to which should be added everything that the educational process can offer. The question this arises is – what is missing in the learning process, and which may be important for efficacy?

J.C. Sánchez drew attention to an interesting source showing the effectiveness of entrepreneurial education. He carried out an experimental study showing that training participants developed entrepreneurial skills, such as self-efficiency, pro-activeness, risk taking, and the intention of self-employment. Participation has showed

15. Mitra, J., Matlay, H. Entrepreneurial and vocational education and training: lessons from Eastern and Central Europe. Industry and Higher Education 2004; 18 (1), pp. 53-69.
16. Hansemark, O.C. Reed for achievement, locus of control and the prediction of business start-ups: A longitudinal study. Journal of Economic Psychology 2002; 24, pp. 301-319.
17. Hansemark, O.C. Reed for achievement, locus of control and the prediction of business start-ups: A longitudinal study. Journal of Economic Psychology 2002; 24, pp. 301-319.

achievement with higher scores as opposed to those who did not participate in it, which was a distinct merit of the educational process. At the same time, however, J.C. Sánchez sought to answer the question what was so special about this course that achieved the learning outcomes. The fact is there are studies that show the ineffectiveness of educational activities in the field of entrepreneurship. “In this sense we must point out other aspects deriving from our program that are in line with what Rae has called the main role of entrepreneurship education: sparing ideas of what it means to be an entrepreneur and creating critical awareness. This aspect was also pointed out by Bakotic and Kruzic, who argue that entrepreneurship education programs help to augment perception of the important aspects of entrepreneurship as well as provide a realistic view of the problems it can involve.” [18] Therefore it is worth looking deeper at the process of the entrepreneurial education.

8.4 The role of cognitive structures

Most probably the problem is very complex. This study focuses on certain guidelines provided by cognitive psychology. The starting point is the fact that education is focused on providing knowledge and information which are important from the point of view of running a company. It is therefore interesting to look at how the individual copes with information about the world, and here in particular the reality of running your own business, what they do with it, and how relevant it is to their behaviour.

According to cognitive psychologists the individual accumulates knowledge about themselves, others, and the world around them, in cognitive structures. It is on this knowledge that how s/he perceives and interprets themselves, the world, other people, and his/her own relationship with the world, depends. This then affects his/her behaviour. Also of interest to this study are the decisions s/he takes, for example, in the course of running their own business. How the entrepreneurial activity runs will depend on his/her perception and interpretation of the business world, its rules and the principles governing it and himself/herself in relationship with them, which is reflected in his/her beliefs and perceptions.

The information gathered by an individual is generalised in the form of schemata. A cognitive schema is knowledge abstracted from experience, useful for interpreting phenomena, a kind of container of new and similar elements of experience [19]. Schemata are created in social interactions and are subject to social arrangements. Among these are scripts, also including roles, and activities, which are cognitive representations of reality. These allow the individual to orient themselves in the world and predict the effectiveness of activities and likelihood of events, such as the set of behaviours typical of an entrepreneur. They also cover different spheres of life, in fact including everything that is associated with business activity. Thanks to them, the world is structured, and individuals know what to do, how to react, etc. As a result, the content of these cognitive schemata and scripts determine the type and form of

18. Sánchez J.C. The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. Journal of Small Business Management 2013; 51(3), pp. 447–465 doi: 10.1111/jsbm.12025
19. Rumelhart, D.E. Schematy – cegiełki poznania. In: Chlewiński Z. (ed.) Psychologia poznawcza w ostatnich trzech dekadach. Gdańsk: GWP; 2007, pp.431-455

individual activity. Some of these include running a company. It can therefore be assumed that the course of the entrepreneurial process also depends on them. The question is what relationship arises between cognitive schemata and the formal knowledge that has been transferred in the course of teaching.

This is explained by Seymour Epstein's Cognitive-Experiential Self Theory (CEST) [20]. According to this, the individual processes information in two systems: experiential and rational. In the experiential system information is collected from direct experience and on this basis response patterns are formed, resulting in specific behaviours. It is important that it is an automatic learning system that extends beyond the control of consciousness, and the individual at best knows its effects, but is often not fully aware of it. "It works in a preconscious, automatic, non-verbal, associative, fast, effortless, concrete, and at the same time comprehensive manner, and is strongly associated with emotions" [21]. It conditions adaptation processes. In the experiential system, there are schemata that are generalizations of one's own, emotionally important experiences. They are preconscious, implicit theories of self and the world and are descriptive and motivational (if-then, means-end relations).

The rational system works with problem-solving processes involving thinking and reasoning. It includes beliefs, i.e. conscious, explicit theories of self and the world. Their sources are the individual's own experiences and social (cultural) communication. Acquisition of beliefs occurs through logical reasoning and rational elaboration of experiences. This process "is conscious, oriented, mostly verbal, not too fast, requires effort, abstract, analytical and mostly free from the direct influence of emotion". [22]

We can assume that the content of the individual's cognitive structures concerning running their own business are in the form of cognitive schemata, perceptions and beliefs, as a private theory about what to do to function in business, regardless of what is communicated in the course of formal education. Cognitive psychologists assume that the two systems operate in parallel and that they interact.

The importance of these schemata and beliefs is indicated by the results of Koellinger, Minniti and Schade [23]. They researched entrepreneurs from 29 countries including Poland using the Global Entrepreneurship Monitor (GEM) database. According to them, subjective beliefs, and perception of self and the environment are essential for entrepreneurial activity. These in turn are influenced by many factors such as the culture, history, and economic realities of a given country. In their opinion, entrepreneurial decisions are largely based on perception and cognitive mechanisms. This may for example lead to over-confidence and result in the entrepreneur overestimating their control over events, and assessing risk incorrectly.

From the point of view of the development of entrepreneurship it is interesting and important to see how the contents of the cognitive structures in people who want to run their own business, in the form of schemata, scripts, actions, beliefs and perceptions, interact with those that are transferred during formal learning. It is

20. Strelau J., Doliński D. Psychologia. Podręcznik akademicki. Gdańsk: GWP; 2008.
21. Strelau J., Doliński D. Psychologia. Podręcznik akademicki. Gdańsk: GWP; 2008.
22. Strelau J., Doliński D. Psychologia. Podręcznik akademicki. Gdańsk: GWP; 2008.
23. Koellinger, P., Minniti M., Schade Ch. “I think I can, I think I can”: overconfidence and entrepreneurial behavior. Journal of Economic Psychology 2007; 28, pp. 502-527.

precisely the automated and not fully conscious cognitive schemata that may be crucially important. This is due to the specific nature of entrepreneurial activity. During this, it is necessary to activate the processes of decision-making and behaviours which are non-routine and non-schematic. It is not possible to use the set of algorithms which have a foreseeable result specific to each of the situations in which an entrepreneur may find themselves.

The education process may deliver the instruments, tools, and guidelines, but these may not be enough. They are not universal. The variability and unpredictability of the various business situations requires the application of skills outside the schemata. It is then that the automatic reactions arising from an individual's beliefs and perceptions on how to act in a given situation are activated. The direction is then provided by assumptions as to how things in the world of business are in this case and ensuring effective operation within it. Perhaps the individual activates a script for action which automatically plays shaped by observation of the world and the behaviour of others. It may be that this non-routine response is inconsistent with what education has tried to convey and inapplicable to the rules of the market. However, the individual may not be aware of this and act in the conviction of the rightness of their actions. Thus the acquired school knowledge – a set of procedures to be used in the right way and appropriate to the circumstances – is not applied correctly. The entrepreneur must decide what s/he should use from this kit, and that depends on his/her beliefs, ideas, etc. S/he is in a different situation form, for example, an official who must stick to narrowly defined rules. So if an entrepreneur is guided by erroneous premises, even the best method, for example a marketing tool, used inappropriately, will not bring the expected results.

The more so that according to Zaleśkiewicz [24] entrepreneurs prefer informal information (advice from others) from formal (publications, etc.), because they prefer an intuitive way of thinking that is associational, rather than a systematic and analytical procedure. Manimal [25], however, argues that entrepreneurs use a variety of simplifications in thinking and have an internal orientation in decision making – a tendency to follow their own ideas, avoiding such expert opinion. This could suggest that they are oriented towards and have more confidence in what works in their cognitive structures as a result of their own experiences and thoughts. The objectivised knowledge administered during formal education and based on rational facts is less important to them.

This is also confirmed by Simon [26], "Entrepreneurship seems strongly linked to biased perceptions rather than measures of objective reality, so researchers are turning to entrepreneur's cognitive biases to explain not only entrepreneurial firm creation but also failure." The validity of this line of research is also confirmed by studies on the mindset of entrepreneurs by J. Michael Haynie, Dean Shepherd, Elaine Mosakowski and P. Christopher Earley [27].

24. Zaleśkiewicz, T. Przedsiębiorczość i podejmowanie ryzyka. In: Tyszka, T. (ed.) Psychologia ekonomiczna. Gdańsk: GWP; 2004, pp. 303-326
25. Zaleśkiewicz, T. Przedsiębiorczość i podejmowanie ryzyka. In: Tyszka, T. (ed.) Psychologia ekonomiczna. Gdańsk: GWP; 2004, pp. 303-326
26. in: Gudmundsson, S.V., Lechner C., Cognitive biases, organization, and entrepreneurial firm survival. European Management Journal 2013; 31, pp. 278– 294.
27. Haynie J. M., Shepherd D., Mosakowski E., Earley P.C. A situated metacognitive model of the entrepreneurial mindset. Journal of Business Venturing 2010; 25 pp. 217–229.

The importance of this is apparent at the moment the decision to start your own business is taken, which is nothing other than taking a specific career path. The concepts of vocational development by Super and Gottfredson [28] look precisely at the importance of cognitive processes in the process.

According to Gottfredson [29], in choosing a profession the individual uses information on themselves and the professional environment. Based on this, s/he creates an image of him/herself in the occupational context, and thus a set of ideas arise concerning the occupations – a cognitive map of occupations which may be of interest. The type of information contained in this cognitive map of occupations is determined by the individual's course of action.

Another proponent of developmental theories, Super [30], draws attention to the importance of the individual's self-image, emphasizing that this is a subjective idea of him/herself in a particular role, situation, or social position, and is a source of assessment of his/her own capabilities in the roles undertaken. He also introduces the idea of the vocational self-concept, which is shaped by observing the work situation, identification with others, and with the overall environment.

It should be noted that the information on which the individual makes career decisions is subjective in nature and is the result of their relationship with the environment. So the individual is as if sentenced to the fact that the information obtained is not always objective, but is a variety of stereotypes, generalizations and simplifications functioning in a given society and transferred to them during socialization. This applies both to self-perception as well as ideas about occupations.

According to these concepts of choice of occupation, in this case, the decision to be an entrepreneur is taken on the basis of the contents of the cognitive mental map, and relates to one's own "I", the occupation, and the occupational environment. Since these are ideas about social reality, it is possible to identify in them the same elements that cognitive psychology includes in the cognitive representation of the social world. "Social reality is represented in our minds in the form of events and social activities that have their actors, along with objectives, conditions for activation, barriers, and typical ways of overcoming them." [31] Reykowski writes, however, that cognitive structures include "representations of specific objects: individuals, institutions, symbols, places, objects that surround an individual with whom s/he remains in stable relationships. The network of these relationships determines the nature of the individual-world relationship" [32]. In this case, this means the world of entrepreneurship. At the same time a cognitive schema, in addition to descriptive information, also contains data about the emotional relationship to the objects contained therein.

28. Bajcar B., Borkowska A., Czerw A., Gąsiorowska A., Nosal Cz. S. Psychologia preferencji i zainteresowań zawodowych. Przegląd teorii i metod, Warszawa: MPiPS Departament Rynku Pracy; 2006.
29. Bajcar B., Borkowska A., Czerw A., Gąsiorowska A., Nosal Cz. S. Psychologia preferencji i zainteresowań zawodowych. Przegląd teorii i metod, Warszawa: MPiPS Departament Rynku Pracy; 2006.
30. Bajcar B., Borkowska A., Czerw A., Gąsiorowska A., Nosal Cz. S. Psychologia preferencji i zainteresowań zawodowych. Przegląd teorii i metod, Warszawa: MPiPS Departament Rynku Pracy; 2006.
31. Trzebiński J. Reprezentacje skryptopodobne jako formy ukrytych teorii osobowości, in: Jarymowicz J., Smoleńska Z., (ed.) Poznawcze regulatory funkcjonowania społecznego, Warszawa: Wydawnictwo Polskiej Akademii Nauk; 1983, p. 56.
32. Reykowski J. Osobowość wobec przemian społecznych i technologicznych – szkic problematyki, in: Jarymowicz J., Smoleńska Z. (ed.) Poznawcze regulatory funkcjonowania społecznego, Warszawa: Wydawnictwo Polskiej Akademii Nauk; 1983, p. 229.

The cognitive map of occupations also includes information about the social roles realised while pursuing a given occupation, in this case by entrepreneurs. In the social reality, individuals play roles, creating a kind of storyboard drama which is played out in the entrepreneurial environment. [33] The entities in these relationships behave according to the descriptions of their role and others associated with the occupation.

It can thus be concluded that an individual acts as an entrepreneur in accordance with how s/he imagines him/herself, defines his/her role, and how s/he identifies with other individuals, their attributes and motives, and rules of operation. This perception of the world will determine his/her decisions, and its relevance to reality will determine their effectiveness in running a business.

From the perspective of these theories, it therefore seems particularly important to examine the cognitive map of the mind to reach these functional aspects of the entrepreneurial individual. There must be a correspondence between formal knowledge and the beliefs about the company, the rules by which it acts and the goals to pursue. The suspicion that there might be inconsistency in this is justified, for example when we take into account the history of the development of Polish entrepreneurship. In the earlier, communist, economic system, any entrepreneurial initiative was gradually destroyed. Many myths and beliefs were also created on the subject that have been saved in the individual's cognitive system and act like Hofstede's cultural programming [34], and may constitute an important barrier to the development of business activity in Poles [35].

8.5 Customer orientation

From the perspective of the theory of professional development, it can be assumed that the ideas and beliefs about the world of business contained in cognitive structures and the cognitive map of occupations affect the motivation for starting your own business. This motivation can therefore be seen as a manifestation of a belief by which individuals are guided.

As we know from Wickham's research [36], one of the motives for founding a firm is when the entrepreneur stands slim chances of finding a job, and being self-employed is the most advantageous solution for him/her. The second type of motivation stems from the fact that the entrepreneur notices a market opportunity and decides to run his/her own company. Among other things which distinguish the two types of motivation is the object towards which the action is directed. In the first case, the focus is on the person starting the company. As a further consequence, it can be predicted with high probability that the entrepreneur will act to meet their own needs, and not those of the customer, as might be expected from the second type of motivation to start their own business. This limits the potential profits of the company and will only allows him/her to maintain it in very favourable market conditions. There

33. Goffman, E. Człowiek w teatrze życia codziennego. Warszawa: PIW; 1981.
34. Hofstede, G. Kultury i organizacje, Warszawa: PWE; 1998.
35. Glinka B. Kulturowe uwarunkowania przedsiębiorczości. Warszawa: PWE; 2008
36. Wickham P. A. Strategic entrepreneurship. Pearson Education, Limited; 2004

is the risk that such people do not fully identify and understand the rules of the market game.

This relationship with the customer can be very important for the development of the newly-established company.

K. Tajeddini, U. Elg and M. Trueman refer to a series of studies from various sources indicating the importance of customer orientation. “There is clearly a need for a customer-focused strategy if companies are to survive in the long term. Furthermore, as recognition of the economic significance of small firms has grown research has found that customer orientation is especially important.” [37] They also found that "those entrepreneurial orientated small-sized retailers who tend to be proactive in anticipating the latent needs of customers are able to respond that current and future customer needs and wants, thereby generating a pioneering advantage over competitors" [38].

The demonstration of such a relationship allows us to draw the conclusion that customer orientation is not something natural, even when you have experience of running your own business and regular contact with customers. It can thus be assumed that the mere transfer of rational knowledge, such as marketing, is not sufficient to shape this orientation. This is confirmed by G. Morgan's statement (...) that "it is impossible to develop new ways to organize and manage, while still thinking the old way". [39]

This means that cognitive schemata, perceptions, and beliefs about clients include content that, intuitively and automatically applied, can lead to non-proeffective behaviours and decisions.

The aim of this study is to reach precisely this content, to determine the level of consumer orientation competency (COC).

Establishing a competence-based approach involves the allegation formulated against entrepreneurship education that, as Kirby says, "only rarely... is the focus on developing in their students the skills, attributes and behaviour of the successful entrepreneur". [40] According to the general definition, competence consists of the knowledge, skills and attitudes, and its determinants are specified behaviours. Kirby's accusation thus relates to the competency aspects of the individual's functioning in business. This analysis can identify potential areas of special influence in shaping entrepreneurial competence.

In this study, the competence of customer orientation will be construed in accordance with Brown's approach as a behavioural construct, to observe "a tendency or predisposition to meet customer needs". [41]

This should be distinguished from the understanding that "in marketing philosophy, customer orientation seeks to measure the extent to which decisions and activities in

37. Tajeddini K., Elg K., Trueman M. Efficiency and effectiveness of small retailers: The role of customer and entrepreneurial orientation. Journal of Retailing and Consumer Services 2013; 20 pp. 453–462.
38. Tajeddini K., Elg K., Trueman M. Efficiency and effectiveness of small retailers: The role of customer and entrepreneurial orientation. Journal of Retailing and Consumer Services 2013; 20 pp. 453–462.
39. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002, p. 6
40. Kirby, D. Entrepreneurship education: can business schools meet the challenge? Education+Training 2004; 46 (8/9), pp. 514.
41. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002, p. 6

the organization are customer-based. Alternatively customer orientation in service firms is directly related to perceptions of quality, employee performance and service environment, leading to successful external marketing, enhanced customer satisfaction, and enhanced company performance” [42]. For example, this type of study was conducted Olalekan Asikhia among Nigerian small and medium-sized enterprises [43].

The approach presented in this paper focuses on the individual and their cognitive schemata, perceptions and beliefs about the customer. It is assumed that the individual has a high customer orientation competence if this content reveals a high awareness of the importance of the customer, orientation on active recognition of their needs, and addressing these in the course of cooperation. In addition, it is recognised that those so minded would indicate that they need knowledge about the customer to conduct business effectively. It is a quest for answers to the questions:

- Do they believe in the importance of the customer for their business?
- Do they focus on identifying and satisfying their needs?
- What action would they potentially to take towards the customer?
- Do they need knowledge about the customer?

8.6 Research method

An important moment for the realization of this research goal was the choice of diagnostic method. However, the objective of the research in this paper was to reach the content of cognitive schemata, which are largely unconscious and instinctive. Asking the questions directly would make the respondents say what they think is right, and not what is due to their actual beliefs. This would be no different from what is obtained from conventional tests of knowledge. The resulting research material would not be credible, and it would be difficult to predict their behaviour in the realities of business based on it. Therefore, the most appropriate approach in this situation seemed to be to use a qualitative approach and psychological projection techniques.

According to Sęk, projection methods show the "subjective and subject-specific way of perceiving and constructing the environment" [44], i.e. what is needed in the problem being analysed. Kowalik, on the other hand, notes that projection techniques can lead in varying degrees to the appearance of projection. In contact with the projection stimulus this "may lead to the projection of unconscious or masked content, or a simple expression of conscious and accepted psychological content". [45] The use of projection methods for the diagnosis of beliefs and ideas about the role of the customer in running a company assumes a simple mapping of cognitive representation of the world in response to the projection stimulus. This has the advantage that, "to a greater extent than clearly structured material, the projection

42. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002, p. 6
43. Asikhia O. Customer Orientation and Firm Performance among Nigerian Small and Medium Scale Businesses. International Journal of Marketing Studies 2010, 2 (1), pp. 197-212
44. Sęk, H. Teoretyczne podstawy metod projekcyjnych, in: Sęk, H. (ed.) Metody projekcyjne. Tradycja i współczesność. Poznań: Wydawnictwo UAM; 1984, p. 5
45. Kowalik, S. Werbalne techniki projekcyjne, in: Sęk, H. (ed.) Metody projekcyjne. Tradycja i współczesność, Poznań: Wydawnictwo UAM; 1984, p. 91

material [...] gives a better insight into the phenomenological world of the individual's experience, allows us to recognize their personal patterns of structuring and communicating experience, and reveals the dominant default social context of their activities". [46] Since this is a diagnosis of an imaginary business reality and the customer's place within it, we are dealing with a different application of this method than in clinical psychology, which seeks to capture the individual's defence mechanisms.

Using this approach, two diagnostic tools were constructed. One of these was an unfinished sentences test modelled on the Rotter Incomplete Sentences Blank RISB. This is a semi-structured projection technique, which requires the test subject to finish a sentence, adding a completion to the initial given words (called stems). It is assumed that the sentences created by the respondent reflect their attitudes, motives, aspirations, desires, and conception of the surrounding reality. In finishing the sentence, the respondent "projects" their own attitudes and views on various aspects of life, thus making it possible to reach the sources and motives of their conduct. The test used in this study was specifically designed for this purpose. It is consistent with the methodological assumptions that "the unfinished sentences test, like other projection techniques, is constructed separately for each research problem". [47] This is important for consideration of the purpose of the study and the type of data that we wish to obtain.

For the second diagnostic tool, a test was used where the "projectionality" stems from the use of metaphor. According to G. Morgan, metaphor is "the basic overall form of experience through which individuals engage, organize and understand their world" [48]. It stems from the assumption that "we see things not as they are in objective reality, but rather as they appear in our experience" [49]. "Thus metaphor is an expression of our experience" [50] and "in most cases it is not about the truth or falsehood of the metaphor, but about the perception and conclusions that flow from it, and the actions sanctioned by it. In all aspects of life (...) we define a new reality in metaphorical terms, and then act guided by these metaphors. We draw conclusions, set goals, make commitments, and realize plans on the basis of how we partially organize our experience, consciously or unconsciously, but through metaphor." [51]

Therefore, based on knowledge of the metaphor with which the individual describes their company, it is possible to predict actions, procedures, type of decisions taken, and recognized rules, principles, etc. Leaving the respondents the freedom to associate and choose metaphors, the projective nature of the test is maintained and limits interference from the researcher and the simplifications that might ensue. Metaphor shows the cognitive functioning of a study subject, taking into account the emotional aspect of the issues. The metaphors are closer to the "average" individual, more common and inspiring, and therefore easily reach their imagination. The respondent, in describing the situation metaphorically, feels relatively safe, presenting

46. Stemplewska-Żakowicz K. Wprowadzenie, in: Stemplewska-Żakowicz K. (ed.), Nowe spojrzenia na Test Niedokończonych Zdań J.B. Rottera. Interpretacja jakościowa, Warszawa: Pracownia Testów Psychologicznych PTP; 1998, p. 14
47. Maison, D. Zogniskowane wywiady grupowe: jakościowa metoda badań marketingowych, Warszawa: Wydawnictwo Naukowe PWN; 200, p. 30
48. Morgan G. Obrazy organizacji. Warszawa: Wydawnictwo Naukowe PWN; 1997, p. 231
49. Lakoff G., Johnson M. Metafory w naszym życiu, Warszawa: PIW; 1988, p.7
50. Lakoff G., Johnson M. Metafory w naszym życiu, Warszawa: PIW; 1988, p.7
51. Lakoff G., Johnson M. Metafory w naszym życiu, Warszawa: PIW; 1988, p.7

their own perspective indirectly. With a direct question, the respondent could hide important details, especially emotional ones. This method of using projection methods for the diagnosis of consumer orientation competency has high incremental accuracy, indicating the extent to which the tool provides new information that is difficult or impossible to obtain using other techniques. [52] Examples of studies of this nature include the author's other research work [53], [54]. L.D. Sargent, Ch. D. Bataille, H.C. Vough, M. D. Lee used metaphor analysis to examine the meanings of retirement for a group of retired Canadian executives and managers. [55]

The tools constructed for the needs of the present study consist of the following projection impulses. The Unfinished Sentences Test contains the following stems:

- The most serious risk in running your own business...
- Factors hampering running of the company...
- In running a business what would help me...

The Metaphor Questionnaire was constructed in two versions, each addressed to a different group of respondents, as described in the next section.

Metaphor Questionnaire Version I contained the following instructions:

- Compare your company to any vehicle.
- What does the customer do in this vehicle?
- Who else is with you in this vehicle?

Metaphor Questionnaire Version II contained the following instructions:

- Compare your company to any vehicle.
- What does the customer do in this vehicle?

8.7 Research course

The study was conducted independently in two stages. The first survey was conducted in November 2008 among participants in the European Social Fund project conducted at the Faculty of Management at Warsaw University "Entrepreneurship. Let's start our own company". It was attended by 22 people (10 women and 12 men) who, due to the fact that the condition for joining the project was to prepare a business plan, will hereafter be called the "entrepreneurs". As participants in the project, they received funding to start their own business, training, and supervision from management professionals. They exclusively completed Metaphor Questionnaire Version I.

The second study was conducted in April 2011. This was attended by students of I and II year fixed full-time and evening courses of the Faculty of Management at the

52. Lilienfeld, S.D., Wood, J.M., Garb, H.N. Status naukowy technik projekcyjnych, Kraków: Wyd. UJ; 2002.
53. Pawłowska A. Projection methods in diagnosing an individual's cognitive map of occupations. in: Mróz B. (ed.) Functioning in the workplace. Quantitative and qualitative psychological research. Warszawa: Scholar Publishing House, 2012, pp. 115-127
54. Pawłowska A. Młodzi w biznesie z perspektywy teorii rozwoju zawodowego. Wyniki badań własnych. in: Glinka B., Pasieczny J. (ed.) Młodzi przedsiębiorcy. Problemy Zarządzania, Warszawa: Wydawnictwo Naukowe WZ UW; 2012.
55. Sargent L.D., Bataille Ch.D., Vough H.C., Dea M.Metaphors for retirement: Unshackled from schedules. Journal of Vocational Behavior 2011; 79 pp. 315–324

University of Warsaw. Within this range, a group of people was isolated declaring that in the future they intend to start their own company (76 people, including 50 women and 26 men) and a second, not planning self-employment (21 individuals, including 14 women and 7 men). They completed the Incomplete Sentences Questionnaire and Metaphor Questionnaire Version II. Analysis of the results focused on the group planning to start a business. The second group represents a point of reference, but as it was far fewer in number, it cannot be the basis for a full comparative analysis, although some issues were identified for further investigation.

8.8 Analysis of research results

In order to analyse the data obtained, separate categories were assigned related to consumer orientation competence. For a more complete picture of the situation, other categories were also taken into account if this was justified by a reasonable response frequency from the subjects.

The table below shows the categories into which the respondents' statements were qualified. Analysis of the responses consisted of measuring their appearance in a given category.

Question / stem	Analysed response categories
• Compare your company to any vehicle. • What does the customer do in this vehicle?	Attitude to the consumer and their importance • The customer is a component of the vehicle/company • The customer is outside the vehicle/company • There is no customer Focus on identification of customer needs • Entrepreneur seeks contact with the customer (proactive) • Entrepreneur is passive, the customer actively seeks contact with him/her • The customer evaluates the entrepreneur

Table 8.1 Analysed categories of responses for the Metaphor Questionnaire and the Incomplete Sentences Questionnaire Source: Own report

Question / stem	Analysed response categories
	Potential actions taken towards the customer • Cooperation • Battle • Rivalry • Tolerance of the customer's presence next to the company
• Who else is with you in this vehicle?	• The customer is a component of the vehicle/company • The customer is outside the vehicle/company • There is no customer
• The most serious risk…	• No customers, demand, sales, etc. • Competition • Financial problems • Lack of knowledge and experience • Psychological problems • Other
• Factors hampering running of the company..	• Customer • Idea • Competition • Market • Other
• In running a business what would help me …	• Knowledge of the customer, market etc., idea • Financial support • Emotional Support • Experience • Knowledge • Consultancy • Other

Table 8.1 Analysed categories of responses for the Metaphor Questionnaire and the Incomplete Sentences Questionnaire Source: Own report

The level of consumer orientation competency depended on whether and how many people gave diagnostic responses, i.e. belonging to the proper category. This information is included in Table 8.2.

The replies of the respondents divided into categories are presented in the following Tables. These show the percentage of responses that fall into a given category. In the group of students, due to the large number of them, only example answers are given. Readers interested in the full results may obtain these via email. On the other hand, all answers given by the entrepreneurs are quoted.

Component of consumer orientation competency	Question from the Metaphor Questionnaire Version I and Version II	Stem from the Incomplete Sentences Questionnaire	Category of response diagnostic for consumer orientation competency
Attitude to the consumer and their importance	• Compare your company to any vehicle. • What does the consumer do in this vehicle? • Who else is with you in this vehicle?	• The most serious risk in running your own business… • Factors hampering running of the company …	• The consumer is a component of the vehicle/ company • No consumers, demand, sales, etc. • Consumer
Focus on identification of consumer needs	• What does the consumer do in this vehicle? • Who else is with you in this vehicle?		• Entrepreneur seeks contact with the consumer (proactive) • The consumer is a component of the vehicle/ company
Potential actions taken towards the consumer	• What does the consumer do in this vehicle?		• Cooperation

Table 8.2 Categories of respondent answer diagnostic for consumer orientation competency Source: Own report

Component of consumer orientation competency	Question from the Metaphor Questionnaire Version I and Version II	Stem from the Incomplete Sentences Questionnaire	Category of response diagnostic for consumer orientation competency
Areas in which Support is expected		• In running a business what would help me …	• Knowledge of the consumer, market etc., idea

Table 8.2 Categories of respondent answer diagnostic for consumer orientation competency Source: Own report

8.9 Study results — Students

The table below provides answers in Metaphor Questionnaire Version II and students planning and not planning to start their own business.

Questions from the questionnaire	**Compare your company to any vehicle.** **What does the customer do in this vehicle?**			
Respondents' answers	**% of responses**		**Sample Answers**	
	Expecting to start their own business	**Not expecting to start their own business**	**Expecting to start their own business**	**Not expecting to start their own business**
Attitude to the consumer and their importance				
The consumer is a component	25	48	• The consumer sits at the front of a	• the consumer is waiting for a solution,

Table 8.3 Summary of student responses in Metaphor Questionnaire Version II Source: Own calculations based on data from studies

of the vehicle/ company			bus on the first seat • is my pilot	trying to offer their own solution, and as a manager I listen to it • the consumer is the fuel propelling the vehicle (electricity)
The consumer is outside the vehicle/ company	57	38	• may enter, receives service, and leaves • looks and admires	• takes care of their own affairs • keeps close to the rocket, may be in some way related to it
There is no consumer	3	0	• there is no consumer • there are no customers	–
No answer	15	14	–	–
Focus on identification of customer needs				
Entrepreneur seeks contact with the customer (proactive)	26	14	• rests, my f-16 will take the product to their home • is my map and policy; thanks to them I will go further • the consumer determines what is	• chooses the route • the customer is the fuel propelling the vehicle (electricity) • sitting in the back seat and not worrying about anything because they are informed

Table 8.3 Summary of student responses in Metaphor Questionnaire Version II Source: Own calculations based on data from studies

			expected, what s/he wants and receives from the company what he expected	about everything directly and we spare him/her almost all tasks
Entrepreneur is passive, the customer actively seeks contact with him/her	34	62	• the customer stands by the road and waits for a suitable entrepreneur – like me :) • runs after me	• the customer comes for advice, and receives it • sitting in the car and waits patiently • uses the services of my business
The customer evaluates the entrepreneur	21	24	• the customer is satisfied with our services • is satisfied with the company	• is smiling, talking with us • Rides on the back seat, comfortably settled
No answer	19	0		
Potential actions taken towards the customer				
Cooperation	43	57	• sits in my plane as a passenger, gets out after finishing cooperation • is my support • works with me for our mutual benefit	• is a passenger who uses services • the customer comes for advice, and receives it

Table 8.3 Summary of student responses in Metaphor Questionnaire Version II Source: Own calculations based on data from studies

Battle	3	0	• is watching me, waiting for an opportunity, is greedy • the customer must trust me and believe that I will do everything to keep them happy	–
Rivalry	3	5	• talks to me and listens to me • there is no consumer	• takes care of their own affairs
Tolerance of the customer's presence next to the company	36	38	• is waiting for an opportunity • wants to drive the Ferrari	• sits comfortably in the compartment feeling comfort and safety • sits next to me
No answer	15	0		

Table 8.3 Summary of student responses in Metaphor Questionnaire Version II Source: Own calculations based on data from studies

The first element, consisting of a COC in accordance with the adopted approach assigns great importance to the customer. This should be found in the metaphors provided by the respondents. In fact, it was found that only 25% of respondents identify the customer as an element of the vehicle representing the company. The vast majority – 57% – locate the consumer outside the company, and 3% believe that they are not present at all.

The cited responses "the consumer sits in the front of the bus on the first seat" and "is my pilot" are the essence of thinking in terms of orientation towards the customer, who is a major factor in the company's operation on the market. As is evident, most of the respondents do not share this point of view, which is a worrying sign. The result of the group not planning to start their own business is interesting because there the proportions are reversed, as if they were more aware of the importance of the customer. Due to the small number of respondents from this group, they cannot be directly compared, but this is certainly an interesting result to be investigated further.

The next element of COC is the attitude to recognising customer needs. In this case, the diagnostic response is the one showing that the entrepreneur is proactively seeking contact with the customer and how to meet their needs. In the planning group this approach is shown by 26% of respondents, which may coincide with the answers on the importance of the customer. Dominating, however, is the attitude of passivity towards the consumer (34%). In their view, the consumer him/herself takes the initiative to make contact with the entrepreneur. In conjunction with the replies of the categories on simply tolerating the presence of the customer, more than half (55%) of the students obtained a result showing a very low level of COC.

At the same time there are negative signals, demonstrating the fact that students who are planning to start a business have unrealistic expectations and wishful thinking, for example, that the customer will wait or even run after their company. Meanwhile, the realities of today's market are quite different. Using the terminology of cognitive psychology, we can conclude that the cognitive schemata and scripts held by respondents and relating to the client and how to run a company are clearly inappropriate to what is happening in the real world of business.

Slightly less disturbing are the answers concerning the potential actions taken towards the customer. 43% of respondents stated an approach requiring cooperation with the customer. This is not, however, entirely satisfactory, because of the fact that 36% of respondents simply tolerate the presence of the customer, showing no initiative to establish relations with them.

We can thus conclude that even if respondents indicate the importance of the customer in their responses, they feel as if they have no effect on his/her behaviour and do not plan to conduct any informed, purposeful activity addressed to him/her. They do not think they can control the relationship with the customer, as if they were simply stuck with what s/he does. This is particularly visible in the group of respondents not planning to start a business, and perhaps therefore will not take that decision. This is an area for closer examination and potentially targeted educational impact.

Complementing the above considerations are the data obtained in the Incomplete Sentences Questionnaire, whose results are shown in the table below.

Question from the questionnaire	**The most serious risk in running your own business…**	
Respondents' answers	**% of responses**	**Sample Answers**

Table 8.4 Student responses in the Incomplete Sentences Questionnaire. ***The most serious risk in running your own business...*** Source: Own calculations based on data from studies

	Expecting to start their own business	Not expecting to start their own business	Expecting to start their own business	Not expecting to start their own business
No customers, demand, sales	17	22	• There are no customers • lack of customer interest • decreasing demand for a given good that we want to sell	• failure to accept a given good or service by the market • poor adaptation of the goods on offer to market needs
Competition	28	26	• Competition • Competition and the market you're in • high risk from aggressive competition	• competition, which could "finish" my company
Financial problems	21	22	• bankruptcy • incurring debts • lack of funding for various projects, services or goods	• bankruptcy and debts, loans • lack of liquidity and customers who do not pay
Lack of knowledge and experience	5	4	• lack of "business" skills • incompetence and lack of experience	• inability to take control over workers and the quality of selection

Table 8.4 Student responses in the Incomplete Sentences Questionnaire. ***The most serious risk in running your own business...*** Source: Own calculations based on data from studies

Psychological problems	12	9	• fear • lack of motivation • greed for excessive profits	• coping with stress
Others	13	17	• Political parties that approve "strange" laws hostile to companies • environmental variables	• economic crisis

Table 8.4 Student responses in the Incomplete Sentences Questionnaire. ***The most serious risk in running your own business...*** Source: Own calculations based on data from studies

Respondents were able to indicate any possible risks occurring to them that may arise in the course of business and, therefore, their answers do not add up to 100%.

The diagnostic response for COC – that the most serious threat in running your own business is the lack of customers, etc. – was given by only 17% of those planning to start a company and was in third place. First place was taken by competition (28%) and second financial problems (21%).

In combination with the fact that they are passive in meeting customer needs, it can be assumed that the respondents do not fully understand the rules of company operation. For example, that the customer should be the main objective of combating competition and providing funds.

It is also interesting that the percentage distribution of responses in both groups is similar, that is, plans to start your own business are not intrinsically linked to an understanding of the rules of functioning on the market. This is another indication that a properly conducted process of entrepreneurial learning may be very important. It is also worth noting that 12% of respondents identified psychological problems as a threat to running a company.

Question from the questionnaire	**Factors hampering running of the company ...**	
Respondents' answers	**% of responses**	**Sample Answers**

Table 8.5 Student responses in the Incomplete Sentences Questionnaire ***Factors hampering running of the company...*** Source: Own calculations based on data from studies

	Expecting to start their own business	Not expecting to start their own business	Expecting to start their own business	Not expecting to start their own business
Customer	7	0	• stress; crisis; lack of customers or interest on the market • high costs; crowded markets; difficulties in reaching the customer	
Idea	4	23	• big responsibility; necessary start-up capital; a lot of competition (the concept must be unique) • competition; capital (too low); lack of ideas for your company	• Lack of capital to start a business; lack of ideas; lack of competence and skills • bureaucracy; lack of ideas for an effective enterprise
Competition	21	23	• a lot of competition • competition; time-consuming; responsibility	• high responsibility; possible strong competition; a significant risk that we will fail • dishonest employees, competition, etc.; our final decisions may

Table 8.5 Student responses in the Incomplete Sentences Questionnaire ***Factors hampering running of the company...*** Source: Own calculations based on data from studies

				prove to be inaccurate; bureaucracy
Market	16	0	• high costs; crowded markets; difficulties in reaching the customer • constantly changing market conditions; the need for continuous modernisation	
other	53	23	• high cost of living; a lot of responsibilities; lack of funds • Full responsibility for the business; risk; stress, a lot of work and responsibilities	• Responsibility, risk, lack of stability • Too low capital; many formalities; fear of risk

Table 8.5 Student responses in the Incomplete Sentences Questionnaire *Factors hampering running of the company…* Source: Own calculations based on data from studies

In the case of the factors hampering running the company, respondents could also indicate several factors and therefore the responses do not add up to one hundred percent. Only 7% of respondents explicitly point to the customer as a source of difficulty. Competition was indicated by 21%, and the market by 16%. Over half (53%) of the respondents focused on factors not directly related to the customer and the market.

The complement of this information is investigation of what they need to conduct business. In addition to COC diagnosis, this may also be an indication for entrepreneurship education.

The need for awareness of the customer, the market, concept and knowledge is indicated by only 5% of respondents, which should be a clearly worrying signal for education. The more so that most of both those planning (22%) and not planning (24%) to start a business indicated that consultancy would help them, most often understood as support from someone experienced in conducting business. Among those planning to start a company, the second need was for financial support (20%), followed by emotional support (17%), and a lack of experience 16%. Consultancy is actually a type of substantive support, but also psychological. Perhaps those respondents focused on their own needs have difficulty focusing on the customer.

Question from the questionnaire	**In running a business what would help me ...**			
Respondents' answers	**% of responses**		**Sample Answer**	
	Expecting to start their own business	**Not expecting to start their own business**	**Expecting to start their own business**	**Not expecting to start their own business**
Knowledge of the customer, market etc., idea	5	5	• thorough analysis of the environment and the market in which I want to work • prior knowledge of potential customers	• knowledge of the market and competition
Financial support	20	14	• having unlimited capital • lots of money	• good financial security
Emotional Support	17	19	• belief in my own abilities and greater self-confidence • family support • having people who would share the responsibility	• support of brothers, and especially parents, and numerous training courses • trusted friends

Table 8.6 Student responses in the Incomplete Sentences Questionnaire *In running a business what would help me...* Source: Own calculations based on data from studies

			with me and help me decide	
Experience	16	10	• experience acquired in previous jobs and experienced staff • the assistance of an experienced businessperson	• experience gained in a company with a similar business
Knowledge	5	19	• training courses on how to run your own business	• acquiring knowledge of how to run a business
Consultancy	22	24	• expert support	• Help from someone with experience • transfer of knowledge from other entrepreneurs
Others	15	24	• skilled worked	• obtaining good and trusted employees

Table 8.6 Student responses in the Incomplete Sentences Questionnaire *In running a business what would help me…* Source: Own calculations based on data from studies

8.10 Study results — Entrepreneurs

It is worth taking a close look at the results obtained from the group of entrepreneurs, because thanks to their participation in the project they found themselves in approximately the situation in which the students would like to see themselves. They have a business idea, and they have received financial and technical support and advice. The study tested their responses in terms of the level of COC in the extended version of Metaphor Questionnaire Version I. The results are given in the table below.

Question from the questionnaire	% of responses	Compare your company to a vehicle
The consumer is a component of the vehicle/ company	0	• There were no comparisons in this category
The consumer is mentioned, but outside the vehicle / company	14	• I find it hard to compare it to a vehicle. The company will be shaped as a "virtual organisation". Access to all resources via the Internet from anywhere. A Call Centre to serve customers from anywhere • A limousine – every employee, even the chauffeur and the client, is proud to cooperate with my company, there is nothing to be ashamed of, they are well treated, happy, the workplace is comfortable and welcomes creative and productive work or cooperation with the client • an ambulance – quick reaction or fire engine for customer needs
There is no consumer	86	• better make of car with good acceleration, able to drive in difficult conditions • a floating drilling platform – we're looking for places, we penetrate a topic, work and derive benefits; if necessary there is the option for extension or expansion into another area

Table 8.7 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from studies

		• the most modern fighter or NASA aircraft – modernity, speed – work on self-realisation – or continuous self-improvement • bike or tricycle • sailing boat • spacecraft or space shuttle • black Seat – safe, dynamic, classy • Range Rover Sport, fast, big, safe, all-terrain, always reaches the destination • Jeep – useful, convenient • Sledge – Simple but probably difficult to come up with simple ideas. (Relatively) little need – only a "frame" and manuals (advertising, promotion) and you can drive at will. Even though you have to reach the top by foot, sledges are reliable. • a solar energy vehicle, something new • An amphibious vehicle with wings adapting to all road and weather conditions • a sailing boat, with a beautiful profile, with large sails in currently furled, but when favourable winds come, it will sail quickly in the right direction • a car – necessary; and in some cases essential! • a small tank – slow, but responds flexibly to changes in the environment, tenacious in reaching its destination • sports car – for a narrow audience, gives a lot of satisfaction at great expense

Table 8.7 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from studies

		• a Mercedes for driving around the city • a stable and secure Volvo • an off-road vehicle (diesel)

Table 8.7 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from studies

The customer as part of the company does not appear in any of the entrepreneur responses, and only 14% cited it outside the company. Other answers do not allude directly to the customer. This is surprising when you take into account the fact that these are people who have started the process of running their own business. The analysis of responses to the question "What does the customer do in this vehicle?" provides more information on this topic.

Question from the questionnaire	% of responses	What does the customer do in this vehicle?
Entrepreneur seeks contact with the customer	27	• I am looking for them in this forest, I drive our other vehicles, we greet each other, we talk • is a passenger • I invite him on a cruise full of beautiful impressions • he is sitting next to me and amiably talking with me • he is resting, drinking cocktails, spending a good time as he pleases, wish fulfilment • sits next to me
Entrepreneur is passive, the customer actively seeks contact with him/her	46	• arrives, pays and receives the goods and smiles at the same time • chooses • waits for my arrival, always on time! • the client is waiting for us. They are calm,

Table 8.8 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from the studies

		because they know that soon we will arrive and solve their problem • they wait for me and do not even expect that they seriously need what I have for him. And we (me first) tell him this • draws from my work • enjoys the pleasure that comes from travelling in this vehicle • the customer orders services • is waiting for my arrival • is satisfied and pleased that he is leaving me his money – is satisfied in the long term
The customer remains on the outside and evaluates the entrepreneur	27	• assesses how I am driving • feels relaxed and is happy to tell others about this place • the customer watches as I drive • looks at the vehicle with admiration • is enjoying himself • observes the behaviour of my tank with caution (but is fascinated by it)

Table 8.8 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from the studies

In this group, the largest number of respondents (46%) displays an attitude of passively waiting for customer response. In this respect, they do not differ from the students planning to set up a business, while demonstrating the unrealistic attitude that the customer is waiting for them. In conjunction with the 27% of the group for whom the customer only assesses their operations, this gives a worrying signal that the studied individuals are not sufficiently customer-oriented. Only 27% of respondents could be classified as showing that the entrepreneur is set to proactively seek contact with the customer. This is definitely not enough to be confident that the majority in this group will be able to use the support offered them and effectively keep their company on the market, and thus that the funds allocated to the project will be used optimally. The analysis of the responses given below provides some clues as to the causes of this situation.

Only 19% of respondents listed the customer as someone who is with them in the vehicle (14%) or outside the vehicle (5%). The remaining 81% indicate other people, among whom the dominant group are by far family members or friends. It is worth looking closer at the fact that within the company there are close people, relations with whom are friendly or family. This suggests that respondents did not identify the rules of company operation based on market principles. They see it more as a community. According to Bolesta-Kukułka [56] the specific nature of this community is that the purpose of its existence is collective co-existence, to overcome the difficulties and obstacles that threaten survival, as is the case in the family. Among the members of the community there is a strong psychological bond and continuous and permanent relationships of obligation and entitlement. Whereas a profit-oriented company market should have the characteristics of an organisation that, as Bolesta-Kukułka writes [57] exists to implement goals already decided by someone else. The relationships existing within it are formalised and objectivised and not the result of mutual agreement and adaptation. If the entrepreneur treats the company as a way of meeting the needs of the family, they may lose the pro-customer perspective. This is because the customer is shifted to the wayside, external, and cognitively it is virtually impossible to focus on their needs. They are an external instrument in the "business as second family home". This misunderstanding of the rules of company operation, confusing them with communities, may be the cause of non-pro-effective decision-making and contribute to the loss of market position, even in the possession of professional knowledge in the field of entrepreneurship.

Question from the questionnaire	**% of responses**	**Who else is with you in this vehicle?**
The customer is a component of the vehicle/ company	14	• collaborators, customers, employees, friends, people, businesses which support or build the developing market • my customers • Myself, employees, customers, not family just to be safe – an accident can always happen even in the best car

Table 8.9 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from the studies

56. Bolesta-Kukułka, K. Decyzje menedżerskie w teorii i praktyce zarządzania. Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania UW; 2003.
57. Bolesta-Kukułka, K. Socjologia ogólna. Warszawa: Wydawnictwo Naukowe WZ UW; 2003.

The customer is mentioned, but outside the vehicle / company	5	• Employees who are responsible for customer contact – sales, implementation
There is no customer	81	• my loved ones and others unknown to me • myself + employees • my husband, son and dog • a large number of interested people unknown to me • someone to hold the tackle or lines • my partner • my employees! • my co-workers or a cohesive team of several people • a friend • my boyfriend Adam, brother, dad, mum and a whole sledgeful joins us • my acquaintances who run their own businesses • the A Team – a proven team of trusted people • I want to be the cox, and the passengers will be my family • people who are friendly towards me • family plus friends • my family • my co-workers • no answer

Table 8.9 Entrepreneur responses to Metaphor Questionnaire Version I Source: Own calculations based on data from the studies

If this is the belief of those who participate in business schools, and the results clearly show that it is, this might be one of the sources of inefficiency in the teaching methods. With such a belief as to the reasons for the existence of a company, there is no way that formal knowledge can be used properly in the course of business activity. Candidates for entrepreneurs must therefore learn to think in terms of the market and, in accordance with its rules, modify their beliefs and ideas. Attempts to transfer formal knowledge alone may end up in the fact that it will be absorbed automatically and incorrectly applied.

J.C. Sánchez consistently suggests that “the instructors (academics, lecturers, and trainers) should receive training not only in how to teach entrepreneurship but also in how to change “hearts and minds”. [58]

8.11 Consumer orientation competency level

Generally, the COC level among the students who are planning to start a business and entrepreneurs should be assessed as low and not predictive that their entrepreneurial activity will help them to remain on the market. In the responses they provided in these projection tests, the customer is very rarely mentioned spontaneously. According to the approach adopted, this is an indicator of low awareness of the consumer's importance in the functioning of the company. With regard to recognising needs, the respondents strongly reveal an attitude of passivity towards the customer. They display no bias towards having a conscious, deliberate influence on him/her. At the same time, symptoms of wishful thinking may be observed, expressed by the fact that the customer will wait for the company and will be delighted with it. It is positive that they have a collaborative attitude, but in combination with other responses this does not seem credible. Complementing this is the fact that a small group of respondents reported the need for expertise and Support in attracting customers. In contrast they require a good of consultancy from experienced people, and financial and emotional Support.

The research also presents one more observation that is important from the point of view of entrepreneurship. Specifically, that there are indications of the fact that some candidates for entrepreneurs confuse the market organisation of a company with a community. They have a misconception about the purpose of a company and the rules by which it is directed by the market. This limits the capability to adopt a customer orientation.

To sum up the whole, it should be noted that the vast majority of respondents, according to the criteria, have a low level of consumer orientation competency, which may restrict their business success. Since all were participants in business schools, it is worth seeing how it happens that the educational process has not changed their non-proeffective beliefs and ideas.

Confirming what J.C. Sánchez says that “not only training in the knowledge and resources needed for starting a business, as traditionally considered. Training in entrepreneurial competencies implicitly entails an inspirational component. Inspiration is what gives rise to attitude and intention, and increases the students’ interest in trying out an entrepreneurial career.” [59]

58. Sánchez J.C. The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. Journal of Small Business Management 2013; 51(3), pp. 447–465 doi: 10.1111/jsbm.12025
59. Sánchez J.C. The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. Journal of Small Business Management 2013; 51(3), pp. 447–465 doi: 10.1111/jsbm.12025

8.12 Conclusion

The data obtained provide some evidence for a possible improvement in the process of entrepreneurial education. They show that in order to teach it, ideas and beliefs must be disclosed, discussed, and undergo informed modification, and that formal knowledge must be provided on this basis. According to Morgan "the individual responds to his/her perception of the situation in which s/he finds him/herself. Through the metaphors we can reach this perception, identify it, and then we can modify it. This will then be reflected in a real change in the way people act." [60]

The diagnostic approach applied may be used in the course of learning. The teacher can ask the participants to complete the projection questionnaires presented in this paper, and then discuss the content contained therein jointly with them. It is also possible to use the methods applied in marketing research, such as personification, animalisation, or collage.

The purpose of education is to teach business thinking and a perception of the world in terms of market rules. Only on this basis can information and tools of company management be provided that will be applied on the basis of pro-effectiveness reasons and this will help to make a profit. Entrepreneurs need to know why they are using these tools, because their work is not activity reconstructed in accordance with prescribed procedures, but a continuous search for relevant solutions to a changing situation.

With respect to the research process, it is probably worth checking the results obtained using other diagnostic techniques. Metaphorical statements should not be regarded as constituting a fully adequate picture, but as a signal that it is worthwhile to look more closely at the issues identified. However, we can assume that if someone metaphorically describing reality as s/he sees it does not include certain elements, these are not important to him/her, and s/he will not be guided by them in their decisions.

Much could be made also by the analysis of the responses of individuals. It would also be interesting to carry out this research in groups that are different in terms of motivation by which they were guided in starting a company. The resulting material may also be an inspiration for further research, for example, on the relationship to competition. It seems significant and should be further checked what the respondents are thinking of saying that they need counselling and emotional support, with little indication of the demand for knowledge, which for education is particularly disturbing.

60. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002.

8.13 References

1. The European Commision Press releases database http://europa.eu/rapid/press-release_IP-12-1233_pl.htm
2. Matlay H. The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development 2008; 15 (1) pp. 382-396.
3. Ministry of Infrastructure and Development http://www.mir.gov.pl/fundusze/Fundusze_Europejskie_2014_2020/Documents/PO_WER_08012014.pdf
4. in: Matlay H. The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development 2008; 15 (1) pp. 382-396.
5. Kirby, D. Entrepreneurship education: can business schools meet the challenge?. Education+Training 2004; 46 (8/9), pp. 510-2.
6. Polish Agency for Enterprise Development http://en.parp.gov.pl)
7. Nobel, C. Why companies fail-and how their founders can bounce back. HBS Working Knowledge 2011, March 7 cyt. za: Gudmundsson, S.V., Lechner C., Cognitive biases, organization, and entrepreneurial firm survival. European Management Journal 2013; 31, pp. 278– 294.
8. Raport of Eurydice “Entrepreneurship Education at School in Europe. National Strategies, Curricula and Learning Outcomes” March 2012 http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/135en.pdf
9. Wach K. Kształtowanie postaw przedsiębiorczych w programach nauczania. Stan obecny i proponowane kierunki zmian. Conference of University of Economics in Katowice: Shaping entrepreneurial attitudes versus education of economics; Jun 2007 http://fundacja.edu.pl/przedsiebiorczosc/index.php?DOC=program
10. Report of European Commission Enterprise and Industry Directorate-General “Entrepreneurship in higher education, especially in non-business studies” March 2008 http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/entr_highed_en.pdf
11. Gajewski Z. Vice-General Manager of the Polish Confederation of Private Employers Lewiatan http://rynekpracy.org/wiadomosc/764239.html; April 2012
12. Mitra, J., Matlay, H. Entrepreneurial and vocational education and training: lessons from Eastern and Central Europe. Industry and Higher Education 2004; 18 (1), pp. 53-69.
13. Hansemark, O.C. Reed for achievement, locus of control and the prediction of business start-ups: A longitudinal study. Journal of Economic Psychology 2002; 24, pp. 301-319.
14. Sánchez J.C. The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention. Journal of Small Business Management 2013; 51(3), pp. 447–465 doi: 10.1111/jsbm.12025
15. Rumelhart, D.E. Schematy – cegiełki poznania. In: Chlewiński Z. (ed.) Psychologia poznawcza w ostatnich trzech dekadach. Gdańsk: GWP; 2007, pp.431-455
16. Strelau J., Doliński D. Psychologia. Podręcznik akademicki. Gdańsk: GWP; 2008.

17. Koellinger, P., Minniti M., Schade Ch. “I think I can, I think I can”: overconfidence and entrepreneurial behavior. Journal of Economic Psychology 2007; 28, pp. 502-527.
18. Zaleśkiewicz, T. Przedsiębiorczość i podejmowanie ryzyka. In: Tyszka, T. (ed.) Psychologia ekonomiczna. Gdańsk: GWP; 2004, pp. 303-326
19. in: Gudmundsson, S.V., Lechner C., Cognitive biases, organization, and entrepreneurial firm survival. European Management Journal 2013; 31, pp. 278–294.
20. Haynie J. M., Shepherd D., Mosakowski E., Earley P.C. A situated metacognitive model of the entrepreneurial mindset. Journal of Business Venturing 2010; 25 pp. 217–229.
21. Bajcar B., Borkowska A., Czerw A., Gąsiorowska A., Nosal Cz. S. Psychologia preferencji i zainteresowań zawodowych. Przegląd teorii i metod, Warszawa: MPiPS Departament Rynku Pracy; 2006.
22. Trzebiński J. Reprezentacje skryptopodobne jako formy ukrytych teorii osobowości, in: Jarymowicz J., Smoleńska Z., (ed.) Poznawcze regulatory funkcjonowania społecznego, Warszawa: Wydawnictwo Polskiej Akademii Nauk; 1983, p. 56.
23. Reykowski J. Osobowość wobec przemian społecznych i technologicznych – szkic problematyki, in: Jarymowicz J., Smoleńska Z. (ed.) Poznawcze regulatory funkcjonowania społecznego, Warszawa: Wydawnictwo Polskiej Akademii Nauk; 1983, p. 229.
24. Goffman, E. Człowiek w teatrze życia codziennego. Warszawa: PIW; 1981.
25. Hofstede, G. Kultury i organizacje, Warszawa: PWE; 1998.
26. Glinka B. Kulturowe uwarunkowania przedsiębiorczości. Warszawa: PWE; 2008
27. Wickham P. A. Strategic entrepreneurship. Pearson Education, Limited; 2004
28. Tajeddini K., Elg K., Trueman M. Efficiency and effectiveness of small retailers: The role of customer and entrepreneurial orientation. Journal of Retailing and Consumer Services 2013; 20 pp. 453–462.
29. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002, p. 6
30. Kirby, D. Entrepreneurship education: can business schools meet the challenge? Education+Training 2004; 46 (8/9), pp. 514.
31. Asikhia O. Customer Orientation and Firm Performance among Nigerian Small and Medium Scale Businesses. International Journal of Marketing Studies 2010, 2 (1), pp. 197-212
32. Sęk, H. Teoretyczne podstawy metod projekcyjnych, in: Sęk, H. (ed.) Metody projekcyjne. Tradycja i współczesność. Poznań: Wydawnictwo UAM; 1984, p. 5
33. Kowalik, S. Werbalne techniki projekcyjne, in: Sęk, H. (ed.) Metody projekcyjne. Tradycja i współczesność, Poznań: Wydawnictwo UAM; 1984, p. 91
34. Stemplewska-Żakowicz K. Wprowadzenie, in: Stemplewska-Żakowicz K. (ed.), Nowe spojrzenia na Test Niedokończonych Zdań J.B. Rottera. Interpretacja jakościowa, Warszawa: Pracownia Testów Psychologicznych PTP; 1998, p. 14
35. Maison, D. Zogniskowane wywiady grupowe: jakościowa metoda badań marketingowych, Warszawa: Wydawnictwo Naukowe PWN; 200, p. 30
36. Morgan G. Obrazy organizacji. Warszawa: Wydawnictwo Naukowe PWN; 1997, p. 231
37. Lakoff G., Johnson M. Metafory w naszym życiu, Warszawa: PIW; 1988, p.7

38. Lilienfeld, S.D., Wood, J.M., Garb, H.N. Status naukowy technik projekcyjnych, Kraków: Wyd. UJ; 2002.
39. Pawłowska A. Projection methods in diagnosing an individual's cognitive map of occupations. in: Mróz B. (ed.) Functioning in the workplace. Quantitative and qualitative psychological research. Warszawa: Scholar Publishing House, 2012, pp. 115-127
40. Pawłowska A. Młodzi w biznesie z perspektywy teorii rozwoju zawodowego. Wyniki badań własnych. in: Glinka B., Pasieczny J. (ed.) Młodzi przedsiębiorcy. Problemy Zarządzania, Warszawa: Wydawnictwo Naukowe WZ UW; 2012.
41. Sargent L.D., Bataille Ch.D., Vough H.C., Dea M.Metaphors for retirement: Unshackled from schedules. Journal of Vocational Behavior 2011; 79 pp. 315–324
42. Bolesta-Kukułka, K. Decyzje menedżerskie w teorii i praktyce zarządzania. Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania UW; 2003.
43. Bolesta-Kukułka, K. Socjologia ogólna. Warszawa: Wydawnictwo Naukowe WZ UW; 2003.
44. Morgan G. Wyobraźnia organizacyjna. Warszawa: PWN; 2002.

Chapter 9 Teaching and Detecting The Creative Potential — Experience and Perspectives

by Sílvio Manuel Brito [1]

9.1 Introduction

9.1.1 Objectives and Preoccupations

"Creativity is like a muscle, must be trained, everyday, observing the others and thinking continuously how to make something different" said Benjamin Franklin [2]. Today, more than ever, it is necessary to discuss experience and consequences for human life pertaining to the use of creativity in individual and collective practice. This article analyses the educational environment of a Portuguese Polytechnic Institute, including its programming, aims, and powers (both on the part of the teacher and on the part of the students) as well as the techniques and instruments used. It is necessary to examine the creative potential of different persons in educational environments in Portugal and in Italy, exploring the influence of values on professional choices, focusing on the associations between social and professional backgrounds, and the introduction of a course on entrepreneurial education in fashion agencies that offer young models new opportunities.

In addition, in classrooms in Tomar, Portugal and in Salamanca, Spain, we set creative teams tasks representing their intra-entrepreneurial being inside the work context. Following that, we tried to define and explore the concept of creative potential through references about creativity increasing originality in a group vision, and to measure creative potential with tasks and tests. The above studies have the dual purpose of investigating the issues and extending them to different types of populations.

1. Instituto Politécnico de Tomar, Portugal
2. Ferreira, M., Santos, J., and Serra, F., "Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa" (Lisboa: Edições Sílabo, 2010).

9.1.2 Research methods

There are several means to measure and detect the creative potential [3]. We used test failures and re-tests, Hermann's Screening Questionnaire [4], Schwartz's Portrait Values Questionnaire (PVQ) [5], Blake & Mouton's Managerial Grid [6], Alcántara's attitude modification strategies [7], and Conflicts Management Diagnosis Test [8].

9.1.3 Preliminary results

Based on the application of the screening Hermann questionnaire as creative, we propose three strategies to link the entrepreneurial competencies of our subjects. Several studies demonstrate that Schwartz's theory of human values [9] is valid in cultures previously beyond its range. We measured the 10 value constructs in the theory with the Portrait Values Questionnaire (PVQ), a new and less abstract method than others. This study explores the influence of values on professional choices, focusing on associations between social and professional backgrounds. The findings support the construct validity of the test. The results suggest that there is a relationship between values and occupational choices, and that there are evident differences between genders and age groups. These results confirm the international literature about different gender and value systems impacting on such behaviour.

The theme of Entrepreneurial Education has acquired more and more importance in recent years because in the present economic situation there is a growth of the need for people (above all, among young people) to reinvent themselves and to create their own personal businesses. This happens in every field of the labour market, even in the fashion world. The present research has the goal of introducing a real course of entrepreneurial education inside fashion agencies, to offer young models the basic knowledge to become entrepreneurs and make the most of their skills and attitudes, helping them to make their way in a world which, contrary to what it seems, is not only made of beauty. So, being creative means using independent thinking in order to produce new forms. "Creativity is the process that leads to a new product that is accepted as useful and / or satisfactory for a significant number of people at some point in time."

3. Hermann, N. "The Creative Brain" The Journal of Creative Behaviour (1991), 25 (4), 275-295.
4. Hermann, N., "The Whole Brain Business Book" (New York: McGraw-Hill, 1996).
5. Schwartz, S. H., "Basic Human Values: An Overview", The Hebrew University of Jerusalem (2006), 1–19.http://scholar.google.pt/scholar?cluster=8846081571740001914&hl=pt-PT&as_sdt=0,5&as_vis=1 (accessed 22 July, 2014).
6. Blake, Robert R.; Mouton, Jane S.; Bidwell, Alvin C. "Managerial grid", Advanced Management - Office Executive, Vol 1(9), 1962, 12-15.
7. Alcántara, J. A., "Como Educar as Atitudes" (Lisboa: Editora Plátano, 1995).
8. Jesuíno, J., Pereira, O.G., Reto, L. "Características dos gestores de topo: Uma abordagem qualitativa" Análise Psicológica, (1993), 2 (XI), 179-199.
9. Schwartz, S. H., "Basic Human Values: An Overview", The Hebrew University of Jerusalem (2006), 1–19. http://scholar.google.pt/scholar?cluster=8846081571740001914&hl=pt-PT&as_sdt=0,5&as_vis=1 (accessed 22 July, 2014).

Creativity means having the capacity to look in different way and with an original perspective; for example, new ways to sell a product, a different mode of packing, an unexplored issue, and so on. Creativity, however, has nothing to do with intuition because that is an "unconscious thought" and unsupported thinking in formal or factual analysis. Creativity is a tool with which we find different ways to:

- Do more with less.
- Reduce costs.
- Streamline processes and systems.
- Increase profitability.
- Find new uses for products.
- Find new market segments.
- Differentiate the curriculum.
- Develop new products.

A product or response will be judged creative to the extent that:

1. They are new and appropriate, useful, or add value to a task.
2. The task is heuristic rather than algorithmic.

A creative person has both a tremendous verbal fluency and a high capacity to express their thoughts. A person is creative in the effort to bring originality to bear on problems in devising new solutions, and is flexible and adaptive in their thinking. This kind of person is aware that their mind has maintained an inexhaustible source of ideas, thoughts, and wisdom in order to deal with new ideas and categories whenever they arise.

Creativity has three components [10]: Fluidity (the ability to express oneself), Originality (to present new solutions), and Flexibility (to change thinking and adapt to new situations).

Wertheimer (1945) [11] argues that creative thinking rebuilds an element of structurally deficient Gestalts. In humanistic theory, creativity, in agreement with Carl Rogers' definition, [12] has three features:

1. Openness to experience, which implies the absence of rigidity, a tolerance for ambiguity, and greater permeability for ideas, opinions, perceptions, and assumptions.
2. The ability to live in the present moment, with maximum adaptability allowing the continuous organization of self *and personality*.
3. Confidence in the body as a means to achieve more satisfactory results in every existential moment.

Rogers, therefore, emphasizes the relationship of the subject and their own individuality with the environment, believing in the oneness and uniqueness of this encounter. Thus, momentum is not enough for self-realization in "present conditions in society, which should enable the individual freedom of choice and action, are also part of creativity."

10. Alcántara, J. A., "Como Educar as Atitudes" (Lisboa: Editora Plátano, 1995).
11. Wertheimer, M., "Productive Thinking", (New York: Harper, 1945).
12. Rogers, C., "Body-Centered Counselor", Journal of Counseling & Development (2000), 78 (2), 172–179.

By example, for Freud creativity is related to the imagination, which is present in the games and the playground of distance. On these occasions, upbringing in the world produces an imaginary river, which interacts with the reorganization of the components of this world in new ways. Creative people in adulthood behave similarly, fantasizing about an imaginary world, which distances itself from reality. The motivating forces of fantasy apply to every fantasy, to the correction of an unsatisfactory reality and desire not fulfilled. This feature of sublimation would be linked, therefore, to the need for sexual gratification or other repressed impulses, carrying the typical person to channel their fantasies into other realities. Freud attributes creativity to conflicts in the unconscious (the id). Later or earlier, produces a solution to the conflict, which can be "ego syntonic" and result in creative behaviour, or in the absence of the ego, which leads to a neurosis. In any case, Freud reveals that creation is always driven by the unconscious.

Thus to create is a habit, and the more we create the more developed is our capacity for creativity. It is necessary to reserve a time, every day, to carry out creative activity. We can write, paint, draw, think creatively; we suggest starting with half an hour a day. Over time, you can dedicate longer periods to creative work, trying to keep a specific time in order to facilitate other activities (work, studies, etc.), and to consider this time "sacred". Curiously, after do this, compare the products of our creativity. We believe that "Creativity is the appearance of something unique and original", which constitutes the process of being sensitive to problems, deficiencies, and gaps in knowledge; the lack of harmony; and which allows us to identify problems, find solutions, etc. This article analyses the experiences of students developing their creative potential throughout the course of their school career, dividing them into groups based on their vocation, gender, and the course they have chosen. It explains the formulation of working hypotheses, how those hypotheses were tested and retested, and communicates the results, evidencing any scientific practice in detection of creative potential through experience in research of students during the course of their school career, according to the vocation, gender, and the course they have chosen.

9.2 Body

9.2.1 How to detect and measure the creative potential and creativity for entrepreneurship

The world is constantly changing because change is part of life; how dreary would the world be if people's lives were based on a constant and repetitive routine. Life is a chaos dramatized by humans in order to restore his balance. In a complex teaching system, we can see an open door for studying behavioural forms: when we have information and resources fluid slowly with few links, people's behaviour is stable, their actions are predictable and controlled. Meanwhile, when the system when the system performs a hard control, people's behaviour is bumpy, random, and fragmentary, which leads to stagnation and disintegration of the system. Therefore, a system on the verge of disintegration produces an endless array of variety and innovation, where behaviour should not be stuck with an established pattern or be assumed to be unstable, but is recognized as transformative. Here arises the need to create things, to transform the world so that it is more attractive, less monotonous, giving us access to a huge diversity of goods and services that enable wellbeing and employability. One of the consequences of a chaotic environment is creative entrepreneurial behaviour, which requires the alteration of previous behaviour, making necessary changes in learning.

The European Commission's Entrepreneurship 2020 Action Plan [13] shows us how important investment in entrepreneurship education is: it expects entrepreneurial education and training to support growth and business creation, creating new foundations that increase the prevalence and quality of entrepreneurial learning,. This means that we are involved in one of the highest return investments that Europe can make. Several surveys suggest that between 15% and 20% of students who participate in a mini-company programme in secondary school will later start their own company, a figure that is about three to five times greater than that for the general population [14] Whether or not they go on to found businesses or social enterprises, young people who benefit from entrepreneurial learning develop business knowledge and essential skills and attitudes — including creativity, initiative, tenacity, teamwork, understanding of risk, and a sense of responsibility. This is the entrepreneurial mindset that helps entrepreneurs transform ideas into action and also significantly increases employability. Thus, it is of the highest importance that the creative potential of people is detected and measured, since entrepreneurship is a core competency within the Community Framework [15].

Creative potential on a task, for example, can be defined as a set of containing personality traits, skills and creativity skills, and specialized domain-specific knowledge. This, in terms of creative self-efficacy, means that the creative person understands how to be creative but also incorporates broader aspects of creative potential, such as having the capability and the knowledge to perform the job well, and the perception of their ability to take risks in proving the viability of new creative ideas. Accordingly, the extent of the subject's creative self-efficacy determines the likelihood that they apply effectively their creative potential and practiced form of creativity. Indeed, the relationship between creative potential and practiced creativity can be attenuated or enhanced by motivational factors of the subject, as equally as by contextual factors such as organizational support, supervision style, freedom, resources, teamwork support, workload, and organizational challenges or obstacles. So creativity can be stimulated through certain management practices such as autonomy encouragement; delegation; feedback; proposing goals and intellectually challenging tasks; the setting up of work teams with innovative environments, in accordance with the skills and employees personality; and through the use of flexible thinking and persistence behaviour. Moreover, many investigations about creative environments, from which creativity arises, depends on the leadership style practiced by managers. Administrators and managers should consider creativity as an

13. European Commission. Communication from the Commission to European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM (2012) 795 final. Brussels 9.1.2013
14. C. Jenner, "Business and Education: Powerful Social Innovation Partners", Stanford Social Innovation Review (2012).
15. Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning.

important goal to be encouraged and to be achieved. Even some current research [16] indicates that creative work is stimulated when the proposed tasks involve complex and ill-defined problems: hence the need to obtain results from the generation of innovative and useful solutions.

Each of us represents a creative potential, that is to say we use our brain's hemispheres to develop innovative and productive tasks in the monitoring of learning for personal procurement, interpersonal, instrumental, and technical skills. To go to the meeting of what we can do we intend to evaluate the creative potential of each one, It is believed that creative potential arises in childhood, when children have their own potential and initiatives recognized and incentivized by their parents, which helps them to become resolute in adult life and daring people who will speak and act in an innovative way. It seems true; when people feel that their actions will be recognized and valued, they will work better with more creative force. On the other hand, when people do not feel under the threat of losing their jobs, trapped by fears of change, or led by preconceptions into maintenance of the status quo, people lose the fear of innovation and reveal their creative capacities.

Hermann [17] indicates that creative potential originates in the brain, more properly in the left and right cerebral hemispheres which represent both sides of the human brain, analytical and creative functions representing the past and future, control the hands, and act according to the four mediators: rational, cautious, experimental, and sensitive. According to this, he introduced us to the second strategy we will examine, with the application of a questionnaire, the detection of the creative potential of each subject arising from the biological basis of brain function [18]. The left hemisphere controls the right hand and analytic brain function: motor control, concern for detail, analysis of facts, objectivity, and immediate results. By using this hemisphere, the rational subject analyses, measures and criticize the results, it is realistic, uses the numbers and know how things work, is more cautious, establishes preventive measures, reliable, organized, is punctual and establishes plans.

The right hemisphere is divided into experimentation and sensitivity; the left hand controls and thus institutes the creative function. The right hemisphere is characterized by intuition, subjectivity, lateral thinking, fuzzy logic, and creativity. So what is revealed by the subject is the ability to experiment, to predict the future, to use imagination, speculate, calculate risks, display impetuosity, brake rules, like surprises, and jumping obstacles. On the other hand, it also makes the subject sensitive, and as such empathetic, sensitive, supportive of other people, verbally expressive, and responsive to emotional stimulation.

Then, we give an example of tests — questionnaires — used to detect the creative potential.

In the first questionnaire, items are arranged in pairs (a/b) and each member of the pair represents a preference. The subject must indicate a preference for each item, using a score from 0 to 5: a score of 0 means that the subject disagrees strongly with the premise, and 5 means that the subject agrees strongly. The scores for each item

16. Ussmane, M.H., "Inovação e Criatividade – Manual de Desenvolvimento de Produto" (Lisboa, Sílabo, 2013).
17. Hermann, N., "The Whole Brain Business Book" (New York:McGraw-Hill,1996).
18. Hermann, N. "The Creative Brain" The Journal of Creative Behaviour (1991), 25 (4), 275-295.

must add up to 5 (0 and 5, 4 and 1, 2 and 3, etc.). The subject cannot use fractions like 2.1 but only whole numbers.

As an example: 'I prefer':

1a. 'Thinking alone and in silence' (the subject assigns a score of 4).

1b. 'Interacting and passing the time with people' (the subject assigns a score of 1).

Then the subjects complete the questionnaire mentioned above, assigning respective scores:

I prefer…

1a □Thinking alone

1b □Interacting and passing my time with other people

2a □That people see me as an imaginary and intuitive person

2b □That people consider me as objective, accurate, and facing the facts

3a □Coming to conclusions through logic and careful analysis of the problem

3b □Examining the situation from what I feel and believe about people

4a □Planning, as needed, just before acting

4b □Planning in detail and in advance, based on predictions

5a □Getting the data records of people and being made to think and decide immediately5b □Talking freely and at length with people, stopping, reflecting and resolving the problem later

6a □Carrying out detailed plans drawn accurately

6b □Imagining and developing plans to execute them without necessarily following every detail

7a □Applying my ability to analyse situations and problems

7b □Experiencing situations and participating in movements with others, engaging in group discussions

8a □Avoiding hard deadlines or appointments

8b □Establishing a schedule and sticking with it

9a □Inquiry into the facts, situations, and problems privately before sharing my findings with others

9b □Discussing a new question or problem extensively, especially with the group of people involved or interested in the subject

10a □Abstract and theoretical issues

10b □Real and objective, specific issues

11a □Logical, articulate, and sensible people

11b □Sensitive, emotional, unusual, and even unique people

12a □Starting meetings when everyone has arrived and is comfortably settled

12b □Starting meetings on time

13a □Using methods already tested and effective in performing tasks

13b □Considering creating a new method to perform the tasks

14a □Helping others to use their feelings

14b □Helping people to make logical decisions and be sensible

15a □Imagining possibilities and alternative fantasies, even if they do not work

15b □Dealing with realities, based on the facts

16a □Being free to do things on the spur of the moment

16b □Knowing in advance what is expected of myself

According to the obtained score, people discover which is the predominant hemisphere of their brains and the respective degree to which they utilize their creativity. Thus, if a person uses the score predominantly the left hemisphere, which logically and rationally addresses the problems it faces, the creative vision is rarely applied sensibly (Right hemisphere from zero to 19; Left hemisphere from 80 to 61). If a person uses the score left hemisphere slightly, this suggests a predominance of the rational approach. Their creativity is present, but locked (Right hemisphere from 20 to 34; Left hemisphere from 45 to 36). If a person's brain balances its two hemispheres, the score means then it looks for both logical and creative alternatives to a unique problem (Right hemisphere from 35 to 45; Left hemisphere from 80 to 61). If the score means it makes slight use of the right hemisphere, then the brain presents a creative approach presenting intuition and sensitivity characteristics. Logic, concepts, and rationality is in the background (Right hemisphere from 46 to 60; Left hemisphere from 34 to 20). If a person mainly uses the right hemisphere of their brain as a score, then, it shows that the predominant form creates original ideas. The rationality of creative decisions (Right hemisphere from 61 to 80; Left hemisphere from 19 to zero).

The second questionnaire is in two parts, inserted in a test battery, and pretending measure six conditions. The first's call as α-test, measure and detect creativity on people, organizations, and performance [19]: creative potential, creativity practice, and organizational perception support. The second's call as β-test, measure and detect creativity in the subject performance, only [20]: creativity support, characteristics of work, and blocks to creativity. Both tests constitute a set of statements falling on an agreement scale with five levels: one = completely disagree; two = disagree; three = neither agree nor disagree; four = agree; five = completely agree. In each proposed statement, the subject assigns only one grade in the scale. For detecting the creativity of a subject and their organization, the following statements are used:

1. I feel that I am good at generating novel ideas.
2. I have confidence in my ability to solve problems creatively.

19. Di Liello, T.C. and Houghton, J., "Creative Potential and Practiced Creativity: Identifying Untapped Creativity in Organizations" Journal Compilation Blackwell Publishing 2008; 17 (1), 37–46.
20. Mayfield, Milton, and Mayfield, Jacqueline, "Developing a Scale to Measure the Creative Environment Perceptions: A Questionnaire for Investigating Garden Variety Creativity", Creativity Research Journal (2010) 22 (2) 162–169.

3. I am good at finding creative ways to solve problems.
4. I have the talent and skills to do well in my work.
5. I feel comfortable trying out new ideas.
6. I have opportunities to use my creative skills and abilities at work.
7. I have the opportunity to participate on team(s).
8. I have the freedom to decide how my job tasks get done.
9. My creative abilities are used to my full potential at work.
10. People are recognized for creative work in this organization.
11. Ideas are judged fairly in this organization.
12. People are encouraged to solve problems creatively in this organization.
13. This organization has a good mechanism for encouraging and developing creative ideas.
14. People are encouraged to take risks in this organization.
15. Rewards are given for innovative and creative ideas.

For detecting creativity in the subject’s performance, the following statements are used:

1. My supervisor encourages me to be creative.
2. My work group is supportive of new ways of doing things.
3. My organization encourages me to work creatively.
4. I have the resources I need to do my job.
5. My work is challenging.
6. I have control over how I do my work.
7. My organization’s politics makes it difficult to be creative.
8. My organization’s policies prevent spontaneity in the workplace.
9. It is difficult to be creative with the work deadlines that I have.

According to results of the highest number of responses in columns four and five (agree and completely agree) the score’s percentage will indicate the creative capacity present in various guises. Thus, if the test indicates a high proportion of creative potential we have more creative potential in reality. The same applies to practiced creativity, perceived organizational support, creativity support, and good work characteristics. If the test indicates a high proportion of blocks to creativity, then we have more blocks to creativity in reality.

The third questionnaire, which detects entrepreneurial values and mindsets, is a survey composed by several authors and is divided into two parts: the first concerns skills and entrepreneurial values, the second section is designed to collect socio-demographic variables as follows:

Locus of Control: This construct was developed by Rotter [21] and concerns the ways in which people interpret events according to the polarity inside/outside. When the locus is internal, the person is deemed responsible for events, through their commitment and personal skills. Conversely, if the locus is external events are attributed to external causes, such as luck and favourable or unfavourable circumstances. Begley and Boyd [22] have noted that the ultimate combination of this construct is especially

21. Rotter, J., “Generalized Expectancies For Internal Versus External Control”, Psychological Monographs: General and Applied (1966), 80 (609) (1) 1–28.
22. Begley, T. M. and Boyd, D. P.,“Psychological Characteristics of Associated with Performance in Entrepreneurial Firms and Small Businesses”, Journal of Business Venturing (1987), 2, 79–83.

typical in individuals with entrepreneurial inclinations, which have a general tendency to attribute the events to internal factors. For this reason, it was chosen to use in research (mentioned later in this chapter) the scale used by these authors, which requires subjects to indicate their level of agreement on ten statements, according to a Likert scale from zero to five. An example is “what I get in my life will be related to the commitment that I put in”.

Risk Taking: This construct is believed to be related to personality traits that drive people who possess it to a fairly high degree to seek risky situations and to reject low risk situations [23]. In contrast to the conventional wisdom, however, entrepreneurs are not “reckless gamblers”, because they are able to calibrate the level of risk that combines potential rewards with personal ability to manage uncertainty [24]. This scale is divided into two parts: the first requires subjects to indicate whether they feel able to take the actions described, while the second prompts them to specify the degree of confidence which they would feel in undertaking that action, on a scale ranging from one to 10.

Engagement: This is understood as a pervasive and positive work-related state of mind characterized by vigour, dedication, and absorption [25]. The scale consists of nine items that measure the degree of agreement and disagreement of the participants by means of a series of statements related to the activities carried out by people who have a personality characterized by high engagement, through a Likert scale ranging from zero to six. One example is: “In my work, I feel full of energy.”

Employability: Studies on self-employability arise mainly in relation to changes in the labour market and in the light of the gradual modification of contracts and the fragmentation of careers. Kluytmans & Ott [26] identify the skills that characterize a worker as employable: ability of know-how (problem solving in situations of sudden change); availability to travel; and knowledge of the labour market (how to find work and to improve the work already secured). The reference scale [27] consists of five items which measure the degree of agreement, or disagreement of the participants, with a series of statements indicating the subject’s employability, through a Likert scale that ranges from one to five. One example is: “what is the probability of finding an acceptable job outside of your company?”.

Pro-activity: This is the “ability to anticipate future problems, needs, changes.” A pro-active person is one who can operate without waiting for something to happen, and who takes the initiative to realize what is right and necessary. The pro-active approach improves the person’s performance, and promotes their ability to reach career goals [28], while also reducing the levels of uncertainty and anxiety [29]. The survey scale consists of 13 items, which measure the degree of the subject’s agreement and

23. Lyng, S., “Edgework: A Social Psychological Analysis of Voluntary Risk Taking”, AJS (1990), 95 (4), 851–86.
24. Osborne, R. L., “The Essence of Entrepreneurial Success”, Management Decision (1995) 33 (7), 4–9.
25. Schaufeli, W., Bakker, and B., Salanova, M., “The Measurement of Work Engagement with a Short Questionnaire. ACross-National Study”, Educational and Psychological Measurement (2006) 66 (4), 701–716.
26. Kluytmans, F., and Ott, M. “Management of Employability in the Netherlands”, European Journal of Work and Organizational Psychology (1999) 8, 261–272.
27. Sánchez J.C., Caggiano V., and Hernández, B., “Competencias emprendedoras en la educación universitaria”, INFAD, 1, 19–28.
28. Bateman, T. S., and Crant, J. M., “The Pro-active Component of Organizational behaviour”, Journal of Organizational behaviour (1993) 14 (2), 103–118.
29. Saks, A., and Ashforth, B.E., “Organizational Socialization: Making Sense of the Past and Present as a Prologue for the Future”, Journal of Vocational Behaviour (1997) 51,234–279.

disagreement with a series of statements, through a Likert scale, ranging from zero to six. One example is: “I think I am ready to put into play a bit of my current professional security to get something better.”

Self-efficacy: It is believed that individuals are prompted to develop an entrepreneurial career to the extent to which they believe they possess the necessary skills to operate in this environment [30], [31]. The scale used deals specifically with the transition between more usual working patterns and the situations likely to be experienced by entrepreneurs [32]. It consists of 10 items that measure the degree of the subject’s agreement and disagreement with a series of statements that usually refer to actions carried out by people with high self-efficacy traits, through a Likert scale ranging from zero to six. An example is: “I feel able to effectively manage this career transition.”

Values: The second referenced value is: “a concept that an individual has as a transitional purpose (instrumental vs. terminal), expressing interests (individualist vs. collectivist) connected to motivational domains, and evaluated on a continuum of importance as a guiding principle in their lives”. [33] On the basis of considerations about the existence of three universal needs of people (biological, social interaction, and the survival and well-being of the group), the author identifies ten motivational types of values that assume a common meaning in all groups and their cultures. They are organized on the following two bipolar dimensions:

- Openness to change:
- Self-direction and stimulation vs. conservatism (conformity, tradition and security)
- Self-transcendence (universalism and benevolence) vs. self-affirmation (success and power).
- **Hedonism**: correlated with openness to change and with the self-assertion, since it is associated with variably of stimulation and success.

Another questionnaire, which consists of a Creativity Observation Scale, [34] can be used to assess creativity attitudes according to which the observer chooses the level that corresponds to a frequency range which is organized as follows: before, few times, much, and almost always. The questions are:

- Does the subject renounce his ideas and submit easily?
- Is the subject ashamed?
- Is the subject discouraged in face of difficulties?

The observer takes notes and observes the subject’s responses to a questionnaire with the following questions:

- Do you feel able to achieve certain goals in life?
- What instils fear in you?
- Do you prefer to obey or do you prefer to be free?

30. Chen C.C., Greene, P.G., and Crick, A., “Does Self-Efficacy Distinguish Entrepreneurs from Managers?”, Journal of Business Venturing (1998) 13, 295–316
31. Krueger, N.F. Jr. and Brazeal, D.V., “Entrepreneurial Potential and Potential Entrepreneurs”, Entrepreneurial Theory & Practice (Spring, 1994), 91–104
32. Vieira D. A., Caires, S., and Coimbra, J. L., “Do Ensino Superior Para o Trabalho: Contributo dos Estágios para Inserção Profissional”, Revista Brasileira de Orientação Profissional (2011) 12 (1), 29 – 36.
33. Schwartz, S. H. “Les Valeurs de Base de la Personne: Théorie, Mesures et Applications — Basic Human Values: Theory, Measurement, and Applications”, Revue Française de Sociologie (2006) 42, 249–288.
34. Alcántara, J. A., “Como Educar as Atitudes” (Lisboa: Editora Plátano, 1995).

The observer provides a comparison between the responses of the scale and questionnaire, and gives results establishing the activities that can be developed, such as:

- Collaborating in the production of a bulletin of the company, magazine, or school.
- Promoting the work, of creative employee, or creative pupils.
- Encourage exhibitions organizations, and conferences about work and experiences of the company or school, the innovation and improvement of working methods, products and services provided to managers, employees, students, teachers, and the public in general.

9.2.2 Research samples to detect creative potential and entrepreneurial skills

A research project conducted in Italy aimed to investigate the relationships between variables relating to entrepreneurial skills and values within a specific population composed of individuals who were professional models, The project had a dual purpose: investigating the issue in question by extending it to a type of population on which there was a vast literature, and using the information gleaned in view of a larger project on entrepreneurship education, through stimulation on the emergence of trends and entrepreneurial skills in different and specific types of people and jobs. The sample consisted by 84 models: 49% men and 51% women. The majority of people (48) were between 21 to 26 years,15% were single, and 85% were bachelor. Regionally, 74% lived in the capital of a province or region, and 26% lived outside the capital. In terms of education, 74 people had a degree or frequency of a college, where 46 were employees, 29 were students, and nine were entrepreneurs.

Considering the inferential part of this research, the following hypotheses were formulated:

Based on several studies [35] , [36], [37]it was assumed that in the research sample the value of self-direction turns out to have a significant positive correlation to variables related to the Internal Locus of Control, Employability, and Engagement, while negative ones related to the External Locus of Control;

It was assumed that the variable of risk taking had a significant positive correlation on the Internal Locus of Control and Pro-activity during employment transitions, and correlated negatively on the External Locus of Control [38].

35. Begley, T., M. and Boyd, D. P., "Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses", Journal of Business Venturing (1987) 2, 79–93;
36. Lidaka, A. 2012: "Value education — an important factor in the personality formation process" proceeding of Electronic International Interdisciplinary Conference, 3-7 September 2012, Czechoslovakia, http://www.eiic.cz
37. Schwartz, S. H.; Bilsky, W. "Toward a universal psychological structure of human values" Journal of Personality and Social Psychology 1987: 53 (3) 550-562.
38. Begley, T., M. and Boyd, D. P., "Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses", Journal of Business Venturing (1987) 2, 79–93; Osborne, R. L., "The Essence of Entrepreneurial Success", Management Decision (1995), 33 (7), 4–9; Sanchez J.C., Caggiano V., and Hernández, B., "Competencias Emprendedoras en la Educación Universitaria", INFAD, 1, 19–28.

Based on values theories [39], it was assumed that the pro-activeness and job transitions in both were positively correlated to employability and self-efficacy in regards to work transitions and success values.

These hypotheses were then applied to the third questionnaire, mentioned in the preceding paragraphs, through the use of an online platform for investigations and scientific research — “Survey Monkey” — where the findings were influenced by disturbance variables such as territorial and cultural difference, typical of a single place residence. In general, the attempt was made to recruit as heterogeneous a sample as possible that was best able to reflect the population in question. It was confirmed that the research had been able to make more information available regarding the broader scope of entrepreneurial skills and values. What has been obtained from the analysis could also provide some interesting insights for further in-depth studies aimed at identifying training models for different types of personalities and professions which are effective in promoting and developing the skills in an entrepreneurial culture.

With regard to the first hypothesis, it was seen that there was a significant association between entrepreneurial skills and specific values. Specifically, those with higher values of Internal Locus of Control also tended to have a sense of personal value as well as self-direction, and it seems that when both were present the subjects felt more likely to find a job (employability) and were even more involved in the work they performed (engagement). However, what could not be confirmed was a negative relationship between those values and the External Locus of Control. So, even though it was a negative trend, the tendency to attribute the causes of events to the External Locus of Control was not sufficient to establish the emergence of an internal value in connection with self-direction. For these data it was possible, however, only to establish a correlation but one which did not give guidance on which variable was independent and which was dependent. Therefore, in this study, it cannot be determined which of these variables was due to the other.

The External Locus of Control, on the other hand, was found to be related to the variable of Risk Taking, so it seems that people who tended to attribute causes to outside events would also avoid entering into risky situations, probably because they did not indicate the possibility of personal control. Even so, conversely, the more people tended to attach themselves to situations, the more inclined they were to take risks. This behavioural tendency, corresponding to the second hypothesis, also tended to increase when people demonstrated pro-action in periods of career transition, which precisely corresponded to a state of uncertainty.

Finally, the evidence was interesting regarding the third hypothesis because we saw that while people were pro-active in situations of work transition, this was not the same as having good or high levels of self-efficacy in the same situations. This was probably because new people, even if proven to be pro-active, were in quite uncertain situations and may not have developed a sense of self-efficacy, which was formed after these experiences had been experienced. It was said that those who feel

39. Begley, T., M. and Boyd, D. P., “Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses”, Journal of Business Venturing (1987) 2, 79–93; Sanchez J.C., Caggiano V., Hernández, B., “Competencias Emprendedoras en la Educación Universitaria”, INFAD, 1, 19–28; Schwartz, S. H.; Bilsky, W., “Toward a Universal Psychological Structure of Human Values”, Journal of Personality and Social Psychology (1987), 53 (3), 550–562.

effective in situations like that tended to act pro-actively, probably because they did not know well enough what to do in those situations. Even in that case, it would be useful to conduct further studies in order to identify the causative reasons behind these results.

This hypothesis, however, confirmed expectations concerning employability and the value of success. The first showed how to be pro-active in situations of transition regarding work and also involved the perception of greater ease in finding a new job, while the second relationship may be interpreted on the basis of a motivational value of success, which was a result produced by pro-active behaviours in those situation. The value of pro-activity during employment transitions was also founded or linked to another which was not provided on the initial assumption: the value of stimulation. This could be due to the fact that people who have the need for, and value the search for, new stimulation would be more likely to act pro-actively in situations, but those conclusions are to be examined by future studies.

This research, therefore, provided certain evidence as to the psychological variables affecting entrepreneurship. According with this study, the cognitive open cases evidenced self-efficacy to undertake, and strong involvement in entrepreneurial initiatives through different effects from self-intentions. Since the study took this point of view, this involved taking into account psychological variables of this type in order to remedy the deficiencies of initiatives aimed at enterprising people in the part of Italy considered here. Taking consideration of the entrepreneurship level of the youngest students and employees, and their potential for entrepreneurship, has the effect of changing the region’s business landscape and economy. The propensity of people to engage with the variables of Locus of Control and Risk was significant and explains their enterprising intentions. Therefore, despite the fact of existing lack of support, it was prudent to conclude that this fact does not explain at all the quality of entrepreneurship, but that other variables of personal behaviour came into play. In conclusion, these findings showed, among other things, the need to continue delving into this subject, both in regard to the design and greater reliability of scales, and to research on other components (both personal and contextual) in order that future research takes into greater account the variables involved in the emergence of entrepreneurial initiatives.

Research conducted in Portugal in a public community college (Polytechnic Institute of Tomar) aimed to characterize the use of subject’s cerebral hemispheres in order to determine their creative potential. In a sample, I see where 103 subjects comes from (21 men and 82 women), but the total of 210 is not then explained in a manner that the reader can understand. As such, I cannot rephrase the rest of the sentence without fear of misrepresenting the study. The following hypotheses were then formulated:

1. The subjects are creative in general.
2. Subjects increase their creative potential by attending a course.
3. Finalist subjects, attending a seminar on creativity, represent greater creative potential.
4. The women are more creative than the men.

The Hermann creative potential test and the SPSS (Social Packet Statistical Software) were then applied to these hypotheses. The Hermann test confirmed that the group in question was not creative: originality or creativity did not account for their behavioural decisions. However, a balance between the two hemispheres was prevalent in most of the population, which ensured some stability and also possibility to learn about creativity and become creative.

In the same domain, but in another research project in Portugal were studied two courses in the same public community college: one of which was eminently creative for its scientific and pedagogical content with a focus on the "plastic arts", the other being photography. A sample, was taken, consisting in a set of 71 subjects, 30 men and 41 women from a total of 171, representing 42 % of the universe in question shared by two courses of three years respectively, with 25 on the first year, 28 on the second year, and 18 from the last year. The photography course had 48 subjects and the visual arts 23. The following hypotheses were then formulated:

1. The subjects in the two courses are creative in general.
2. Differences exist regarding creativity between the two courses.
3. There are gender differences in creativity.
4. Creativity depends on age.
5. Progression in the course increases creative potential.
6. Creative potential is the main function in the use of the cerebral hemispheres.
7. The subjects had chosen the right course for them.

The Hermann creative potential test and the SPSS statistical software were then applied to these hypotheses and the following variables: the year of course attendance, gender, hemisphere predominance, rational approach, predominance, balancing hemispheres use, slight creative predominance, sensory and intuitive approach, creativity, and rationality of decision. These tests confirmed the hypotheses that the sample in question constituted a creative group. Originality and creativity were found to be superior to the rationality of decisions in their behaviour. However, a balance between the two hemispheres was prevalent in most of the studied population, which presupposed a general stability and possibility of creativity in order to learn and become creative or potentially more creative.

Another similar research project, which took place in a higher institute of psychology in Portugal with a sample of 28 subjects (six males and 22 females) who were graduates in psychology, undertaking a Master's degree in this scientific area, from a total of 199, representing 14% of the universe in question, aimed to address the following hypotheses and research questions:

1. Psychologists are creative in general.
2. New graduates, by undertaking a Master's degree in psychology, increase their creative potential.
3. There are gender differences in creativity.
4. There are age differences in creativity
5. What is the most prevalent brain function in the total group, divided by gender and age?
6. What is the main function in the use of both brain hemispheres?

The Hermann creative potential test and the SPSS statistical software were then applied to these hypotheses. taking the following variables into account: the year of course attendance, gender, slight predominance of the rational approach, balance of the two hemispheres use, slight predominance of a creative, sensory, and intuitive approach, creativity and rationality of decision making. The research concluded that the study group was not creative, because as was found on the application of the Hermann test, neither originality nor creativity of rational decisions influenced the subjects' behaviour. The balance between the two hemispheres, however, was predominant in the population studied, which assumed some stability and also a possibility that subjects might learn more about creativity and become creative.

9.2.3 Contributions in the field of entrepreneurship education

Pressures from globalization require organizations to enable their employees to carry out necessary work, and they need to ensure that they empower their teams. So in order to be more competitive, organizations must structure working patterns around teamwork. This requires a more effective engagement with creativity in the formation of teams. This trend should begin in schools, starting at the basic level and developing in each type of school. For some years, and resulting from the exchange of mobility programs between two institutions in Portugal and Spain — the Polytechnic Institute of Tomar, and Salamanca University with its Chair of Entrepreneurship — those institutions have sought to develop the teaching of creativity and entrepreneurship through practical methodologies that, little by little, took shape during classes. These institutions had the aim that pupils could later contribute to the creative development of the organization they worked for, thus representing the role of intra-entrepreneurs, or to create their own business or organization, which would combat unemployment and the problem of the skilled unemployed.

Those methodologies are based on fully interactive subject-centred environments, which integrated each topic of the programme into teams performing work in indoor and outdoor environments. The aims were: seeking to develop creative attitudes, investigating and doing creative exercises, and allowing students to request guidance in their research until they materialize their idea addressed in a prototype of a good or service that is presented as an essential condition to work. The programmes, for example, facilitated each pupil to learn about, use, and practice creativity, thus promoting an analytical ability to conduct creative approaches to problem solving, encouraging innovation in the everyday life of organizations. To achieve this goal, students must acquire creativity and critical skills in developing an innovative mindset, such as:

1. Being creative and owning creative attitudes.
2. Applying creativity to potential tests in application and discussion.
3. Being able to engage in creativity exercises: construction, application, and implementation.

These goals required addressing the following questions or problems:

1. How can we build entrepreneurship teams?
2. How do we generate ideas, do we use brainstorming techniques?
3. Building a model of a commodity or a service.
4. Testing the model: presentation in a real context.

Given the above, we present the following method, alerting the reader's attention to that fact that this field continues to evolve and that progress depends on the contribution that each pedagogical action makes.

9.2.4 The first strategy — Developing the creative mind

This strategy develops and modifies attitudes that relate to creativity:

- Originality.
- Problem solving.
- Curiosity.
- Open-mindedness.

Developing originality means developing the imaginative processes that are integral factors of original creativity. Originality is key as the factor bringing about interesting, unusual, and surprising ideas. The object is not to repress fantasy but to stimulate it. We can think about innovative ideas, thereby imagining the world as if we had to create it anew as a project. Developing problem solving means developing the imaginative processes as integral factors of original creativity. Originality is the key here, too, bringing about interesting, unusual, and surprising ideas. Again, the object is not to repress fantasy but to stimulate it, exploring many possibilities over time that provide innovative responses to an identified problem. Developing curiosity requires us to awaken it in writing, developing original questions that provoke interesting discussions. Developing open-mindedness means encouraging flexibility of thought, which is an important aspect of creativity. If one method does not result in immediate gains, then another method may be attempted. People must give opinions about real and imaginary cases of life, and try to choose some adopted behaviours in order to provoke change and improve experiences.

We may, at this point, have acquired the ability to look the same things, the same needs, or problems as others but in a different manner: for example, searching for new ways to sell, or to change a product or service with respect to its location, and content, for example. This quality gives people the tools to find ways to make more with less, to reduce costs, streamline processes and systems, increase profitability, find new uses for products, search for new market segments, differentiate between potential workers' curriculum vitaes, develop new products, and potentially many more benefits.

Walt Disney used to say: "Creativity is like a gym: we become stronger how much more is the training" [40]. With this philosophy, he created a method based on three types of personality:

- The Detailer — which means the trouble-shooter who lives in us all and which evaluates ideas systematically in the belief that all ideas should be evaluated and analysed logically.
- The Designer — which means the innovator who lives in us all analysing ideas with the intention of developing new ways of acting and making projects possible.
- The Dreamer — which is the child inside us all, looking for opportunities instead problems in an innovative way.

9.2.5 Second strategy – Brainstorming

The second strategy for developing creativity, in addition to the set of actions that characterize individual efforts, is the brainstorming technique. It consists in an application of rules encouraging reflection where a group of people should suggest the greatest possible number of unique ideas that can function as solutions, as well as to stimulate ideas in others. Such rules are that participants:

1. Encourage group mates to suggest all sorts of ideas — the more daring and radical the better.
2. Do not judge ideas.
3. Value quantity over quality.
4. Pay attention to ideas that arise and build on those of others.
5. Treat any idea as valid, even if it seems silly, impossible, or irrelevant.
6. Do not censor or criticize their own ideas or the ideas of others.

This reflection process goes through phases in which there are many ideas, and others in which the ideas come more slowly. When the process slows down, it is a good time to review the ideas and work on them. The group reflection can last from five minutes to two hours, although most of the groups work within a range of five to fifteen minutes.

9.2.6 Third strategy – Detecting the creative potential

As noted earlier, we know that creative potential originates in the brain, more properly in the left and right cerebral hemispheres, which represent both sides of the human brain: the left side governing analytic functions, and the right side governing creativity and emotional capabilities.

40. Ferreira, M., Santos, J., and Serra, F., "Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa" (Lisboa: Edições Sílabo, 2010).

9.2.7 Fourth strategy — Exercises for creativity practice

Testing our creativity is key and we propose that this strategy can be applied to several exercises [41], of which we examine only two examples as follows:

1. Explaining sight to a person without that sense. Imagine that a group mate near to you is blind.
    - Explain to him how the clouds appear.
    - Explain to him how the blue colour appears.
    - Warming Exercise: The Cow [42]
    - Outline three different business models, all using a cow.
    - Start by defining some characteristics of the cow (produces milk all day, moos, etc...).
    - Use these features to produce an innovative business model based on a cow.

(Note: the people have three minutes in which to do these exercises.)

9.2.8 Fifth strategy — Build entrepreneurial teams

The fifth strategy consists in building entrepreneurial teams and submitting them to a 'Conflicts Management Diagnosis Test inspired by Rahim [43]. To organize a group of this nature we advocate providing supporting resources, formulating objectives, and meeting the team, in order to be effective in achieving efficiency, operationalizing results, and materializing ideas. This means that two or more people must come together in working to achieve a common goal, such as planning a picnic with staff, updating company policies, or creating a new product line. The best form for an entrepreneurial team to be is that of a self-managed team. This kind of team exists to recruit people from different areas of the organizations who possess different bodies of knowledge, competencies, and cultures. A team of this nature must be small because larger groups create communication problems, and this team must be able to act effectively and be multidisciplinary. The 'Conflicts Management Diagnosis Test based on Jesuino [44] permits knowledge of what kind of people we can insert in the team, according to their motivation levels and relationships with others, in the following manner:

41. Ferreira, M., Santos, J., and Serra, F., “Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa” (Lisboa: Edições Sílabo, 2010).
42. Osterwalder, A. and Pigneur, Y., “Criar Modelos de Negócio” (Lisboa: D. Quixote; 2011).
43. Rahim, M. A., “Managing Conflict in Organizations” (Westport: Quorum Books, 2001).
44. Jesuíno, J. C., “ Processos de Liderança” (Lisboa: Livros Horizonte, 1996).

9.2.9 Entrepreneurial team creation using conflict management diagnosis

First step:

Ask the subjects to answer the following questions in a sincere and spontaneous manner. To do this, they should place a cross (x) at the site that best represents the correct answer.

When experiencing conflict, to what extent do you perform each of the following behaviours:

	Never	Rarely	Sometimes	Frequently	Always
1. I explain the problem, clearly looking for a solution					
2. I try not to argue					
3. I try hard to solve the problem					
4. I draw attention to common interests					
5. I am looking for a mutual commitment					
6. I face the question openly					

Table 9.1 Conflict Management behaviours

	Never	Rarely	Sometimes	Frequently	Always
7. I try not to get involved					
8. I insist that a particular solution is taken					
9. I note that the differences are less important than goals					
10. I am looking for an intermediate solution					
11. I do not let the issue pass without resolving it					
12. I give up easily					
13. I impose my interests on others					
14. I bridge the gap					
15. I am ready to negotiate					

Table 9.1 Conflict Management behaviours

	Never	Rarely	Sometimes	Frequently	Always
16. I face the conflict directly					
17. I am ready to quit the situation					
18. I do not accept "No" as an answer					
19. I look to smooth out disagreements					
20. A little early in order to receive something in return					
21. I express my point of view clearly					
22. I ignore the conflict					
23. I impose my solution					
24. I behave as if mutual objectives were of vital importance					

Table 9.1 Conflict Management behaviours

	Never	Rarely	Sometimes	Frequently	Always
25. I take both sides of the problem into account					

Table 9.1 Conflict Management behaviours

Second step:

Assign the values one, two, three, four, and five to their responses, according to the following logic:

Answer	Assign the value
Never	1
Rarely	2
Sometimes	3
Frequently	4
Always	5

Table 9.2 Scale punctuation.

Third step:

Fill in the tables below, using the figures arrived at through step two. Calculate the totals by adding up the values in the columns.

Collaboration	
Answer	**Assign the value**
6	
9	

Table 9.3 Style punctuation.

16	
18	
25	
Sum	
Accommodation	
Answer	**Assign the value**
2	
4	
14	
19	
20	
Sum	
Sharing	
Answer	**Assign the value**
1	
5	
10	
15	
21	

Table 9.3 Style punctuation.

Sum	
Competition	
Answer	**Assign the value**
3	
8	
11	
13	
23	
Sum	
Avoidance	
Answer	**Assign the value**
7	
12	
17	
22	
24	
Sum	

Table 9.3 Style punctuation.

Fourth step:

Taking into account the values received, check the style of conflict management that is used most frequently. Through the above, the results reflect on its effectiveness in managing conflicts. We know that all individuals have interests, and according to the degree of satisfaction in personal interests those of others, we obtain the values of these interests. This measurement identifies five kinds of individual behaviour:

1. **Accommodative**: This style of behaviour means: “I subjugate my power to your will”. The person is only interested in satisfying the interests of others rather than their own interests. This kind of person demonstrates submission and complacency if issues agree with them and meets the interests of other. We use this style when:
    - We know that we are wrong, and if we want to hear a better opinion.
    - When it is important to meet the other halfway and maintain their cooperation.
    - When we want to create a good environment and store personal credits to be used in the future.
    - When harmony and stability are very important, allowing subordinates to learn from mistakes.
2. **Avoidance**: This style of behaviour means: “Let the problem take care of itself”. The person is not interested in satisfying either their own interests or those of others. This kind of person has the procedure of ignoring the conflict and hoping that it will pass, encouraging slow procedures that delay conflict resolution, being secretive to avoid confrontation, and calls on bureaucratic rules as a source of conflict resolution. This kind of style is used:
    - When an aspect is trivial or more important ones are pending.
    - When there is a perceived inability to meet the issue’s needs.
    - When disruption outweighs the benefits of resolution.
    - When it is important to collect more information before resolution
    - When others can resolve the conflict in a more satisfactory way.
    - When the current problems depend upon others being resolved first.
3. **Competitive**: This style of behaviour means: “For me to win the other must lose”. The individual is only interested in satisfying their interests. This kind of person inserts themselves in win-lose situations, makes use of rivalry and power to achieve their own objectives, and to force submission in others. We use this style when:
    - Quick decisions are needed, as in emergencies.
    - Where unpopular decisions need to be implemented: cost reduction, discipline, and implementation of disliked rules.
    - When, in aspects vital to the well-being of the company, you know that you are right.
    - You need to counter the behaviour of people who take advantage of the complacency and submission of others.
4. **Collaborative**: This style of behaviour means: “These are my objectives, what are yours and how we can achieve together”. The person is interested in fully meeting both their interests and those of others. This kind of person facilitates the sharing of ideas and information, investigation of integrative solutions, and situations where everyone can win. Problems and conflicts are viewed as challenges. This kind of person is:

- Used in the search for an integrative solution where it is important to reach a compromise between both sides of the problem.
- When the aim is learning.
- When we aim to find better solutions through understanding the different perspectives of other people.
- When we aim to gain commitment through the establishment of a consensus.
- When we try to resolve feelings that may compromise the working relationship.

5. **Sharing**: This style of behaviour means: "Let's make mutual concessions to one another so that we both win a little". This kind of person is very interested in satisfying the interests of others, negotiates, and focuses their attention on trade and agreements, and demanding satisfactory or acceptable resolutions. This kind of person is used:
   - When the goals are important.
   - When opponents with equal power are involved with objectives that can be shared.
   - When there is a need to achieve a temporary understanding of complex issues.
   - When there is a possibility of collaboration and competition is not possible.

Finally, we verify in each member the awareness of capabilities that we need to for a productive business life according to an application of a frequency scale [45], measuring variables such as time pressure, family life, mobility, interest, challenge, task, risk assumption, tolerance of failure, confidence, reaction to criticism, leadership, delegation capability, decision making, choice of partners, success, and the capacity to request help. The test may present the following results: more people put an "x" by "always" and "sometimes" the more closely they come to being successful as an entrepreneur. If an "x" were placed by them predominantly by "sometimes" and "occasionally", we recommend that they must think twice before moving on because their profile shows some weaknesses as an entrepreneur. If on the other hand, putting most "x" by "occasionally" and "never", they must be advised to choose a better opportunity for them than being an entrepreneur. See the table below:

Scale	1	2	3	4
1. Are you able to work several hours?	Always	Sometimes	Occasionally	Never
2. Are you persistent?	Always	Sometimes	Occasionally	Never

Table 9.4 Awareness of capabilities needed in business life

45. Costa, H. "Criação & Gestão de Micro-Empresas & Pequenos Negócios" (Lisboa: Sílabo, 2010).

Scale	1	2	3	4
3. Is your project more important than the rest your family?	Always	Sometimes	Occasionally	Never
4. If your project mobilized you intensely for five years, would you continue to pursue it?	Yes, easily	Yes	Yes, with difficulty	No
5. Do only your financial business successes interest you?	Completely	Mainly	Partly	No
6. Do you consider yourself as a survivor?	Always	Sometimes	Occasionally	Never
7. If you experience difficulties, can you find an original way to overcome them?	Frequently	Sometimes	Rarely	Never

Table 9.4 Awareness of capabilities needed in business life

Scale	1	2	3	4
8. Do you always complete the projects or tasks you are involved in?	Always	Normally	Sometimes	Occasionally
9. Are problems a challenge for you?	Always	Normally	Sometimes	Occasionally
10. Are you able to live with a situation of uncertainty with jobs and personal finances?	Yes easily	Yes	Yes, with difficulty	No
11. Do you have self-confidence?	Yes, always	Yes, sometimes	Sometimes, I lack confidence	No
12. How do you deal with failure?	It is an opportunity to learn	With disappointment	It is a defeat	It is a disaster
13. Do you accept being criticized?	I agree, but I may not agree	I always agree	I agree, but do not like it	I cannot agree
14. Do you ask others' opinion of your performance	Always	Normally	Sometimes	Rarely

Table 9.4 Awareness of capabilities needed in business life

Scale	1	2	3	4
in order to correct them in the future?				
15. Do you believe that your success depends from external factors only?	Entirely Disagree	I disagree	Sometimes I agree	I always agree
17. Do you consider that you will always be able to find the right people to get what you want?	Quiet	Very	Not really	I never can manage it
18. Can you recognize when you need help?	Always	Normally	Sometimes	No
19. Can you identify what decisions are important and which are not?	Yes, always	Yes, normally	Yes, sometimes	No
20. Are you able to	Yes, when appropriate	Yes, sometimes	With difficulty	No

Table 9.4 Awareness of capabilities needed in business life

Scale	1	2	3	4
delegate to others?				
21. Have you already taken risks in the past?	Yes, calculated	Yes, high	Yes, low risk	Sometimes I ran risks

Table 9.4 Awareness of capabilities needed in business life

With this method, we found over the years that this diversified methods that increased the likelihood of generating more organizational and social gains, not only in the content of the strategies and exercises but also in their number and scope. Thus, methods facilitating creativity encouraged research subjects to develop their designs of prototypes, contribute to their motivation and autonomy, and enhance the use of their technical competencies and relationships. Therefore, we enumerate a list of products or services that have been designed since 2008 during creativity classes by students in Portugal, Spain, and Italy:

1. Funeral coffin of sturdy card holding weights of up to 250 kg, ideal for cremation.
2. Mattress alarm for deaf people.
3. Universal restaurant with dishes from around the world.
4. Mobile multipurpose space.
5. Diaper with dirt detector alarm.
6. Ghetto music: music publisher for amateurs.
7. Mobile sports equipment.
8. Multipurpose chair.
9. Vegetable crackers.
10. Cup multi drinks.
11. Pre-school convenience.
12. Ecological Clearwater.
13. Smart Eco point.
14. Personalized products distribution.
15. Student smart card.
16. Auto recycling centre.
17. Automatic self-cleaning kit.
18. Anti-theft pocket.
19. Bag multi uses.
20. Anti-vandal handle.
21. Multipurpose toothpaste.
22. Multi-function beach kit.
23. Smart t-shirt.
24. Seed separation filtration machine.

25. Glasses with windshields.
26. Facilities space organizer.
27. Multipurpose alarm.
28. Electric motorbike.
29. Dog robot watcher.
30. Multipurpose ladies handbag.
31. Support mobile charger jack.
32. Glasses detecting obstacles for the blind.
33. Deodorant sticker.

9.3 Conclusions and future trends

Given the deficiencies in the data analysis of investigations considered in this article, we hope to have suggested how the principles of creativity can be applied to more disciplines, courses, and professions. We also found, in the analysis of the samples, that it is very difficult to find a “pure creative”. The scientific community must extend this theme to their own conditions and to those of creativity consulting firms, teachers, and students, also extending it to the study to genetic studies, brain studies, biological studies, motivational studies, and all types of interpersonal relationships, using larger samples to cover larger universes and increase the probability of finding purely creative people. With these strategies we can establish a methodology for learning about creativity in entrepreneurial action, constituting important skills that everyone should be able to carry out and operate. There will remain no doubt that creativity is the most obvious sign of human evolution and practical use of intelligence. This constant interrogation of creating can materialize competitive advantages for companies, point towards alternatives in knowledge, technology, business, and crises, to further Mankind’s development and progress. Understanding the principles of creativity gives us a suite of options with which to act effectively.

We suggest the following terms as keywords for this article: qualified teams; group mates; entrepreneurial teams; goals and commitments; conflicts; negotiation; self-managed teams; standardization; and creativity.

9.4 References

1. Ferreira, M., Santos, J., and Serra, F., “Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa” (Lisboa: Edições Sílabo, 2010).
2. Hermann, N. “The Creative Brain” The Journal of Creative Behaviour (1991), 25 (4), 275-295.
3. Hermann, N., “The Whole Brain Business Book” (New York: McGraw-Hill, 1996).
4. Schwartz, S. H., “Basic Human Values: An Overview”, The Hebrew University of Jerusalem (2006), 1–19. http://scholar.google.pt/

scholar?cluster=8846081571740001914&hl=pt-PT&as_sdt=0,5&as_vis=1 (accessed 22 July, 2014).

5. Blake, Robert R.; Mouton, Jane S.; Bidwell, Alvin C. “Managerial grid”, Advanced Management - Office Executive, Vol 1(9), 1962, 12-15.
6. Alcántara, J. A., “Como Educar as Atitudes” (Lisboa: Editora Plátano, 1995).
7. Jesuíno, J., Pereira, O.G., Reto, L. “Características dos gestores de topo: Uma abordagem qualitativa” Análise Psicológica, (1993), 2 (XI), 179-199.
8. Schwartz, S. H., “Basic Human Values: An Overview”, The Hebrew University of Jerusalem (2006), 1–19. http://scholar.google.pt/scholar?cluster=8846081571740001914&hl=pt-PT&as_sdt=0,5&as_vis=1 (accessed 22 July, 2014).
9. Alcántara, J. A., “Como Educar as Atitudes” (Lisboa: Editora Plátano, 1995).
10. Wertheimer, M., “Productive Thinking”, (New York: Harper, 1945).
11. Rogers, C., “Body-Centered Counselor”, Journal of Counseling & Development (2000), 78 (2), 172–179.
12. European Commission. Communication from the Commission to European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM (2012) 795 final. Brussels 9.1.2013
13. C. Jenner, “Business and Education: Powerful Social Innovation Partners”, Stanford Social Innovation Review (2012).
14. Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning.
15. Ussmane, M.H., “Inovação e Criatividade – Manual de Desenvolvimento de Produto” (Lisboa, Sílabo, 2013).
16. Hermann, N., “The Whole Brain Business Book” (New York:McGraw-Hill,1996).
17. Hermann, N. “The Creative Brain” The Journal of Creative Behaviour (1991), 25 (4), 275-295.
18. Di Liello, T.C. and Houghton, J., “Creative Potential and Practiced Creativity: Identifying Untapped Creativity in Organizations” Journal Compilation Blackwell Publishing 2008; 17 (1), 37–46.
19. Mayfield, Milton, and Mayfield, Jacqueline, “Developing a Scale to Measure the Creative Environment Perceptions: A Questionnaire for Investigating Garden Variety Creativity”, Creativity Research Journal (2010) 22 (2) 162–169.
20. Rotter, J., “Generalized Expectancies For Internal Versus External Control”, Psychological Monographs: General and Applied (1966), 80 (609) (1) 1–28.
21. Begley, T. M. and Boyd, D. P.,“Psychological Characteristics of Associated with Performance in Entrepreneurial Firms and Small Businesses”, Journal of Business Venturing (1987), 2, 79–83.
22. Lyng, S., “Edgework: A Social Psychological Analysis of Voluntary Risk Taking”, AJS (1990), 95 (4), 851–86.
23. Osborne, R. L., “The Essence of Entrepreneurial Success”, Management Decision (1995) 33 (7), 4–9.
24. Schaufeli, W., Bakker, and B., Salanova, M., “The Measurement of Work Engagement with a Short Questionnaire. ACross-National Study”, Educational and Psychological Measurement (2006) 66 (4), 701–716.
25. Kluytmans, F., and Ott, M. “Management of Employability in the Netherlands”, European Journal of Work and Organizational Psychology (1999) 8, 261–272.

26. Sánchez J.C., Caggiano V., and Hernández, B., “Competencias emprendedoras en la educación universitaria”, INFAD, 1, 19–28.
27. Bateman, T. S., and Crant, J. M., “The Pro-active Component of Organizational behaviour”, Journal of Organizational behaviour (1993) 14 (2), 103–118.
28. Saks, A., and Ashforth, B.E., “Organizational Socialization: Making Sense of the Past and Present as a Prologue for the Future”, Journal of Vocational Behaviour (1997) 51,234–279.
29. Chen C.C., Greene, P.G., and Crick, A., “Does Self-Efficacy Distinguish Entrepreneurs from Managers?”, Journal of Business Venturing (1998) 13, 295–316
30. Krueger, N.F. Jr. and Brazeal, D.V., “Entrepreneurial Potential and Potential Entrepreneurs”, Entrepreneurial Theory & Practice (Spring, 1994), 91–104
31. Vieira D. A., Caires, S., and Coimbra, J. L., “Do Ensino Superior Para o Trabalho: Contributo dos Estágios para Inserção Profissional”, Revista Brasileira de Orientação Profissional (2011) 12 (1), 29 – 36.
32. Schwartz, S. H. “Les Valeurs de Base de la Personne: Théorie, Mesures et Applications — Basic Human Values: Theory, Measurement, and Applications”, Revue Française de Sociologie (2006) 42, 249–288.
33. Alcántara, J. A., “Como Educar as Atitudes” (Lisboa: Editora Plátano, 1995).
34. Begley, T., M. and Boyd, D. P., “Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses”, Journal of Business Venturing (1987) 2, 79–93;
35. Lidaka, A. 2012: “Value education — an important factor in the personality formation process” proceeding of Electronic International Interdisciplinary Conference, 3-7 September 2012, Czechoslovakia, http://www.eiic.cz
36. Schwartz, S. H.; Bilsky, W. “Toward a universal psychological structure of human values” Journal of Personality and Social Psychology 1987: 53 (3) 550-562.
37. Begley, T., M. and Boyd, D. P., “Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses”, Journal of Business Venturing (1987) 2, 79–93; Osborne, R. L., “The Essence of Entrepreneurial Success”, Management Decision (1995), 33 (7), 4–9; Sanchez J.C., Caggiano V., and Hernández, B., “Competencias Emprendedoras en la Educación Universitaria”, INFAD, 1, 19–28.
38. Begley, T., M. and Boyd, D. P., “Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses”, Journal of Business Venturing (1987) 2, 79–93; Sanchez J.C., Caggiano V., Hernández, B., “Competencias Emprendedoras en la Educación Universitaria”, INFAD, 1, 19–28; Schwartz, S. H.; Bilsky, W., “Toward a Universal Psychological Structure of Human Values”, Journal of Personality and Social Psychology (1987), 53 (3), 550–562.
39. Ferreira, M., Santos, J., and Serra, F., “Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa” (Lisboa: Edições Sílabo, 2010).
40. Ferreira, M., Santos, J., and Serra, F., “Ser Empreendedor — Pensar, Criar e Moldar a Nova Empresa” (Lisboa: Edições Sílabo, 2010).
41. Osterwalder, A. and Pigneur, Y., “Criar Modelos de Negócio” (Lisboa: D. Quixote; 2011).
42. Rahim, M. A., “Managing Conflict in Organizations” (Westport: Quorum Books, 2001).

43. Jesuíno, J. C., “ Processos de Liderança” (Lisboa: Livros Horizonte, 1996).
44. Costa, H. “Criação & Gestão de Micro-Empresas & Pequenos Negócios” (Lisboa: Sílabo, 2010).

Chapter 10 Entrepreneurship Education as Learning to Form Identities — Cross-Cultural Perspective

by Iiris Aaltio [1] ***and Qian Wang*** [2]

10.1 Introduction

In this study we focus on entrepreneurship education, entrepreneurs' professional identity and related cross-cultural issues [3]. Today's global business requires professional identities that are flexible and broad-mind, and this is why teaching should recognize these challenges. There is a need for new skills such as generalist skills, social skills and abilities for creating and sustaining new, complex trust-based business networks. We believe entrepreneurship education can promote such abilities. The entrepreneurs-to-be also need ethical rules and codes as they build values and ethical understanding, all rooted in identity. Recently, researchers such as Rae [4] have stressed the need for entrepreneurship education with a strong emphasis on sustainability and responsibility.

The research of entrepreneurship education is related to current policy, and should be understood in this context [5]. Recent advances in theory building in cross-cultural management hold to a dynamic vision of culture and communication [6]. In our study, culture is approached in generic terms, even if interpreted in the context of a national culture. Entrepreneurship must have dynamic characteristics in order to adapt to political and economic changes. For an individual within a specific national culture, his/her behavior and values are affected not only by the national culture, but also organizational culture (if a member of an organization), group culture (if a member of a group) and global culture [7]. The influence of the different levels of culture depends on the context and the individual. Communication is usually seen to be at the center

1. University of Jyväskylä, School of Business and Economics, Jyväskylä, Finland
2. University of Jyväskylä, School of Business and Economics, Jyväskylä, Finland
3. Aaltio I. Management Education as an Identity Construction: the Case of Estonia and its Transition Economy Background. International Journal of Entrepreneurship and Small Business 2008; 5(1): 83-99.
4. Rae D. Yliopistot ja Yrittäjyyskasvatus: Vastaus Uuden Aikakauden Haasteisiin. In: Heinonen J, Hytti U, Tiikkala A. (eds.) Teoksessa Yrittäjämäinen Oppiminen: Tavoiteita, Toimintaa ja Tuloksia. Turun Yliopisto, Turku: Uniprint; 2011. p38-69.
5. Pittaway L, Cope J. Entrepreneurship Education: A Systematic Review of Evidence. International Small Business Journal 2007; 25(5): 479-510.
6. Fang, T. Yin Yang: A New Perspective on Culture. Management and Organization Review 2012; 8(1): 25–50.
7. Ulijn J, Aaltio I, Guerra J, Uhlaner L. Cooperation and Teamwork in Technology Start-ups: Reflected in Some Italian, British, Dutch and German Findings. International Journal of Entrepreneurship and Small Business 2011; 14(1): 100-126.

of culture. Differing communication rules, for instance, in the West and East also have an impact on networks. Although important, it seems that this kind of dynamic approach is still quite rare in entrepreneurship training and research.

The identities of business actors need to evolve from the current circumstances and ways of working: who am I as an entrepreneur, with whom do I work and network, and from whom do I get my insights for the future. The identity that business professionals develop is of importance to their entrepreneurship, and it transforms in the cultural context that they connect to and the social groups in society that they professionally relate to. Education creates a kind of mind-set in the course of the lifelong schooling process. Although young people might receive a good academic education they lack preparation for working life and its competitive environment. Job insecurity has increased and unemployment rates among young people remain high. Entrepreneurship education has been criticized as being overly practice-orientated and affording too little space for recognizing opportunities and development abilities in students, which would be necessary for the promotion of creativity [8]. As noted by Kyrö [9], the learning paradigm in universities is not supportive of entrepreneurship, since the traditional and the entrepreneurial mind-set require different educational approaches. Small business provides an excellent employment opportunity for young people, but requires new skills and identities to be learnt that are not offered in earlier school education. Entrepreneurship education that equips students with the abilities needed in this complex interaction between competitive environments and business is required.

The entrepreneurial processes in establishing new enterprises require different kinds of skills than those needed when working in existing stable circumstances. There are many questions to be solved; such as, when should people start learning about running an enterprise and what should the content of such courses be? In general, it is the combination of knowledge, skills and various personal qualities that is important. The socialization of our personality is influenced by the ambient culture, group and social relations within a given society and is dependent on individual experiences. People mostly maintain the values they have acquired by the age of 20, and those adopted at an early age have a stronger influence than those adopted later in life [10]. Skills such as those for communication are equally important; that is, the ability to communicate novel ideas and to listen and respect other people's opinions. Such skills can also be developed later through education in entrepreneurship programs. The described tendencies apply to the business environment and management education worldwide, even if there are also country-specific ways of coping with these issues.

Nowadays there has evolved several new approaches to being enterprising, such as social entrepreneurship, and this all means learning new ways to be entrepreneurs. This assumes a new perspective on entrepreneurship, challenging its basic assumptions. Social entrepreneurship deals with broad social, cultural, and

8. Carrier C. Pedagogical Challenges in Entrepreneurship Education. In: Kyrö P, Carrier C. (eds.) The Dynamics of Learning Entrepreneurship in a Cross-cultural University Context. Entrepreneurship Education Series 2, Hämeenlinna: University of Tampere, Research Centre for Vocational and Professional Education; 2005. p136-158.
9. Kyrö P. Entrepreneurial Learning in a Cross-cultural Context Challenges Previous Learning Paradigms. In: Kyrö P, Carrier C. (eds.) The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context. Entrepreneurship Education Series 2, Hämeenlinna: University of Tampere, Research Centre for Vocational and Professional Education; 2005. p68-104.
10. Torokoff M. The Role of School in Teaching Enterprise. In: Mets T, Venesaar U, and Kolbre E. (eds.) Entrepreneurship in Estonia: Policies, Practices, Education and Research. Tartu University Press; 2006. p254-275.

environmental goals, and is commonly associated with the voluntary and not-for-profit sectors; therefore, it also challenges the conventional business-oriented entrepreneurial identity.

In this paper we explore how research on entrepreneurship and entrepreneurship education worldwide has taken account of the new requirements for flexible entrepreneurial identities, and what are the essential elements of recent high-quality research and what can be learnt from this for the future.

10.2 Problems of the study and its field of application

This study is about entrepreneurial identity and how it can be taught, adding here a cross-cultural perspective. We believe there are both universal and country-specific nuances to working as an entrepreneur. National cultures are in a continual process of flux, people living in them are bi-or multicultural, bi-or multilingual and live and move across national boundaries. Many people training to become entrepreneurs are born multinational with more than one national identity. Our question is how entrepreneurial studies are coping with this multinational perspective, and what kind of research is needed in the future. Data used in this study consists of earlier studies including research into identity, entrepreneurship education and cross-cultural issues.

Entrepreneurship and entrepreneurship education involves building a personal entrepreneurial identity. Overall, identity and self refers to a person's own idea of who she or he is [11]. Identity stands at the intersection of self-perception and the perception of others, and it is a relational concept and situated in the cultural context. Individual identity is also created by society, by language, values and institutions, thus making it a socially constructed concept. As noted by Czarniawska [12], human beings are social constructors, and organizations are social constructions. The professional identity of managers has to do with the cultural context she or he connects to and with the social groups in society that she or he professionally relates to. This creates a kind of mind-set in the course of lifelong schooling. Economic society develops more and more closely with the rest of the society, and management and entrepreneurship education should equip students with the abilities necessary for this interaction

According to Hogg and Terry [13], social identity is an integrated perspective on the relationship between self-concept and group behavior. Tajfel [14] defines social identity as the individual's knowledge that she or he belongs to certain social groups together with some emotional and value significance coming from this group membership. Social identity is linked with organizational and individual concepts, and therefore, plays an essential role in actions and behavior. Hall [15] underlines the paradigms of identity research that emphasize it either as the stable content of one's personality

11. Aaltio I. Management Education as an Identity Construction: the Case of Estonia and its Transition Economy Background. International Journal of Entrepreneurship and Small Business 2008; 5(1): 83-99.
12. Czarniawska B. Narratives of Individual and Organizational Identities. In: Deez S. A. (ed.), Communication Yearbook 17, London: Sage; 1994. p193-235.
13. Hogg M.A, Terry D.J. Social Identity Theory and Organizational Processes. In: Hogg M.A, Terry D. J. (eds.) Social Identity Theory Processes in Organizational Contexts. Philadelphia: Taylor & Francis; 2001. p1-13.
14. Tajfel H., editor. The Context of Social Psychology: A Critical Assessment. London: Academic Press; 1972.
15. Hall S., editor. Representation: Cultural Representations and Signifying Practices. London: Sage; 1997.

and mind, or as a continuous process one is going through. Seen as the latter, identity is conscious in terms of the manner in which the individual understands and deals with his or her 'self'.

The concepts of opinion, memory and self-awareness are important in understanding how individuals achieve a modern identity that is independent of other people's reactions. Self-narratives occupy a central place in such a process. A university education provides students with special knowledge, skills and behaviors, but it is also a way of shaping and reshaping their individual identities. The processes by which identities are promoted are relevant, and so are the adopted pedagogical solutions. In addition, there are special needs arising from the business context.

Social capital, based on social networks and trust-based relationships, is something that develops in society. This capital is meaningful for any society and is also country-specific, built using the history and social memory of the society. This forms a bridge between entrepreneurship at the individual and societal level, showing its multi-level importance.

10.3 Research design

The methodology used in this study is a literature based analysis. A review is built and based on peer-reviewed scholarly journals. Primarily according to two databases (described later in the text), we analyze the current state of entrepreneurship education research, its topics, methods and applications. After the analysis and findings we end up with conclusions and further recommendations for entrepreneurship education and research.

10.4 Method

This study involves a literature review conducted based on scholarly peer-reviewed journals. The principal theme is to explore relevant content in discourses concerning how entrepreneurship education contributes to entrepreneurial professional identity in the current changing business environment. Primarily based on two databases – "EBSCOhost" and "ProQuest" – the following keywords were used in searches: "identity", "entrepreneurship education" and "cross culture/cross-culture". The publication date was limited to the 10 years from 2004 to 2014. Only papers with full text are selected, and the language was limited to English. Therefore, after removing duplicates, 29 articles (11 from "EBSCOhost" and 18 from "ProQuest") were downloaded for further assessment by reading each abstract. However, the quality of these varies considerably, and the main topics in most of them do not quite match entrepreneurship education. Only four to some extent qualified to be advanced in the subsequent analysis process, which is inadequate for ameliorating a literature review. The selection criteria were therefore modified by redefining the keywords respectively for each database in order to achieve an appropriate number of articles. Meanwhile, in-depth scrutinization is needed to control the substance in the sample articles. Ultimately, 28 papers were targeted after continuous trials on determining the boundaries of keywords and publication titles (by which, the search mode can be seen in Table 10.1). In addition, before importing the 28-article sample into the ATLAS.ti software tool, further clarification of the main findings in each paper was necessary to facilitate code-generation and articulation in the software-adoption process (see Table 10.2).

Keywords	Database	First-round result	Second-round result
"entrepreneurship education" and "entrepreneurship" (for enhancing relativity) and "identity"	EBSCOhost	365 papers	20 papers
		(Criteria: all of them should be selected from scholarly peer-reviewed journals, with full text, in English and published from 2004 to 2014.)	(After examining each article's title, abstract and keywords to find relevant themes regarding the further keyword – cross-cultural analysis.)
"entrepreneurship education" and "identity" and "cross culture"	ProQuest	2913 papers	8 papers

Table 10.1 Search results per database

Keywords	Database	First-round result	Second-round result
		(Criteria: same as above.)	(By reading through each abstract and keywords, subject-related authenticity and accuracy are improved.)
		259 papers	
		(By limiting papers in relevant publication titles for 17 journals)	

Table 10.1 Search results per database

The list of articles is presented as follows in Table 10.2.

– Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55–71.
– Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492–500.
– DeTienne DR, Chandler GN. Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach

Table 10.2 List of articles included in the analysis

and Empirical Test. Academy of Management Learning & Education 2004; 3(3):242-257.
– Frederking LC. A Cross-National Study of Culture, Organization and Entrepreneurship in Three Neighborhoods. Entrepreneurship & Regional Development 2004; 16(3):197-215.
– Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
– Curran-Kelly C. Stranger in a Strange Land: using International Student Experiences to Teach Adaptation in Global Marketing. Marketing Education Review 2005; 15(2):55-58.
– Katz JA. Fully Mature but Not Fully Legitimate: A Different Perspective on the State of Entrepreneurship Education. J Small Bus Manage 2008; 46(4):550-566.
– Vigoda-Gadot E, Grimland. Values and Career Choice at the Beginning of the MBA Educational Process. Career Development International 2008; 13(4):333-345.
– Carey C, Smith K, Martin LM. Cross-university Enterprise Education Collaboration as a Community of Practice. Education & Training 2009; 51(8/9):696-706.
– Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
– Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
– Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.

Table 10.2 List of articles included in the analysis

– Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
– Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
– Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
– Hjorth D. On Provocation, Education and Entrepreneurship. Entrepreneurship & Regional Development 2011; 23(1):49-63.
– Van Reine PP, Dankbaar B. A Virtuous Circle? Co-evolution of Regional and Corporate Cultures. European Planning Studies 2011; 19(11):1865-1883.
– Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
– Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/ Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
– Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
– Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.
– Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and

Table 10.2 List of articles included in the analysis

Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
– Mutsuddi I. Kickstarting Entrepreneurship Cells in Business Schools: Roadmap and Challenges. Global Management Review 2012; 6(4):61-76.
– Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
– Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.
– Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.
– Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education + Training 2013; 55(8):886-898.
– Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.

Table 10.2 List of articles included in the analysis

Study findings

The literature was examined under a thematic content analysis using ATLAS.ti in which discourses related to keywords such as “entrepreneurship education”, “identity” and “cross culture” were summarized into 11 codes. In order to achieve a comprehensive understanding, they are categorized into 2 code groups (Seen Table 10.3). Relevant direct quotations with discussions will be exemplified in the following section. Systematic thinking patterns and iterative articulating capabilities are needed during this qualitative process of the analysis.

Code group	Code	
Entrepreneurship education	Entrepreneurship education in general	
	Identity reflected in entrepreneurship education	from entrepreneurial identity as a general point of view;
		entrepreneurship education as a promising identity workspace;
	Cultural factors reflected in entrepreneurship education	general point of view;
		national perspective;
		regional perspective;
		global perspective
	Future research	Theory;
		Culture;
		Identity;
		Context;

Table 10.3 Code groups and codes including descriptions of subject matter

Code group	Code	
		Other themes
	Suggestions for improving entrepreneurship education	Entrepreneurial knowledge & Skills;
		Contextual factors;
		Pedagogical perspective;
	Entrepreneurship education for SMEs	
	Europeanization	for achieving a European model of culture and identity;
		Europeanizing education;
Social entrepreneurship education	Social entrepreneurship education in general	
	Identity reflected in social entrepreneurship education	from social entrepreneurs' points of view;
		from students' points of view

Table 10.3 Code groups and codes including descriptions of subject matter

Code group	Code	
	Environmental factor (national context) reflected in social entrepreneurship education	
	Suggestions for improving social entrepreneurship education	

Table 10.3 Code groups and codes including descriptions of subject matter

We now present each of the codes and discuss central issues within it. Reference is made to the article in hand during the presentation.

Code: Entrepreneurship education in general

Researchers attempt to conduct an in-depth analysis of entrepreneurship education (e.g. its definition, course contents, teaching and learning objectives), although there is a lack of significant research on entrepreneurship education programs and their connections to the entrepreneurship point of view. [16], [17] Both the amount and quality of entrepreneurship study needs to be improved providing that "...importance of entrepreneurship as an important study in colleges of business and engineering schools...university education had a significant role in student careers in entrepreneurial pursuits and kickstarting new ventures after their graduation..." [18]. Therefore, not only from a theory-based but also an empirical perspective, entrepreneurship education strengthens student entrepreneurial-related knowledge and skills. The relevant programs and curricula required should be developed with two inherent factors, namely the transmission of information/value from teachers to students and the influence of peers [19]. Besides the knowledge and information flow, entrepreneurship education is defined as a process which increases the cognitive knowledge base in entrepreneurship and practically develops entrepreneurial or enterprising skills in students or pupils through discovering new opportunities and

16. Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
17. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
18. Mutsuddi I. Kickstarting Entrepreneurship Cells in Business Schools: Roadmap and Challenges. Global Management Review 2012; 6(4):61-76.
19. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.

mastering venture creation processes [20], [21]. To transfer the knowledge and to facilitate its progress form the central goals for the school; learners are taught firstly by taking an academic look at entrepreneurship, secondly by enhancing opportunity-identification and exploration abilities, and finally by putting these capabilities into practice. In other words, the aim is to further students' intentions and motivation to be entrepreneurs or embark on an entrepreneurial occupation, meaning "the desirability (the desire to launch an entrepreneurial career)...and the feasibility (possessing the necessary skills and knowledge to create and manage a company) of entrepreneurship" [22].

In reference [23], reflective and active modes of teaching are demonstrated, which can be introduced as two meaningful divisions in entrepreneurship education.

> *...reflective modes, where the learner acquires knowledge through reflective observation, and active modes, where the learner acquires knowledge through active experimentation, differently impact on self-employment intentions...reflective modes involve a more passive role of the students and the teacher initiates the learning process...active modes, the student is more active and initiates the learning process him/herself....* [24]

Code: Identity reflected in entrepreneurship education

From entrepreneurial identity as a general point of view

Identity can be manifested and simultaneously externalized through entrepreneurship education. [25], [26], [27] On the basis of people's social interactions [28], their identities are cultivated from experience, education, and networks of social relationships [29]. Meanwhile, an enterprise is seen as an appropriate venue for a person to develop his/her identity. [30], [31]

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20. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
21. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
22. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
23. Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.
24. *Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.*
25. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
26. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
27. Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.
28. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
29. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
30. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
31. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.

> *...entrepreneurial process has an effect on the identity of the creative actor leading to the development of...one's "possible selves...* [32]

Identity embodies a process of self-identifying, which may include dynamics and changes throughout a specific period. The main aim is to elaborate identity work, which refers to the way people position themselves in discourse, how they attach themselves to certain issues, use and combine texts and materials to articulate and give meanings for themselves and their actions [33] which is further explained in reference [34]:

> *Within a training program the participants have the opportunity to explore their relationship with the new venture creation and entrepreneurial career, in short reflecting their own identity with regard to entrepreneurship.* [35]

> *...language contributes to providing both self-confidence and identity resources for creating, strengthening and maintaining an identity...individuals engage in identity matching with notable people they compare themselves against...* [36]

Entrepreneurship education as a promising identity workspace

In this section, entrepreneurship education is figured as a typical locus for developing identities from both a general social viewpoint and in the context of a business school. Generally, entrepreneurship education is "a part of the societal production of an order of meaning that transforms to pedagogic communication and practice in educational settings...about a moral creation of order, relations and identity..." [37] In particular, entrepreneurial identity will to some extent be conceptualized in school through learning and in society through network building. [38] Both of these processes are linked to educational goals – "storing particular potential entrepreneurial futures and the result of this joint interaction of actors has a variety of economic, educational and social impacts" and implying "discourse about entrepreneurship to which local pupils have been exposed all their lives...a framework for them to perform these

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32. *Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.*
33. Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.
34. Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.
35. *Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.*
36. *Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.*
37. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
38. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.

identities…” [39] Therefore, educational entrepreneurship settings serve as an intersection, joining students and other relevant participants in order to learn from one another and obtain certain useful entrepreneurial experience.

> *…entrepreneurship education specifically would seem to be a particularly promising identity workspace with its unique ability to connect the individual, with his or her particular interests, knowledge, experience and social networks with the marketplace in which he or she seeks to gain acceptance, implement plans, perform commercial transactions, interact with stakeholders and develop a project, business or organization….* [40]

Code: Cultural factors reflected in entrepreneurship education

General point of view

Entrepreneurship education will reflect features from different cultural backgrounds, and at the same time is influenced by culture. In reference [41], culture is depicted as a contributor that moderates the relationship between entrepreneurship education and entrepreneurial intentions. A definition has been introduced where culture is defined as the values, beliefs and assumptions learned in early childhood that distinguish one group of people from another. Furthermore, there are four cultural dimensions (incl. “power distance, in-group collectivism, gender egalitarianism/societal gender inequality, and uncertainty avoidance/perception of uncertainty” [42]) which will exert a certain impact on students’ entrepreneurial minds and future behaviors. For example,

> *…differences of social hierarchy between teacher and student due to power distance culture can influence how students accept and incorporate…variations on peer relationship in accordance with the level of in-group collectivism also can affect the effects of entrepreneurship education on entrepreneurial intentions…two social dimensions (about gender and uncertainty) that may shape a student’s views of entrepreneurship…also determine a student’s entrepreneurial intentions before and after enrolling in entrepreneurship courses…influence a person’s expectations about his or her choice of self-employment…* [43]

In the following section, cultural factors will be illustrated based on three perspectives – from a micro to a macro way of understanding – national, regional and global perspectives.

39. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
40. *Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.*
41. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
42. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
43. *Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.*

National perspective

Entrepreneurship education involves bridging knowledge and skills with a formation of certain beliefs, values and attitudes [44], [45], and to set the objective of letting students choose entrepreneurship as an attractive and real alternative [46]. This process has also been presented in a nation's culture as:

> *…a long-term strategy, an investment in the nation's future, aimed at effecting a significant cultural change….by fostering the right kind of individuals; individuals with the specific traits who form a kind of inner resource that can be profitable on the market…* [47]

Students' attitudes towards entrepreneurship can be distinctively elaborated in entrepreneurship education across different nations [48], [49], [50]:

> *…national…culture may have an impact on the attractiveness of entrepreneurship education and the participants' motivation to study entrepreneurship…* [51]

"Entrepreneurship education should vary nation by nation…across national cultures [52], [53]…there are significant differences among the American, Asian and European students…in entrepreneurial intentions and dispositions as well as motivations and perceived barriers to business startup…" [54]

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44. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
45. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
46. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
47. *Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.*
48. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
49. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
50. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
51. *Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.*
52. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
53. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
54. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.

> *A high in-group collectivistic culture, a low gender egalitarianism, and a low uncertainty avoidance culture reinforced the effects of entrepreneurship education on entrepreneurial intentions….* [55]

Still, an entrepreneurial culture can be thus nurtured through a national culture, and entrepreneurship education may be even more important in nations where the entrepreneurial culture is under-developed compared to countries where the entrepreneurial culture is well established [56].

Regional perspective

The regional context including the regional infrastructure [57]), as a more broadened factor, will have various impacts on entrepreneurship education, and in terms of educational objectives, outcomes, and resources on cultures in school entrepreneurship programs [58]). [59], [60]Therefore, this factor has been named "regionality" [61], and will shape local narratives of entrepreneurial identities and careers [62] into different features and diverse structures throughout regions.

There are two categories classifying regions, namely levels of development [63] and degree of entrepreneurial activity [64], which may vary divergently in accordance with entrepreneurship education.

Level of development:

> *Pupils and teachers in more developed regions also perceive much more regulatory support, from the state and other public bodies, than those in under-developed areas. Similarly, cognitive institutions – local knowledge stocks – appear to be lower in less developed regions, raising questions about the requisite intensity of enterprise education, to tackle these deficits head-on.* [65]

55. *Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.*
56. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
57. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
58. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
59. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
60. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
61. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
62. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
63. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
64. Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.
65. *Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.*

Degree of entrepreneurial activity:

> *A high degree of entrepreneurial activity within a region (as measured by the number of start-ups per inhabitant) enhances the impact of entrepreneurship education on students' self-employment intentions…optimal design of entrepreneurship education depends on regional circumstances…* [66]

Meanwhile, the degree of entrepreneurship education and entrepreneurial activity contribute to mutually influential conditions:

> *Entrepreneurship education offers should have a stronger impact on perceived behavioral control in regions with high degrees of entrepreneurial activity. Such activity also reflects and further adds to a region's entrepreneurial culture…a high degree of entrepreneurial activity indicates that pro-entrepreneurship attitudes prevail in a region. Students are more likely to form positive attitudes towards entrepreneurship in regions where positive information is readily accessible.* [67]

Global perspective

Recently, globalization is considered a megatrend, which signifies the growing interdependence of nations in terms of manifold facets, including economic, cultural, political and intellectual institutions. [68] At the same time, this brings about changes in social, political and cultural spheres – "namely homogenization, polarization, and hybridization" respectively. [69] Convergence is the long-term objective; however, divergence symbolizes an indispensable constituent. Hence, it is also highlighted as in [70]:

> *A hybridization thesis of globalization seems more plausible. That is, people from different cultures borrow and incorporate elements from a variety of sources within particular cultural practices creating hybrid forms.* [71]

66. *Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.*
67. *Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.*
68. Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
69. Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
70. Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
71. *Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.*

Furthermore, the process of globalizing also leads entrepreneurship education with such changes through both visible and invisible factors (visible elements of the culture such as language, dress, ethnic differences, etc.…invisible elements such as values, attitudes, traditions, etc…to sensitize the students to differences in cultures… [72]).

Both convergence and divergence also remain in the development of education surrounded by the knowledge society. They are not contradictory poles, but rather coexist in certain respects. Internationalization will provide more opportunities for students to attain multidimensional knowledge and skills; interaction among different cultures can solidify particular practical questions and issues.

> *…the effects (homogenizing, diversifying and unifying while diving) may not be all the same for every society…the 'convergence' of higher education, such as the MBA program, tend to share the view that globalization opens up more desirable opportunities for the transfer of management theories, policies and practices across cultural contexts…* [73]

> *Higher education in developing countries has even begun to 'integrate into the world community to meet with the global demands and even conform to the international practice'.* [74]

Code: Future research

There are five perspectives concerning the future analysis of entrepreneurship education including in terms of theory, culture, identity, context, and other perspectives. Some of the points are consistent with discussions as previously described. Direct quotations are listed and assigned to similar themes.

Theory:

Practice-based theory:

72. Curran-Kelly C. Stranger in a Strange Land: using International Student Experiences to Teach Adaptation in Global Marketing. Marketing Education Review 2005; 15(2):55-58.
73. *Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.*
74. *Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.*

> *...an absence of effective and practice-based theory on which to base the development of learning programs...a conceptual gap and lack of clarity in terms of what entrepreneurship and enterprising learning are actually about, in learning and educational practice...a need for a holistic model of entrepreneurial learning which can be adapted to different situations, groups and levels of learning...* [75]

Culture-based theory:

> *...a culture-based theory for the relationships and differences among groups and nations, as related to career development...* [76]

Entrepreneurial intention:

> *...the entrepreneurship education–entrepreneurial intentions relationship...* [77]

Empirical literatures:

> *Entrepreneurship education requires a body of empirical literature all its own.* [78]

Culture:

Boundaries of entrepreneurship:

> *...culture is a social/collective phenomenon, and not an individual. If an entrepreneurial culture emerges, will entrepreneurship disappear? This raises questions on what entrepreneurship really is about.* [79]

Identity:

The definition and range of identity:

75. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
76. Vigoda-Gadot E, Grimland. Values and Career Choice at the Beginning of the MBA Educational Process. Career Development International 2008; 13(4):333-345.
77. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
78. Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
79. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.

> *… the potential effect of entrepreneurship education on identity transformation…an exploration of entrepreneurship education as identity workspace – it may bring urgency and relevance, and a desire to learn, to people and places where those attributes have until now been in short supply…* [80]

Context:

Social and regional contexts:

> *…due attention to social embeddedness and context…the regional context…a complex interplay between university education and regional context in promoting entrepreneurship…* [81]

Organizational contexts:

> *…broader benefits of entrepreneurship education…under-explored and an obsession with start-up activities as the main output of entrepreneurship education should perhaps be abandoned…further longitudinal studies examining how entrepreneurial careers develop within a variety of organizational contexts in the longer term…* [82]

Other themes:

Initial process of being an entrepreneur:

> *…how the aspiring or nascent entrepreneurs learn the language and apply symbols or rituals that instigate them into the 'entrepreneurial tribe'…* [83]

Necessity for establishing a procedure of assessments:

80. *Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.*
81. *Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.*
82. *Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.*
83. *Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.*

> *…a lack of development in the field of innovative assessment practices, including self, peer and stakeholder assessments…* [84]

Code: Suggestions for improving entrepreneurship education

Entrepreneurial knowledge and Skills

Entrepreneurial knowledge and skills [85] should firstly be considered as essential for evaluating the effects of entrepreneurship education [86], as students' entrepreneurial intentions [87] can be positively directed and enhanced during the learning process. For instance, the entrepreneurial skills entailed in the workplace can be seen in reference [88] – creative and innovative problem solving, independent thinking, opportunity recognition and exploitation, readiness for change, risk-taking and self-confidence.

At the same time, modes for advancing new learning experiments and experimenting are at the core of entrepreneurship education [89]. By familiarizing students with the narratives of how entrepreneurial actors have created new artifacts called New Ends, and then providing students with the kinds of tools referred to New Means, such as language, social skills, and behavioral models [90], will eventually progress a clear awareness of entrepreneurial experiences and learners will begin to see themselves as entrepreneurial actors in their own right, creating new "Re-storied" selves and new entrepreneurial identities. [91] A similar outcome can also be approached if students can be successfully endowed with an entrepreneurial culture and if their learning is experiential and problem based [92], [93]. Proper problem-based learning capabilities will allow students to behave and act according to themselves and real-world situations, and create new knowledge rather than consume established knowledge [94]. This is different from normal classroom-based learning [95].

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84. *Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.*
85. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
86. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
87. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.
88. Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.
89. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
90. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
91. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
92. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
93. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
94. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
95. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.

Moreover, training interventions (SEEC securing, expanding, exposing and challenging) and simulations (contingency-based business planning) [96], [97] can be utilized for students to gain high-quality learning experiences [98]. It is beneficial for them to possess an appropriate level of confidence and flexibility towards the changing external environment. In addition, other themes that cannot be ignored are developing trust, creating proactive collaboration, friendships and networks [99] as well as team-based learning in business courses to enhance learning and increase the necessary team-working skills of students [100].

Contextual factors

The environment contributes as a crucial influential factor in entrepreneurial education, as cultural factors reflected in entrepreneurship education have been highlighted in the previous section from various different perspectives.

> *…we need to view entrepreneurship education systematically by identifying contextual factors (e.g. "the changes in the business world), inputs into the system, educational processes and finally outputs* [101], [102]

> *…regarding the importance of taking national differences into consideration when developing entrepreneurship education programs…* [103]

> *…taking account of local enterprise habitus is critical if effective enterprise education is to be carried out…* [104]

Pedagogical perspective

Generally, entrepreneurship as a discipline is mature [105], which means that entrepreneurship can be developed by embarking on a system of curricula and

96. DeTienne DR, Chandler GN. Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach and Empirical Test. Academy of Management Learning & Education 2004; 3(3):242-257.
97. Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
98. Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
99. Carey C, Smith K, Martin LM. Cross-university Enterprise Education Collaboration as a Community of Practice. Education & Training 2009; 51(8/9):696-706.
100. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
101. *Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.*
102. *Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.*
103. *Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.*
104. *Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.*
105. Katz JA. Fully Mature but Not Fully Legitimate: A Different Perspective on the State of Entrepreneurship Education. J Small Bus Manage 2008; 46(4):550-566.

programs with the inclusion of different people, different ideas, and new mixes of rigor and insight [106]. A resource-based view is also necessary, which means that both human and social-network resources can be structured in a well-organized manner.

> *…enhance faculty and student capabilities on an ongoing basis, and form networks with entrepreneurs, professional bodies, business organizations and statutory organizations…* [107]

The regional context and environmental changes will pose an indispensable reference supporting entrepreneurial learning in schools. [108], [109]

> *…'joint sense-making and identity-making work'…depicts idiosyncratic habitus-specific entrepreneurial identities, teaches localized entrepreneurial competences and makes manifest latent local resources…* [110]

Considering the process and teaching methods, a rather flexible course framework should be launched by embracing the enhancement of both managerial and communication skills. [111], [112] A "cross-curricular" [113] design can be applied for motivating students to act based on "playing games or running companies" [114]. A camp model can be taken as a typical example, as emphasized in references [115], [116]. In particular, this suggests a creative way of teaching and learning. A new environment is identified and new group members are introduced.

106. Katz JA. Fully Mature but Not Fully Legitimate: A Different Perspective on the State of Entrepreneurship Education. J Small Bus Manage 2008; 46(4):550-566.
107. *Mutsuddi I. Kickstarting Entrepreneurship Cells in Business Schools: Roadmap and Challenges. Global Management Review 2012; 6(4):61-76.*
108. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
109. Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.
110. *Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.*
111. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
112. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
113. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
114. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
115. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
116. Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.

> *Students are taken away from their normal school environment to another location and mixed with students from other disciplines and/or schools and with external people, usually business leaders and experts.* [117]

Conventional pedagogy has been changed from a transferring process based on existing knowledge to a problem-solving format regarding real-life circumstances. The students' own ideas about being entrepreneurs or establishing business plans are placed at the central point. This will not be judged using normal academic criteria. They will achieve their learning goals not only from knowledge exchange via teachers or instructors, but also from experience exchange by themselves as practitioners.

> *The camp environment facilitates communication between students, instructors, and entrepreneurs… students to develop their own initiatives utilizing their personal strengths and weaknesses, developing a business plan that is most appropriate for them, and forming their own personal image as an entrepreneur…* [118]

Simultaneously, another way has also been noticed that combines academic learning schemes and future-oriented entrepreneurial skills.

> *…arranging internships in start-ups for well-performing entrepreneurship students…through face-to-face contact with the founders and their employees…* [119]

Undoubtedly, the pedagogical process of entrepreneurship is a mutually beneficial approach to education. The role of the students is the focus; their future career is the objective and it realizes entrepreneurial knowledge and skills in practice. To learn from their manner of learning can also provide useful catalogues for educators so as to consider how to improve education itself.

117. *Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.*
118. *Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.*
119. *Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.*

> *...a certain responsibility for preventing the process from closing, preventing the institutional operations of discourse from governing towards the singularity of the real, preventing the tendency to pour the cement of dominant theoretical positions into the fissure and cover it up belongs to her/him in particular. The pedagogue needs to learn how the students handle this process...* [120]

Code: Entrepreneurship education for SMEs

The SME owners, who are noticeably considered to be learning from their experiences [121], also require interaction and engagement of collaboration with the HEI (Higher Education Institution). Both sides (HEI and SME) need to collaborate and create a dialogue in order to stay competitive [122]. A smooth and frequent knowledge flow between them will create a bridge linking universities and businesses, in other words, a connection between theories and practices; this bilateral interaction will eventually provide beneficial support for organizational growth in SMEs. Meanwhile, SMEs are able to supply universities with necessary funding opportunities. Hence, they are mutually indispensable in stimulating and sustaining [123] each other, which definitely demands an emphasis on entrepreneurship education of and for SMEs.

Code: Europeanization

To achieve a European model of culture and identity

Europeanization refers to a kind of cultural strategy [124] aiming to achieve a common identity [125] through multilateral associations among national or regional states in Europe. Such a European identity, symbolized as an exceptional source of development, progress and culture [126]), can be further enhanced by integrating education into this system, which will intensify the progress concerning cultural collaboration and ultimately the creation of a new language of identity [127].

Europeanizing education

Education in the European arena is increasingly regarded as important as a factor for stimulating a Europeanizing model of culture and identity. The gradual construction of an open and dynamic European educational area is the goal of cooperation through Erasmus and other exchange programs [128], will furnish this Europeanizing process

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120. Hjorth D. On Provocation, Education and Entrepreneurship. Entrepreneurship & Regional Development 2011; 23(1):49-63.
121. Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
122. Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
123. Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
124. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
125. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
126. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
127. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
128. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.

with various emergent opportunities for establishing an "imagined community" [129]. However, it is also seen that the development of intensive cross-area sociocultural membership may somehow be in conflict with the far-reaching process of globalization. A wide area-based transfer of knowledge might be in some way constrained by specific cultural variables [130].

Furthermore, the knowledge economy [131] is becoming vital in the contemporary world, and this also demands an appropriate adaptation from education in Europe. Competences and skills that are used flexibly, including those in the fields of information technology, foreign languages, technological culture, and entrepreneurship and social skills, are needed for attaining lifelong learning goals [132]. One of the most significant demands is to optimize educational policies through strengthening "international comparability...cross-institutional collaboration...documentation and statistics for the recognition of qualifications...and for key organizations" [133]. Therefore, the globalizing factor cannot be neglected in Europeanizing education; Europeanization is an organic part of globalization and globalization is the background framework for Europeanization.

Code: Social entrepreneurship education in general

Empirical research into social entrepreneurship (SE) education, especially the competencies required, remains scarce. Alongside the rising demand for social entrepreneurship coursework [134], two groups of perspectives emerge that contain trait-oriented or personal attribute views and behavioral competencies [135]. In fact, competencies concerning not only a person's knowledge and capabilities, but also disposition are considered necessary for organizational performance by social entrepreneurship stakeholders, including social enterprise owners, founders, managers and funders [136]). Social entrepreneurship education is therefore defined as a hybrid set of knowledge and skills grounded in and a reflection of personal and organizational values, ethics, and attitudes [137]. Meanwhile, in a literal sense, social entrepreneurship is inherently associated with the assessment of stakeholders and other practitioners as well as factors within the external context. Social entrepreneurship education in this way can be understood as a process through

129. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
130. Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
131. Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/ Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
132. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
133. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
134. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
135. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
136. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
137. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.

which aspiring social entrepreneurs become 'trilingual' students [138] mastering such behavioral skills of bridging competing social-welfare, commercial and public-sector rationales [139].

> *...they are taught to become fluent in the three different languages and conventions of the worlds in which they garner resources, to be at ease with the cultures of these different worlds, and to be able to interact with members of these worlds in a culturally sensitive way...* [140]

To ensure that students are able to transfer their competencies to the workplace effectively for the task or job at hand is also in line with educators' targets [141].

Code: Identity reflected in social entrepreneurship education

From social entrepreneurs' points of view

When social entrepreneurs identify themselves as learners in a learning community, the business and social environment will be naturally combined in regard to their intentions and status in society.

> *...concept of communities of practice...highlights the importance of developing social entrepreneurs' identities as learners...helpful in dealing with the tension inherent in their identity as social entrepreneurs....* [142]

Learning itself is integrated with social events, as learning for a social entrepreneur is more likely to be associated with communities of practice related to their social aims and values [143]. Indeed, social image and value are highlighted and they might find it difficult to adjust to certain business school programs provided that teaching is primarily based on pure business planning and wealth-accumulation.

From the students' points of view

In designing the social entrepreneurship curriculum in a school, students should be offered certain opportunities upon recognition of identity work. [144], [145] The ultimate learning objective is to assimilate the learners into the social world in which they will

138. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
139. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
140. *Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.*
141. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
142. *Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.*
143. Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
144. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
145. Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.

be actively involved as a member. Hence, identity work has been delineated as a set of active processes that serve to construct, strengthen, and revise one's conception of and commitment to a particular identity (whether in the personal or professional realm) [146]. The first step is to motivate students to develop desires consistent with that social identity and to make a positive contribution to society." [147]

> *…a social identity and self-efficacy approach to social entrepreneurship education…helping them identify with the social entrepreneurship community and develop beliefs that they have the tools, abilities, and resources necessary to begin making a contribution…* [148]

After their social consciousness is affirmatively initiated, the reasonable formulation of a plan can be engaged. However, it is anticipated that students should use their practical capabilities – to find the right way to solve real-world problems instead of learning a vague idea for theorizing business proposals. Therefore, besides building on the emotional, concrete environmental conditions need to be taken into account because social entrepreneurship is socially oriented and socially targeted.

> *Going beyond course content and experiential learning, identity work interventions in the context of a social entrepreneurship program should be aimed at supporting students in understanding and shaping their future professional and personal identities as social entrepreneurs operating at the intersection of distinct worlds.* [149]

Code: Environmental factor (national context) reflected in social entrepreneurship education

National contextual factors cannot fully determine the design or launching of social entrepreneurship education. Nevertheless, "the degree to which the social entrepreneurship sector is dependent upon three institutional logics (incl. 'social-welfare, commercial and public-sector logics')" [150] deviates in some countries. As exemplified,

> *…in some contexts, the influence of the state may be very strong, as in Scandinavian countries…it is much weaker, as in many emerging economies…* [151]

146. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
147. Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.
148. *Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.*
149. *Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.*
150. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.

In addition, other logics such as the "community logic or religious logics" [152] may also exert a significant influence on students' social-venture plans based on their profiles and environmental elements. Hence, educators should modify social entrepreneurship coursework and programs to be consistent with "the socialization into a given logic depending on the degree to which the sector is dependent upon this logic for social or material support" [153].

Code: Suggestions for improving social entrepreneurship education

Social entrepreneurship programs should be built on certain principles among students nurturing familiarity, positive relations, and trust [154], and targeted at nourishing their psychological safety and committed learning identities [155]. In this sense, positive social outcomes and fluent communication with public-sector stakeholders will ultimately be fabricated instead of a detachment from social value and social-network creation. [156], [157]

In order to increase the effectiveness of teaching, one of the fundamentals is to recognize needs from the marketplace and try to improve student skills that will be applied within their career path. ("...being more responsive to stakeholders, particularly practitioners..." [158]; "...incorporate multiple logic-building skills – 'social-welfare, commercial and public-sector logics' – to those that mainly focus on providing social-venture and social opportunity-specific knowledge..." [159])

During the learning process, students should learn how to be able to forge a clear sense of self-efficacy and the confidence necessary to combat the growing pervasiveness of the world's social ills [160]. The remaining task for educators is to establish a framework comprising of identity-and value-stimulating schemes aimed at aiding students in defining the social category, identifying prototypical members and their characteristics, and encouraging active engagement through modeling vicarious learning using social persuasion and providing mastery experiences [161].

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151. *Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.*
152. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
153. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
154. Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
155. Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
156. Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
157. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
158. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
159. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
160. Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.
161. Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.

10.5 Conclusions

In this study we asked how research on entrepreneurship and entrepreneurship education world-wide is taking account of the new requirements for flexible entrepreneurial identities in a cross-cultural environment of entrepreneurship, what are the essential elements of recent high-quality research and what can be learnt from it for the future. Entrepreneurship research is wide-ranging but an empirical search indicated that research that also explores identity, cross-cultural issues and education is rare. We now sum up the findings and discuss their limitations as well as future research possibilities.

Discussion on the main findings

Earlier research on identities and cross-cultural entrepreneurship has dealt extensively with pedagogical issues. Reading and analyzing the material from relevant journals we end up with a few special findings in order to strengthen the entrepreneurial identity for cross-cultural needs:

- Enterprising skills and knowledge benefit from reflection, and highly active experimental modes of teaching are needed. The technical aids, simulation, games and programs could be developed in order to support reflection.
- Identity work is of relevance and students should be guided along methods of learning where they learn from each other and by reflecting upon their own identity positioning. Peer support and mentoring can be useful tools for this kind of learning.
- Cultural levels from national to local should be recognized in entrepreneurship education. Internationalization will provide new opportunities for the students and teaching should support learning. Students' experiences and attitudes could be used in the education more systematically.
- New learning tools should be developed in entrepreneurship education. Self-reflection, experimenting and practice-based learning as well as problem-based learning and taking advantage of experience are new ways of teaching. Students learn roles and identities and they process into specific skills. Narratives and self-narration are new pedagogically promising techniques that suit learning identity.
- Europeanizing of entrepreneurship education has its benefits and challenges. International comparability is required and cross-institutional co-operation is of relevance worldwide. Western and Eastern cultural aspects can enrich reflection and mutual understanding and co-operation.

The findings of this research also indicated the broad existence of social entrepreneurship studies in relation to questions of identity and cross-cultural issues in entrepreneurship education. Overall, social entrepreneurship is the process of pursuing innovative solutions to social problems. More specifically, social entrepreneurs adopt a mission to create and sustain social value instead of pure business orientation. While business entrepreneurs typically measure performance in terms of profit and return, social entrepreneurs also take into account a positive return for society. Social entrepreneurship can also be practiced in an international context. Social entrepreneurs are also required to learn to construct their identity:

- Raising social awareness is needed and one should commit to social issues, and build upon the emotional aspect of enterprise.
- Social ventures have a different logic compared to classical entrepreneurship, this might include local, community or religious aspects. Specific environmental issues should be included in business plans and addressing real-world problems is of special importance. Students might find it difficult to adapt to the ordinary business school programs based on pure business planning.
- Social entrepreneurship especially benefits from pedagogies and ways of teaching that take account of and are based on different ideas about entrepreneurial identity.

Overall, education is a way of shaping and reshaping individual identities, both personal and professional. The educational process itself by which identities are created is relevant, but equally relevant is its content. Bridging from earlier values, knowledge and experiences is important especially in the case of a transition society characterized by rapid change. Entrepreneurship education can be seen in this context either as a change agent toward a better future, or as a tool that supports the subjects themselves in transforming and adjusting to new cultural contexts, and building identities that meet the new economic circumstances. The practice of entrepreneurship is constructionist by nature, creating and recreating its own rules in each instance of use. In management education, the use of narratives and the stimulation of the tacit knowledge of the participants work better than recipe books in the creation of the identity of intending or existing entrepreneurs.

Identity building can take place through the collective sharing of experiences by students. When students in teams discuss their own experiences of business life and how it is changing, they bridge their previous experiences into the current context. Reflecting on these experiences in their own words will help them find their own way to face the realities of business life and adopt their own identity as a business professional. This creates a sense of freedom and personal control over one’s own activities.

Identity is an outcome of shared, interactional processes where individuals locate themselves within various societal structures and cultures. Entrepreneurship education can promote such competencies in students and enable them to transform their identities and find trusting relations and opportunities for business actions and new ventures. Opportunities may be found in new enterprises and partnerships. Entrepreneurship is about doing as well as copying and learning from experience.

Identity building as an educational aim includes the values, attitudes and capabilities of students that support their adaptation to changing requirements. Cooperation, inter-and intra-organizational communication, and customer-orientated product development are important considerations. It is also notable that identity building helps society to develop social capital, which means social networks and trust-based relationships as a means of gaining prosperity.

Future research and limitations of the study

Even if based on extensive literature analysis, we end up finding some limitations of the study approach. A longer time-range for the longitudinal data could picture the course of the identity research of entrepreneurship education probably somewhat differently. Also we are aware that using the defined criteria definitely has restricted the selected studies and left out some interesting work. Because our study approach is conceptual, also future research could take its main findings as a frame for an empirical study. Social entrepreneurship education still could benefit conceptual work concerning its basic nature, and studies could be more sensitive to its different contexts. Cross-cultural analysis could include many environments and study how regional and more international contexts effect the nature of social entrepreneurship education. A more systematic and holistic view of theoretical framework could be developed concerning practice-oriented model with ideas of entrepreneurial learning. Finally, the studies used in the analysis also did not include a lot of practical assessment and comprehensive evaluation system, which might be a good subject of study in future research.

Nomenclature

ATLAS.ti: is defined as a computer software program, which has been largely applied in qualitative research (incl. content analysis in this paper) for exploring different types of materials especially without particular structures (e.g. “text, pictures, sound and video”). Researchers are able to categorizing each document based on codes which can be created partly in accordance with their interpretation and logic. By analyzing the relationship between the codes, theoretical ideas can be generalized in a transparent and visualized way.

Code: is meant as a text segment located, selected and marked by researchers based on the research objectives/questions of a paper; it can be identified directly as a quotation or defined by the researchers themselves with a new name in a streamlined version.

10.6 References

1. Aaltio I. Management Education as an Identity Construction: the Case of Estonia and its Transition Economy Background. International Journal of Entrepreneurship and Small Business 2008; 5(1): 83-99.
2. Carrier C. Pedagogical Challenges in Entrepreneurship Education. In: Kyrö P, Carrier C. (eds.) The Dynamics of Learning Entrepreneurship in a Cross-cultural University Context. Entrepreneurship Education Series 2, Hämeenlinna: University of Tampere, Research Centre for Vocational and Professional Education; 2005. p136-158.
3. Fang, T. Yin Yang: A New Perspective on Culture. Management and Organization Review 2012; 8(1): 25–50.
4. Rae D. Yliopistot ja Yrittäjyyskasvatus: Vastaus Uuden Aikakauden Haasteisiin. In: Heinonen J, Hytti U, Tiikkala A. (eds.) Teoksessa Yrittäjämäinen Oppiminen: Tavoiteita, Toimintaa ja Tuloksia. Turun Yliopisto, Turku: Uniprint; 2011. p38-69.

5. Pittaway L, Cope J. Entrepreneurship Education: A Systematic Review of Evidence. International Small Business Journal 2007; 25(5): 479-510.
6. Kyrö P. Entrepreneurial Learning in a Cross-cultural Context Challenges Previous Learning Paradigms. In: Kyrö P, Carrier C. (eds.) The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context. Entrepreneurship Education Series 2, Hämeenlinna: University of Tampere, Research Centre for Vocational and Professional Education; 2005. p68-104.
7. Tajfel H., editor. The Context of Social Psychology: A Critical Assessment. London: Academic Press; 1972.
8. Torokoff M. The Role of School in Teaching Enterprise. In: Mets T, Venesaar U, and Kolbre E. (eds.) Entrepreneurship in Estonia: Policies, Practices, Education and Research. Tartu University Press; 2006. p254-275.
9. Czarniawska B. Narratives of Individual and Organizational Identities. In: Deez S. A. (ed.), Communication Yearbook 17, London: Sage; 1994. p193-235.
10. Hogg M.A, Terry D.J. Social Identity Theory and Organizational Processes. In: Hogg M.A, Terry D. J. (eds.) Social Identity Theory Processes in Organizational Contexts. Philadelphia: Taylor & Francis; 2001. p1-13.
11. Hall S., editor. Representation: Cultural Representations and Signifying Practices. London: Sage; 1997.
12. Ulijn J, Aaltio I, Guerra J, Uhlaner L. Cooperation and Teamwork in Technology Start-ups: Reflected in Some Italian, British, Dutch and German Findings. International Journal of Entrepreneurship and Small Business 2011; 14(1): 100-126.
13. Holmgren C, From J, Olofsson A, Karlsson H, Snyder K, Sundtröm U. Entrepreneurship Education: Salvation or Damnation? International Journal of Entrepreneurship 2004; 8:55-71.
14. Rae D. Entrepreneurial Learning: a Practical Model from the Creative Industries. Education & Training 2004; 46(8/9):492-500.
15. DeTienne DR, Chandler GN. Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach and Empirical Test. Academy of Management Learning & Education 2004; 3(3):242-257.
16. Frederking LC. A Cross-National Study of Culture, Organization and Entrepreneurship in Three Neighborhoods. Entrepreneurship & Regional Development 2004; 16(3):197-215.
17. Honig B. Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning. Academy of Management Learning & Education 2004; 3(3):258-273.
18. Curran-Kelly C. Stranger in a Strange Land: using International Student Experiences to Teach Adaptation in Global Marketing. Marketing Education Review 2005; 15(2):55-58.
19. Katz JA. Fully Mature but Not Fully Legitimate: A Different Perspective on the State of Entrepreneurship Education. J Small Bus Manage 2008; 46(4):550-566.
20. Vigoda-Gadot E, Grimland. Values and Career Choice at the Beginning of the MBA Educational Process. Career Development International 2008; 13(4):333-345.
21. Carey C, Smith K, Martin LM. Cross-university Enterprise Education Collaboration as a Community of Practice. Education & Training 2009; 51(8/9):696-706.

22. Goh JWP. Globalization's Culture Consequences of MBA Education across Australia and Singapore: Sophistry or Truth? Higher Education 2009; 58(2): 131-155.
23. Grek S, Lawn M. A Short History of Europeanizing Education: the New Political Work of Calculating the Future. European Education 2009; 41(1): 32-54.
24. Hytti U, Stenholm P, Heinonen J, Seikkula-Leino J. Perceived Learning Outcomes in Entrepreneurship Education: the Impact of Student Motivation and Team Behavior. Education & Training 2010; 52(8/9):587-606.
25. Bager T. The Camp Model for Entrepreneurship Teaching. International Entrepreneurship and Management Journal 2011; 7(2):279-296.
26. Giacomin O, Janssen F, Pruett M, Shinnar RS, Llopis F, Toney B. Entrepreneurial Intentions, Motivations and Barriers: Differences among American, Asian and European students. International Entrepreneurship and Management Journal 2011; 7(2):219-238.
27. Harmeling SS. Re-storying an Entrepreneurial Identity: Education, Experience and Self-narrative. Education & Training 2011; 53(8/9):741-749.
28. Hjorth D. On Provocation, Education and Entrepreneurship. Entrepreneurship & Regional Development 2011; 23(1):49-63.
29. Van Reine PP, Dankbaar B. A Virtuous Circle? Co-evolution of Regional and Corporate Cultures. European Planning Studies 2011; 19(11):1865-1883.
30. Dodd SD, Hynes BC. The Impact of Regional Entrepreneurial Contexts upon Enterprise Education. Entrepreneurship & Regional Development 2012; 24(9):741-766.
31. Gordon I, Hamilton E, Jack S. A Study of a University-led Entrepreneurship Education Program for Small Business Owner/Managers. Entrepreneurship & Regional Development 2012; 24(9):767-805.
32. Howorth C, Smith SM, Parkinson C. Social Learning and Social Entrepreneurship Education. Academy of Management Learning & Education 2012; 11(3):371-389.
33. Kwong CCY, Thompson P, Cheung CW-, Manzoor H. The Role of Environment in Fostering Conductive Entrepreneurial Learning: Teaching the 'Art' of Entrepreneurship in Boot Camps. Journal of General Management 2012; 38(1):45-71.
34. Miller TL, Wesley II CL, Williams DE. Educating the Minds of Caring Hearts: Comparing the Views of Practitioners and Educators on the Importance of Social Entrepreneurship Competencies. Academy of Management Learning & Education 2011; 11(3): 349-370.
35. Mutsuddi I. Kickstarting Entrepreneurship Cells in Business Schools: Roadmap and Challenges. Global Management Review 2012; 6(4):61-76.
36. Pache A, Chowdhury I. Social Entrepreneurs as Institutionally Embedded Entrepreneurs: Toward a New Model of Social Entrepreneurship Education. Academy of Management Learning & Education 2012 ; 11(3):494-510.
37. Smith IH, Woodworth WP. Developing Social Entrepreneurs and Social Innovators: A Social Identity and Self-Efficacy Approach. Academy of Management Learning & Education 2012; 11(3):390-407.
38. Walter SG, Dohse D. Why Mode and Regional Context Matter for Entrepreneurship Education. Entrepreneurship & Regional Development 2012; 24(9):807-835.

39. Hytti U, Heinonen J. Heroic and Humane entrepreneurs: Identity Work in Entrepreneurship Education. Education+Training 2013; 55(8):886-898.
40. Bae TJ, Qian S, Miao C, Fiet JO. The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: a Meta-Analytic Review. Entrepreneurship Theory and Practice 2014; 38 (2): 217-254.

Chapter 11 Training New Housing Entrepreneurs — A Malaysian Scenario

by Mastura Jaafar [1], Syed Putra Syed Abu Bakar [2] and Wan Mohd Dzulkifli Wan Daud [3]

11.1 Introduction

11.1.1 Housing development industry in Malaysia

Housing is a basic human need that not only serves as a shelter, but also is a simultaneous source of luxury, investment, privacy, and comfort. In Malaysia, the housing sector is an indispensable indicator of economic empowerment because the meeting of housing needs for all people has long been an objective of national policy [4]. Housing is an important wealth constituent [5] that affects the welfare of all people either directly or indirectly [6] in the form of improved living environments. Moreover, the housing sector significantly affects the macroeconomy of Malaysia: in 1996, it contributed 4.5% to the growth domestic product [7] and acted as a tool to 'pump prime' the economy following the Asian financial crisis from 1997 to 1998 [8].

Residences cannot be developed without housing developers [9]. According to Jaafar et al. [10], housing development is the provision of money to build residential estates under stipulated rules and regulations. Such development is a localized [11], unique, and

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4. Tan TH. Sustainability and Housing Provision in Malaysia. Journal of Strategic Innovation and Sustainability 2011;7(1) 62-71.
5. Case KE, Quigley JM, Shiller RJ. Comparing wealth effects: the stock market versus the housing market. Cambridge, MA: National Bureau of Economic Research; 2001. Working Paper No.: 8606.
6. Grimes A, Kerr S, Aitken A. Housing and economic adjustment. Wellington: Motu Economic and Public Policy Research Trust; 2003. Motu Working Paper No.: 03-09.
7. Yahya AZ. Government Housing Policies and Incentives: The Government Viewpoint. In: Mohd-Don A. (ed.) Housing a Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p189-207.
8. Ali R. Entrepreneurship-related factors and firm performance: A study on the Bumiputera housing developers in Peninsular Malaysia. PhD thesis. Universiti Sains Malaysia; 2011.
9. Maruani T, Amit-Cohen I. Characteristics of Developers and Their Relations to Open Space Conservation. Land Use Policy 2011;28(4) 887-897.
10. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Success and Psychological Traits of Housing Developers. Australasian Journal of Construction Economics and Building 2014;14(2) 57-72.
11. Buzzelli M, Harris R. Cities as the Industrial Districts of Housebuilding. International Journal of Urban and Regional Research 2006;30(4) 894-917.

high-risk industry given the imposition of regulations [12] that may inevitably affect the construction process. To start a housing development business, entrepreneurs should have a large cash capital of no less than RM 250,000 [13]. Therefore, such entrepreneurs must have a disposition for risk-taking. By contrast, Abdul-Aziz et al. [14] claim that housing developers are risk-averse and that they maximize profits without thinking overly about risks and challenges.

Jaafar et al. [15], [16] also define housing developers as the chief coordinators that construct residential dwellings for sale and profit. Housing developers convert on-paper ideas into housing products [17] as project initiators [18]. In Malaysia, housing developers must obtain a license from the Ministry of Housing and Local Government (MHLG) [19], and they are encouraged to register as members of the Real Estate and Housing Developers' Association Malaysia (REHDA) [20]. Khalid [21] has also defined the term 'private housing developers' as businesses/entrepreneurs who provide housing units for sale. These businesses/entrepreneurs hold both an MHLG license and a membership in REHDA. However, Jaafar and Wan-Daud [22] contend that those who have developed four or fewer housing units, or who have sold four or fewer lots of land, cannot be considered housing developers because they deviate from the Housing Development Act (Control and Licensing) established in 1966. Therefore, they are known as micro-housing developers in the current study. With regard to size (in terms of number of houses), small-scale developers have developed 5–49 houses; medium-scale developers have built 50 –200 housing units; and large-scale developers have erected more than 200 units for each project.

Programme:	Ninth Malaysia Plan (2006-2010)		
	Low cost:	Medium cost:	High cost:

Table 11.1 Housing targets of the public and private sectors in Malaysia (units) Source: Malaysia (2006)

12. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Success and Psychological Traits of Housing Developers. Australasian Journal of Construction Economics and Building 2014;14(2) 57-72.
13. Wan-Mohd-Dzulkifli MA. Panduan dan Prosedur Asas Cadangan Pembangunan Projek Perumahan. Penang: Penerbit USM; 2009.
14. Abdul-Aziz AR, Ho SY, Jaafar M. Impact of Firm Characteristics on the Value of Resources for Malaysian Private Housing Developers. Journal of Financial Management of Property and Construction 2007;12(2) 95-105.
15. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Success and Psychological Traits of Housing Developers. Australasian Journal of Construction Economics and Building 2014;14(2) 57-72.
16. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Successes of Malaysian Housing Developers. In: Wang J. (ed.) Encyclopedia of Business Analytics and Optimization. Hershey, PA: IGI Global; 2014. p418-428.
17. Anikeeff MA, Sriram V. Construction Management Strategy and Developer Performance. Engineering, Construction and Architectural Management 2008;15(6) 504-513.
18. Maruani T, Amit-Cohen I. Characteristics of Developers and Their Relations to Open Space Conservation. Land Use Policy 2011;28(4) 887-897.
19. Goh BL. Housing Today. In: Mohd-Don A. (ed.) Housing the Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p71-106.
20. Othman A. The effect of the planning system on housing development: A study of developers' behaviour in Kuala Lumpur and Johor Bahru, Malaysia. PhD thesis. University of Aberdeen; 1999.
21. Khalid MS. Abandoned housing development: The Malaysian experience. PhD thesis. Heriot-Watt University; 2010.
22. Jaafar M, Wan-Daud WD. Strategic Collaborative Approach: A Case Study on Training New Housing Entrepreneurs in Malaysia. International e-Journal of Community & Industry Engagement 2014;1(1) 10-19.

Public sector	**85,000**	**27,100**	**28,700**
Low-cost housing	67,000	-	-
Housing by commercial agencies	13,500	8,200	4,700
Housing by land schemes	4,500	-	-
Institutional accommodation quarters for staff	-	18,900	24,000
Private sector	**80,400**	**183,600**	**199,095**
Private developers	77,700	178,000	194,495
Cooperative societies	2,700	5,600	4,600
Total	**165,400**	**210,700**	**227,795**

Table 11.1 Housing targets of the public and private sectors in Malaysia (units) Source: Malaysia (2006)

Both the public and private sectors provide housing in Malaysia. Since the declaration of the country's independence, the public sector has assumed the role of providing housing for people. The housing projects constructed by this sector are normally funded by the government, and these funds are allocated from the national budget [23]. Nonetheless, Jaafar et al. [24] note that private housing developers are also key suppliers of new housing in Malaysia. Thus, they have considerable influence on the industry. Their housing schemes are normally self-financed, deposited through would-be buyers, or obtained from the financial market [25]. In fact, the private sector has provided houses more effectively than the public sector under the National Housing Policy [26] given the economic conditions that allow the private sector to secure high returns in the industry [27].

23. Sirat M, Che-Hamat AF, Abdul-Aziz AR, Rahim A, Salleh H, Yaakob U. Low-Cost Housing in Urban Centres of Malaysia: Issues and Challenges. Penang: Penerbit USM; 1999.
24. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Successes of Malaysian Housing Developers. In: Wang J. (ed.) Encyclopedia of Business Analytics and Optimization. Hershey, PA: IGI Global; 2014. p418-428.
25. Sirat M, Che-Hamat AF, Abdul-Aziz AR, Rahim A, Salleh H, Yaakob U. Low-Cost Housing in Urban Centres of Malaysia: Issues and Challenges. Penang: Penerbit USM; 1999.
26. Agus MR. The Role of State and Market in the Malaysian Housing Sector. Journal of Housing and the Built Environment 2002;17 49-67.
27. Othman A. The effect of the planning system on housing development: A study of developers' behaviour in Kuala Lumpur and Johor Bahru, Malaysia. PhD thesis. University of Aberdeen; 1999.

The housing development sector in Malaysia has transformed significantly since the country gained its independence in 1957 [28]. In the Second Malaysia Plan (from 1971 to 1975), the private sector increased its influence when the government sought the cooperation of private developers in the provision of low-cost houses. As per this plan, at least 30% of the houses in each private housing project must be low cost. The private sector has exceeded this set target by providing a surplus of 41%, 29.4%, and 116% of houses over the past three consecutive Malaysia Plan periods (1991–1995, 1996–2000, and 2000–2005, respectively). Table 11.1 shows the actual housing provision target for the period of 2006–2010 in Malaysia. In the Ninth Malaysia Plan, the private sector is required to construct 80,400 low-cost housing units, 183,600 medium-cost units, and 199,095 high-cost units. Unfortunately, the government has not documented the statistics for the targets in the Tenth Malaysia Plan (2011–2015) and for the housing erected by the public and private sectors.

11.1.2 Housing demand and supply

The universal demand for housing increases over time primarily as a result of demographic trends and rising income [29]. Since the rapid urbanization that began in 1960, a significant budget has been allocated for housing provision in every five-year Malaysian development plan, especially for the urban areas [30]. The main factors that spur the strong housing demand are population growth and age profile, urbanization and migration, and household income. However, gender, occupation, education, and transportation costs also influence high public demand. Moreover, housing demand can also be associated with the preferred housing choices of local homebuyers, which mainly vary in terms of housing category, zone, project size, and project period [31].

Year	Numbers (Million)	Average annual growth rate (%)	Population density (persons per sq. km.)	Urbanization (%)
1970	10.4	3.9	31.0	26.9
1980	13.7	2.3	42.0	34.2

Table 11.2 Population growth, density, and urbanization of Malaysia (1970–2020) Source: Malaysia (2006)

28. Abdul-Aziz AR, Ho SY, Jaafar M. Impact of Firm Characteristics on the Value of Resources for Malaysian Private Housing Developers. Journal of Financial Management of Property and Construction 2007;12(2) 95-105.
29. Bujang AA, Zarin HA, Jumadi N. The Relationship between Demographic Factors and Housing Affordability. Malaysian Journal of Real Estate 2010;5(1) 49-58.
30. Khor SCS, Abu-Bakar AH. Incorporating Sustainable Management System into Housing Development Practice in Malaysia. International Journal of Sustainable Development 2012;15(3) 277-291.
31. Idrus N, Ho CS. Affordable and quality housing through the low-cost housing provision in Malaysia. Paper presented at: Seminar of Sustainable Development and Governance; 2008 June 26; Toyohashi, Japan.

Year	Numbers (Million)	Average annual growth rate (%)	Population density (persons per sq. km.)	Urbanization (%)
1991	18.4	2.6	56.0	50.6
2000	23.3	2.6	71.0	61.8
2010	28.3	1.9	85.0	71.0
2020	31.6	1.1	95.0	83.0

Table 11.2 Population growth, density, and urbanization of Malaysia (1970–2020) Source: Malaysia (2006)

Table 11.2 indicates population growth, density, and urbanization in Malaysia from 1970 to 2020. The Malaysian population has increased from 10.4 million to 28.3 million at an average rate of 2.5% over the past four decades (1970–2010), which denotes an increase of almost three times. The population size is expected to reach 31.6 million in 2020 at an average growth rate of 1.1%, as per the projection of statisticians. The population density in Malaysia increased from 31 people per square kilometre in 1970 to 42 in 1980, then to 56 in 1991 and to 71 in 2000. Likewise, the level of urbanization in this country also increases. The percentage of the population residing in urban areas increased from 26.9% in 1970 to 34.2% in 1980 and 50.6% in 1990. By 2000, more than two-thirds of the population (61.8%) was located in the urban areas of Malaysia [32]. Studies by national scholars [33], [34], [35] substantiated this scenario by reporting the decline of the rural population to 36% and the steady growth of the urban populace in 2005. These circumstances aggravate competition among private housing developers to fulfil housing needs and enhance housing development in the country.

The Malaysian government addresses the substantial increase in housing demand through the MHLG. This department has actively set the direction for national development plans with respect to housing [36]. At present, it provides input and directs issues related to housing deliberation, needs, and target numbers. Furthermore, it collaborates with other parties to implement related programmes, strategies, and

32. Mahari Z. Demographic transition in Malaysia: The changing roles of women. Paper presented at the 15th Conference of Commonwealth Statisticians; 2011 February 7-10; New Delhi, India.
33. Bujang AA, Zarin HA, Jumadi N. The Relationship between Demographic Factors and Housing Affordability. Malaysian Journal of Real Estate 2010;5(1) 49-58.
34. Khor SCS, Abu-Bakar AH. Incorporating Sustainable Management System into Housing Development Practice in Malaysia. International Journal of Sustainable Development 2012;15(3) 277-291.
35. Abu-Bakar AH, Razak AA, Abdullah S, Awang A, Perumal V. Critical Success Factors for Sustainable Housing: A Framework from the Project Management View. Asian Journal of Management Research 2010;1(1) 66-80.
36. Yahya AZ. Government Housing Policies and Incentives: The Government Viewpoint. In: Mohd-Don A. (ed.) Housing a Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p189-207.

plans. Aside from the aforementioned responsibilities, the critical role of MHLG is to monitor the effectiveness of housing procedures in Malaysia to protect the benefits of all stakeholders.

11.1.3 Housing policies in Malaysia

The Malaysian government has formulated a set of policies to strengthen the involvement of the private sector in housing production and delivery [37]. Its housing policy is definitive, and is articulated adequately in all of the five-year Malaysia Plans [38]. Furthermore, this policy primarily aims to ensure that all Malaysians have access to adequate and decent shelter to eliminate slum dwellings and squatter living areas. The MHLG plans the regulation of residential developments, issues licenses and permits for advertisement and sale to housing developers, and ensures that all parties involved abide by all of the legislations and regulations through proper enforcement and by providing necessary financial assistance [39]. Specifically, the ministry is tasked with enforcing housing-related laws and regulations to safeguard the interests of homebuyers [40]. The MHLG also considers applications for development and for the licensing of housing developers in Peninsular Malaysia [41].

The Malaysian housing industry is highly controlled by several laws, policies, and guidelines, which include the National Land Code (NLC) 1965, Government Act 1976 (Act 171), Uniform Building By-Law 1984 (UBBL), Environmental Quality Act 1984, Local Government Act 1976, Street, Drainage and Building Act 1974 (Act 133), Town and Country Planning Act 1976 (Act 172), Town Planning Act 1995, Housing Developers (Control and Licensing) Act 1966, Strata Titles Act 1985, Fire Services Act 1988, and Sewerage Services Act 1993, as outlined by Abdullah et al. [42]. In addition to these laws, housing developers who design the layout of proposed housing projects should consider the requirements imposed by the local authority and the demand factor of the project [43] to ensure business survival.

11.1.4 Housing development process

To implement a housing development project, homebuilders should perform the following: acquire land, alter land use to suit the intended development purpose,

37. Othman A. The effect of the planning system on housing development: A study of developers' behaviour in Kuala Lumpur and Johor Bahru, Malaysia. PhD thesis. University of Aberdeen; 1999.
38. Abdul-Aziz AR, Jahn-Kassim PS. Objectives, Success and Failure Factors of Housing Public Private Partnerships in Malaysia. Habitat International 2011;35(1) 150-157.
39. Ali R. Entrepreneurship-related factors and firm performance: A study on the Bumiputera housing developers in Peninsular Malaysia. PhD thesis. Universiti Sains Malaysia; 2011.
40. Omar D. Communal Living Environment in Low Cost Housing Development in Malaysia. Asian Social Science 2008;4(10) 98-105.
41. Wan-Mohd-Dzulkifli MA. Panduan dan Prosedur Asas Cadangan Pembangunan Projek Perumahan. Penang: Penerbit USM; 2009.
42. Abdullah AA, Harun Z, Abdul-Rahman H. Planning Process of Development Project in the Malaysian Context: A Crucial Brief Overview. International Journal of Applied Science and Technology 2011;1(2) 74-81.
43. Khalid MS. Abandoned housing development: The Malaysian experience. PhD thesis. Heriot-Watt University; 2010.

integrate resources required for the projects, interpret the demand and supply of the market, provide housing units, and finally sell the completed houses. Furthermore, actual housing projects must also incorporate the provisions of various prescribed facilities and amenities as well as safeguard the environment [44]. Jaafar et al. [45] posit that the most critical supporting factors of housing development are finance, land, building materials, and consultancy services. Appointed consultants, who generally include architects and engineers, must follow all of the regulations imposed by the government; these regulations include obtaining permission approval, following the guidelines for construction activities, and adhering to the conditions imposed upon completion of a project, such as procedures for procuring a Certificate of Completion and Compliance (CCC).

Figure 11.1 presents the processes and procedures involved in project development. Jaafar and Wan-Daud [46] state that the practices are quite similar for both large and small projects. However, micro-developers without a development license must provide certain infrastructure facilities, such as elevated water tanks, electricity sub-stations, and other public amenities.

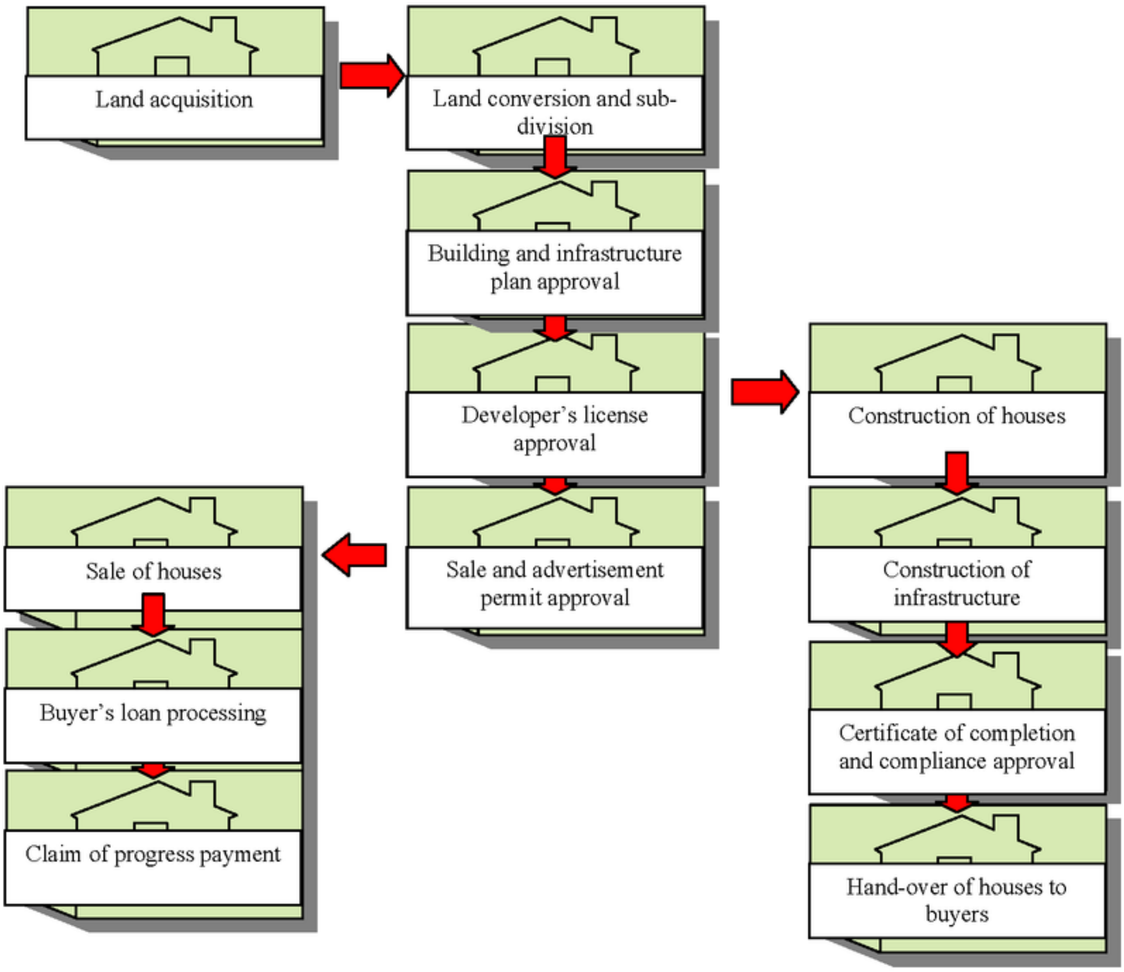

Figure 11.1 Developing New Micro-Housing Developers through Training

44. Sudin, PW. International Experiences III: Low-Cost Housing. In: Mohd-Don A. (ed.) Housing the Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p823-843.
45. Jaafar M, Abdul-Aziz AR, Ali R. Entrepreneurship: A Critical Outlook on Housing Developers in Malaysia. The International Journal of Construction Management 2010;10(4) 77-101.
46. Jaafar M, Wan-Daud WD. Strategic Collaborative Approach: A Case Study on Training New Housing Entrepreneurs in Malaysia. International e-Journal of Community & Industry Engagement 2014;1(1) 10-19.

Hynes and Richardson [47] define training as a knowledgeable initiative to educate specific skills for the enhancement of individuals and organizations. Training nascent entrepreneurs is important because it encourages a tendency to start a business [48] and boosts the likelihood of entrepreneurial intention [49]. According to de Mel et al. [50], increased profits and improved management practices can be formed with efficient training, which is believed to reduce the rate of business failures [51]. An ideal scenario could be achieved if entrepreneurs can quickly adapt to the industry and the environment. As a part of entrepreneurial activities, the success of housing entrepreneurs also depends on flexibility and uncertainties.

The Malaysian housing sector is commonly referred to as ‘a rich businessman’s game’ that is monopolized by large companies, including S P Setia Berhad, Sunway Berhad, Mah Sing Group Berhad, Paramount Corporation Berhad, UM Land, and a few government-related agencies. The lucrative returns of the housing sector have attracted companies from different sectors to join the industry. Sime Darby Plantation, YTL Communications, and Naza Motor Trading Sdn Bhd are only a few examples of mega players in other industries that have diversified into the housing sector. In view of the high impact of the industry toward the environment, people tend to recognize these giant companies and ignore the existence of small and newly established companies. The existence of micro-and small housing development firms has been mostly ignored, particularly in large Malaysian cities, such as Kuala Lumpur, Penang, and Johor Bahru. Land cost is the main constraint for the start-up and survival of such firms. However, small and new firms can still take advantage of the less developed cities in Malaysia, where the land cost is still affordable. Many micro-and small housing developers operate in East Peninsular Malaysia, particularly in Kelantan and Terengganu, because of the lack of houses provided by large housing developers in this area.

As previously mentioned, private housing developers in Malaysia register with the Real Estate and Housing Developers’ Association (REHDA). With branches in each state of Malaysia, REHDA serves a central function in ensuring that the views of housing developers are heard by relevant authorities and government agencies [52], [53]. The REHDA Institute is responsible for providing courses and training to the industry players. The main task of REHDA Institute is to address and facilitate the training and education of the industry. Courses and seminars offered for industry players are related to legislation/regulations/policies/procedures, corporate/financial aspects, technical and infrastructure aspects, property market data, analytical tools, and

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47. Hynes B, Richardson I. Entrepreneurship Education: A Mechanism for Engaging and Exchanging with the Small Business Sector. Education+Training 2007;49(8/9) 732-744.
48. Upton N, Sexton D, Moore C. Have we made a difference? An examination of career activity of entrepreneurship major since 1981. In: Hay M, Birley S, Bygrave WD, Churchill NC. (eds.) frontiers of entrepreneurship research, 1995: proceedings of the 15th Annual Entrepreneurship Research Conference. Wellesley, MA: Babson College; 1995.
49. Farashah AD. The Process of Impact of Entrepreneurship Education and Training on Entrepreneurship Perception and Intention: Study of Educational System of Iran. Education+Training 2013;55(8/9) 868-885.
50. de Mel S, McKenzie D, Woodruff C. Business Training and Female Enterprise Start-Up, Growth, and Dynamics: Experimental Evidence from Sri Lanka. Journal of Development Economics 2014;106 199-210.
51. Giné X, Mansuri G. Money or Ideas? A Field Experiment on Constraints to Entrepreneurship in Rural Pakistan. Washington, DC: World Bank; 2011.
52. Khalid MS. Abandoned housing development: The Malaysian experience. PhD thesis. Heriot-Watt University; 2010.
53. Jaafar M, Abdul-Aziz AR, Ali R. Entrepreneurship: A Critical Outlook on Housing Developers in Malaysia. The International Journal of Construction Management 2010;10(4) 77-101.

marketing prospects. According to a survey by Ali [54], housing developers noted that the courses organized by the government sector, the private sector, or NGOs are more focused on the acts and licensing of the housing process than on the procedures or technical aspects.

Elias and Pihie [55] reveal that attending courses and seminars, especially after starting a company, promotes entrepreneurship and influences the success of an entrepreneur and a firm. Moreover, Ali [56] indicates that attending courses and seminars for business start-ups can ensure the smooth operation of a company. Attending short courses can be considered informal education, which has been recognized as an important tool for providing excellent exposure and information to an individual striving to become an expert, skilful, and well-trained entrepreneur. Examples of informal education (can be reaped by participants) on the part of housing developers are personal networking with other experienced entrepreneurs [57] and having a mentoring relationship with industry experts [58]. Exchanging ideas and opinions, participating in first-hand learning, and sharing experiences with fellow participants are all beneficial practices that housing entrepreneurs can utilize to achieve business longevity in the future [59].

11.2 Training modules

For this case, training provision recognizes the importance of entrepreneurial development in gaining insight into the business environment in which the business operates. The previous section provides profound justifications for the need to train new micro-and small housing entrepreneurs. In consideration of the high capital requirements for starting a business, the strategy of this course is to simultaneously equip micro-and small housing developers with managerial skills and technical knowledge. Given their lack of exposure to the housing business, people tend to associate the housing sector with high-risk production that requires high capital and involves long approval process. The aforementioned factors are among the main restrictions that hinder people from participating in this industry, thereby gradually creating a wide gap between large and small housing developers in Malaysia. Thus, the School of Housing, Building, and Planning of Universiti Sains Malaysia has formed a strategic partnership with an inspiring industry player, Maka Corporation Sdn Bhd, to offer courses on how to improve the potential of new housing developers in Malaysia. The decisive collaboration between the two parties has successfully produced basic and advanced modules for training new and existing housing

54. Ali R. Entrepreneurship-related factors and firm performance: A study on the Bumiputera housing developers in Peninsular Malaysia. PhD thesis. Universiti Sains Malaysia; 2011.
55. Elias H, Pihie ZAL. Profile of Malaysian Entrepreneurs in Relation to their Achievement Motivation. Malaysian Management Review 1995;30(4) 25-31.
56. Ali R. Entrepreneurship-related factors and firm performance: A study on the Bumiputera housing developers in Peninsular Malaysia. PhD thesis. Universiti Sains Malaysia; 2011.
57. Baron RA, Ensley MD. Opportunity Recognition as the Detection of Meaningful Patterns: Evidence from Comparisons of Novice and Experienced Entrepreneurs. Management Science 2006;52(9) 1331-1344.
58. Smith E, Perks S. Training Interventions Needed for Developing Black Micro-Entrepreneurial Skills in the Informal Sector: A Qualitative Perspective. SA Journal of Human Resource Management 2006;4(1) 17-26.
59. Mano Y, Iddrisu AH, Yoshino Y, Sonobe T. How Can Micro and Small Enterprises in Sub-Saharan Africa Become More Productive? The Impacts of Experimental Basic Managerial Training. World Development 2012;40(3) 458-468.

developers. The main objective of this endeavour is to 'turn the potential entrepreneurs into knowledgeable housing developers' with marketing, management, and basic financial skills.

The first course was an introductory course on the housing development business and was conducted in June 2009. This course discusses the fundamental aspects of housing development to motivate nascent entrepreneurs to become fully-fledged housing developers. After a series of basic courses, due to high demand from the public, an advanced course was formulated to expose new developers and existing industry players to the current knowledge and industrial matters for project and business survivability. Introduced in August 2010, the advance course includes three aspects; inter alia entail industry updates, project management, and strategic management of the firm. The two-day course involves various speakers from government agencies, successful housing developers, and experienced consultants. The courses were held in select hotels in Kuala Lumpur because this capital city is a business hub for all Malaysians. The hotel arrangements and marketing of the courses were made by both parties, mainly through Internet marketing and brochure distribution. Among the courses offered, the least frequent is available once a year. The modules were reviewed and modified occasionally on the basis of the comments given by the participants to ensure the relevance of the content. The following section presents the latest module developed by the two organizations.

11.2.1 Title of basic course: 'Kursus Asas Pemajuan Hartanah Perumahan'/Basic course on residential property development

The objectives of the introductory course are as follows:

1. To offer knowledge on housing development with regard to basic requirements for entrepreneurs to start a career as housing developers. Emphasis is placed on the requirements imposed by current housing laws and specific acts.
2. To expose prospective house builders to the related processes, procedures, and legislations of housing development—from acquiring or purchasing land to handing over the houses to homebuyers. Such exposure includes conversion and subdivision of land, obtaining approval for building plans, application for developer licenses and advertising permits, as well as obtaining 'Certificates of Occupancy' and other pertinent requirements and documents.
3. To present holistic guidance in planning and developing properties, such as training on how to conduct feasibility studies, plan cash flows, and prepare progress and project management reports.
4. To find proof for, or to verify, financing and insurance facilities available to house buyers and project developers.
5. To provide participants with opportunities to acquire first-hand experiences while receiving support and guidance from experienced developers on how to be successful.

The module includes the following:

1. Introduction to the Housing and Property Industry:
    - Current scenario of the housing industry in Malaysia.
    - Significance of the industry.
    - Strength, weakness, opportunity, and threat (SWOT) analysis.
    - Housing demand and market analysis.
2. Career as Housing Developers:
    - Who is the developer? What does he/she do?
    - Requirements of a housing developer.
    - Career opportunities provided by the industry.
    - Advantages of being a developer.
    - Step-by-step strategy for becoming a developer.
3. Procedures for Land Acquisition:
    - Type of land ownership.
    - Guidelines for land acquisition.
    - Identification of strategic land.
    - Direct purchase vs. joint venture (JV).
4. Terms and Conditions for Property Development Approval:
    - Application for planning approval.
    - Application for land conversion and subdivision.
    - Building and infrastructure plan approval.
    - Application for occupational certificate for handing over a property.
5. Procedures in Acquiring Developer’s License and Advertisement Permit:
    - Application for a developer’s license.
    - Application for a sale and advertisement permit.
    - Facilities provided in portal MHLG.
6. Housing Sale and Marketing Strategy:
    - Recognizing the housing market through statistical data.
    - Marketing mix— the 4Ps principle (product, price, promotion, and place).
    - Convincing people to purchase.
7. Common modes of marketing—advertisement, promotion, agent, etc.
8. Bank Financial Loan Facilities:
    - Funding facilities provided by banks.
    - Preparation of a working paper.
    - Application and claim conditions and procedures.
    - End financing for purchasers.
    - Conditions of offer.
9. Treasury Housing Loan Facilities:
    - Funding facilities provided by the Treasury Department, Ministry of Finance.
    - Application and claim conditions and procedures.
    - Conditions of offer.
    - Common mistakes made by applicants.
10. Cash Flow Analysis:
    - Factors that affect project viability.
    - Feasibility analysis.

    - Cash inflow and cash outflow.
11. Project Implementation and Control:
    - Procedures and types of contract.
    - Progress and performance report.
    - Monitoring your project.
12. Strategy for Initiating Business in Housing Industry:
    - Starting a housing business.
    - Dos and don'ts.
    - Project development from the contractor and developer perspective.

11.2.2 Title of advanced course: 'Kursus Lanjutan Pemajuan Hartanah Perumahan'/Advance course on residential property development

The objectives of the advanced course are as follows:

1. To expose the participants to current updates and future prospects of the Malaysian housing industry.
2. To impart up-to-date information on government policies and procedures.
3. To guide the entrepreneurs toward business enhancement, especially in terms of project and financial management.
4. To provide knowledge on the latest tax principles affecting developers.
5. To share novel project designs and innovations for the participants to implement.
6. To identify strategic issues of the development process to ensure firm capability.

The module includes the following:

1. Property Market Survey: Present and Future:
    - Current market and related data on the real estate sector.
    - Demand and supply in every Malaysian state.
    - Prospects of the industry.
2. Implementation of Industrialized Building System (IBS) in the Real Estate Industry:
    - Introduction and concept of IBS.
    - IBS applications, procedures, and rules.
    - Advantages of IBS implementation.
    - IBS manufacturers in Malaysia.
3. Strata Titles Act 1985:
    - Introduction to Strata Titles (Amendment) Act of 2007.
    - Types of available schemes and strata title application.
    - Application and processing procedure.
4. Innovations in the Development of Housing Projects:
    - Sustainable project planning and integration.
    - Development concept based on green technology.
    - Recent innovations in project and housing design.
5. Effective Financial Management for Developers:

- Introduction to financial management for housing developers.
- Managing a project and company cash flow.
- Project feasibility analysis: cost, income, profit and loss, internal rate of return, etc.
- Overcoming cash flow deficits.

6. Taxation Matters Affecting Developers and the Housing Industry:
   - Amendments to the Property Gains Tax Act of 1976.
   - Tax management system for housing developers.
   - Tax planning strategy for housing developers.
7. E-Marketing for Developers:
   - Importance of new media.
   - Types of online advertisement.
   - Guideline for effective Internet marketing.
   - Facebook adverts: data comprehension and profit calculation.
8. Key Performance Indicators (KPI) for Housing Firms:
   - Definition of KPI.
   - Job scope and performance target of a company.
   - Scorecard preparation.
   - KPI management as a performance benchmark.
9. Goods and Services Tax (GST): Implementation and Impacts:
   - Introduction to GST.
   - Scope and mechanism of GST.
   - Key terms of GST.
   - Accounting effects and issues.
10. Branding for Housing Firms and Products:
    - Strength of branding for image consolidation.
    - Branding strategy and its effects.
    - Relationship between branding and reputation.
    - Paradigm shift for rebranding of housing developers.

11.3 Assessment of the effectiveness of the courses

For each course, the participants will be given a feedback form on which they can indicate their satisfaction with the course. The survey form is divided into four sections: evaluation of programme objectives, content, presentation, and overall appraisal. Nonetheless, for reference, the introductory course entails 11 presentations, whereas the advanced course involves ten presentations over a two-day workshop. Throughout the course, a three-point Likert scale comprising (1) Poor, (2) Good, and (3) Excellent ratings is applied. The measurement of mean value is used in this study to gauge the operationalized constructs. The subsequent analysis reveals the responses obtained from the latest courses handled by both parties.

11.3.1 Introductory course

Date of the course: 18–19 December 2013

Number of participants: 101

Number of responses: 84

Constructs	Mean Value
Programme Objectives	
(a) What is your overall view of the programme?	2.40
(b) How do you rate the quality of the programme content?	2.33
Programme Contents	
(a) Ease of understanding	2.44
(b) Presentation effectiveness	2.30
(c) Fulfilling self-development	2.39
Presentation Assessment	
How do you assess the performance of each presentation?	
(a) Presenter Paper 1	2.30
(b) Presenter Paper 2	2.45
(c) Presenter Paper 3	2.27
(d) Presenter Paper 4	2.40

Table 11.3 Mean values for analysis of introductory course

Constructs	Mean Value
(e) Presenter Paper 5	2.70
(f) Presenter Paper 6	2.31
(g) Presenter Paper 7	2.58
(h) Presenter Paper 8	2.31
(i) Presenter Paper 9	2.29
(j) Presenter Paper 10	2.52
(k) Presenter Paper 11	2.32

Table 11.3 Mean values for analysis of introductory course

11.3.2 Advanced course

Date of latest course: 18–19 June 2014

Number of participants: 105

Number of responses: 81

Constructs	Mean Value
Programme Objectives	
(a) What is your overall view of the programme?	2.54
(b) How do you rate the quality of the programme contents?	2.48
Programme Contents	

Table 11.4 Mean value for analysis of advanced course

Constructs	Mean Value
(a) Ease of understanding	2.51
(b) Presentation effectiveness	2.35
(c) Fulfilling self-development	2.38
Presentation Assessment	
How do you assess the performance of each presentation?	
(a) Presenter Paper 1	2.42
(b) Presenter Paper 2	2.10
(c) Presenter Paper 3	2.27
(d) Presenter Paper 4	2.19
(e) Presenter Paper 5	2.49
(f) Presenter Paper 6	2.48
(g) Presenter Paper 7	2.44
(h) Presenter Paper 8	2.31
(i) Presenter Paper 9	2.80
(j) Presenter Paper 10	2.53

Table 11.4 Mean value for analysis of advanced course

Comparatively, both courses performed satisfactorily, because all recorded mean values were above 2.10. Thus, at least 70% of the participants are satisfied with the services provided. Only a few dimensions require improvement, especially in terms of speaker presentation skills. Two presenters from the advanced course received a slightly lower score (mean=2.10, mean=2.19) compared with the other trainers. Thus, the organizer plans to replace the speakers with new appointed individuals who have more credibility. Good assessments from the participants are rather unexpected and can be attributed to with the module prepared by the organizers. Notably, the developed modules are highly related to the indispensable aspects of housing development, such as location, marketing, financial management, and product enhancement. Interestingly, Jaafar et al. [60] reported similar dimensions of findings for Malaysian homebuilders in terms of considering the preceding elements to succeed in this area. Given these facts, Banomyong and Supatne [61] emphasize the magnitude of networking (shall be elicited from short courses/trainings), and highlight that residential developers should jointly possess know-how and know-who to remain competitive.

Short courses are undoubtedly suitable for businesses because entrepreneurs have difficulty in fully committing their time for a long period of study [62]. Indeed, the courses elicited positive comments from participants. Based on the open-ended question enclosed in the feedback form, a number of positive suggestions were made such as, *'...very good in terms of course module, though inadequate time provided,' '...the capability to insert a slot on innovation is laudable...'* and *'an enjoyable course with relevant contents...'* The positive responses were demarcated, and several participants from the introductory course look forward to attending the advanced course. Moreover, a few responses provided some suggestions for improvement, especially in terms of module development. A significant number of participants recommended a site visit/case study and experience-sharing session, as well as additional slots on marketing and finance to be included in the next courses. Notwithstanding the constructive remarks from participants, the courses need to undergo some modifications to further improve the content and methods of presentation. Pragmatically, both courses have successfully bridged the gap between theory and practice.

11.4 Conclusion and industry implication

This book chapter provides different contributions to the research aspects, because these assessments are based on the training programme offered to industry players, and the contents are very much related to their business and project operation. The course on entrepreneurship training is the first course of its type to be offered in the housing development industry in Malaysia. With an interest in increasing the number of entrepreneur participants in the industry, the course must be of relevance to increase the knowledge of new entrants and existing industry players. Previously,

60. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Successes of Malaysian Housing Developers. In: Wang J. (ed.) Encyclopedia of Business Analytics and Optimization. Hershey, PA: IGI Global; 2014. p418-428.
61. Banomyong R, Supatn N. Thailand: Relationship Marketing in Thailand: A Case of the Real Estate Industry. In: Paliwoda S, Andrews T, Chen J. (eds.) Marketing Management in Asia. New York, NY: Routledge; 2013. p120-137.
62. Raffo C, O'Connor J, Lovatt A, Banks M. Attitudes to Formal Business Training and Learning amongst Entrepreneurs in the Cultural Industries: Situated Business Learning through 'Doing with Others'. Journal of Education and Work 2000;13(2) 215-230.

training has been associated with specific traits known as 'competencies' [63], which consist of traits, skills, knowledge and attitudes [64]. The improvement of these four characteristics will improve the individual performance of a job. These courses have covered all of the four competency aspects, and the survey indicates high satisfaction from the participants.

Although some scholars neglect the importance of human resource management, recent studies have proposed different views on training courses [65], [66], [67], [68], [69], [70] with the assumption that training will generate better products and an enhanced business environment. Training and career development are vital to any firm or organization that aims at progressing. Aside from employees having to attend training courses, owners/managers should also consider expanding the knowledge base through short-term courses. Owners/managers have insufficient time to attend training courses [71]. However, given proper time management and the worthwhile content of such courses, owners/managers are willing and eager to participate. Moreover, training programmes for nascent entrepreneurs can have important positive effects on economic development. In Malaysia, which has a housing development industry that is becoming conspicuously arduous, the presence of two-tier relative courses is welcome because the success of housing entrepreneurs can be nurtured without merely relying on personal attributes [72].

The initiative taken by the School of Housing, Building, and Planning of Universiti Sains Malaysia with strategic partners from the housing industry to set up modules on developing and empowering new housing developers in Malaysia shall be extolled and encouraged. Indeed, the dearth of entrepreneurship courses in the housing sector in Malaysia has resulted in a high demand for entrepreneurship education. The REHDA Institute only offers specific courses to existing players in the industry. Such a need is apparent in the number of attendees of both courses, with each course attracting more than 100 participants from various parts of Malaysia. The courses have not only attracted newcomers to the industry, but also existing players who are keen on gaining additional knowledge on project and business management. The housing industry has been acknowledged to have links to more than 100 upstream and downstream supply chains, and these training courses can serve as a good platform for them to meet and introduce themselves. Therefore, the programmes presented in this study can fill the research gap to nurture and nourish new industry players in the

63. Sanchez, J.C. University Training for entrepreneurial competencies: Its impact in intention of venture creation. International. Journal Management Journal 2011;(7) 239-254).
64. Stuart, R and Lindsay, P. Beyond the frame of management competencies: toward a contextually embedded framework of managerial competence in organization. Journal of European Industrial Training 1997;21(1) 26-33.
65. Jaafar M, Wan-Daud WD. Strategic Collaborative Approach: A Case Study on Training New Housing Entrepreneurs in Malaysia. International e-Journal of Community & Industry Engagement 2014;1(1) 10-19.
66. Farashah AD. The Process of Impact of Entrepreneurship Education and Training on Entrepreneurship Perception and Intention: Study of Educational System of Iran. Education+Training 2013;55(8/9) 868-885.
67. de Mel S, McKenzie D, Woodruff C. Business Training and Female Enterprise Start-Up, Growth, and Dynamics: Experimental Evidence from Sri Lanka. Journal of Development Economics 2014;106 199-210.
68. Mano Y, Iddrisu AH, Yoshino Y, Sonobe T. How Can Micro and Small Enterprises in Sub-Saharan Africa Become More Productive? The Impacts of Experimental Basic Managerial Training. World Development 2012;40(3) 458-468.
69. Sharma H. Importance and Performance of Managerial Training in Indian Companies-An Empirical Study. Journal of Management Development 2014;33(2) 75-89.
70. Valdivia M. Training or Technical Assistance for Female Entrepreneurship? Evidence from a Field Experiment in Peru. Washington, DC: World Bank; 2011.
71. Sanchez, J.C. University Training for entrepreneurial competencies: Its impact in intention of venture creation. International. Journal Management Journal 2011;(7) 239-254).
72. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Success and Psychological Traits of Housing Developers. Australasian Journal of Construction Economics and Building 2014;14(2) 57-72.

housing field. On a related note, the designed activities ensure the sustainability of entrepreneurial activities and supply alternative means for entrepreneurial cognition, intention, and readiness in a profound manner.

The annual increases in the population and urbanization of Malaysia have resulted in factors that highlight the need for increased shelter—particularly in urban areas—thus increasing the demand on developers to provide additional houses and encouraging new players to enter the industry. With proper training and guidance, these new players will survive and will be able to compete with a larger group of industry actors. Housing developers should basically be furnished with knowledge and information regarding current market preferences. Mano et al. [73] believe that training courses provide a concrete stage for entrepreneurs to be proactive in obtaining customers. This step will inadvertently drive the sales margin toward a superior performance [74] because of changes in business practices [75]. An in-depth understanding of targeted consumer behaviour and attitude is critical for success, and for creating signature developments of outstanding quality and value. In addition, the existing Malaysian housing entrepreneurs need to have an acute understanding of entrepreneurial orientations in order to succeed in their ventures. Entrepreneurial orientations include confidence, courage, strong willpower, risk-taking, creativity, and innovativeness, all of which can be embedded within cognitive development through short courses, training and mentoring programmes, or even academic seminars and conferences leading to knowledge empowerment.

Henceforth, this trend should be emulated by other academic institutions around the globe in partnership with industry players. With this effort, the gap between theoretical value and pragmatic approach can be further minimized or even eliminated. Based on the perspectives of various parties involved in the programme (either participants or trainers), such courses are regarded as significant to the industry. Moreover, collaboration with local leaders with vast experience in this sector, as well as with the ministries, state government authorities, and other fellow players in the industry, is favourable for providing the required knowledge and information to prospective entrepreneurs. Meanwhile, a strong connection with successful mega players should be moulded for monitoring and mentoring purposes. From what has been accomplished, the mentoring programme has received positive feedback from industry players and has provided a new platform for educators, industry players, and relevant stakeholders to transfer their knowledge and share their valuable experiences with nascent developers. These challenging endeavours have given the university a good reputation and positive image. The training course is continuously being developed for future benefits to the industry.

From the researcher’s viewpoint, the publications on industry training provided by the university and their industry partners are quite limited. This kind of strategic partnership will facilitate a win-win situation on both sides. Having a certificate from the university provides extra value to the courses, while private partners can support the module development. An overly academic approach would not be appropriate to

73. Mano Y, Iddrisu AH, Yoshino Y, Sonobe T. How Can Micro and Small Enterprises in Sub-Saharan Africa Become More Productive? The Impacts of Experimental Basic Managerial Training. World Development 2012;40(3) 458-468.
74. Valdivia M. Training or Technical Assistance for Female Entrepreneurship? Evidence from a Field Experiment in Peru. Washington, DC: World Bank; 2011.
75. de Mel S, McKenzie D, Woodruff C. Business Training and Female Enterprise Start-Up, Growth, and Dynamics: Experimental Evidence from Sri Lanka. Journal of Development Economics 2014;106 199-210.

practitioners. Changes in the modules according to new industry updates, rules, and regulations, would require input from private partners. Besides this, action research could be performed on these industry players to enhance the knowledge transfer between these two parties.

11.5 References

1. Tan TH. Sustainability and Housing Provision in Malaysia. Journal of Strategic Innovation and Sustainability 2011;7(1) 62-71.
2. Case KE, Quigley JM, Shiller RJ. Comparing wealth effects: the stock market versus the housing market. Cambridge, MA: National Bureau of Economic Research; 2001. Working Paper No.: 8606.
3. Grimes A, Kerr S, Aitken A. Housing and economic adjustment. Wellington: Motu Economic and Public Policy Research Trust; 2003. Motu Working Paper No.: 03-09.
4. Yahya AZ. Government Housing Policies and Incentives: The Government Viewpoint. In: Mohd-Don A. (ed.) Housing a Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p189-207.
5. Ali R. Entrepreneurship-related factors and firm performance: A study on the Bumiputera housing developers in Peninsular Malaysia. PhD thesis. Universiti Sains Malaysia; 2011.
6. Maruani T, Amit-Cohen I. Characteristics of Developers and Their Relations to Open Space Conservation. Land Use Policy 2011;28(4) 887-897.
7. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Success and Psychological Traits of Housing Developers. Australasian Journal of Construction Economics and Building 2014;14(2) 57-72.
8. Buzzelli M, Harris R. Cities as the Industrial Districts of Housebuilding. International Journal of Urban and Regional Research 2006;30(4) 894-917.
9. Wan-Mohd-Dzulkifli MA. Panduan dan Prosedur Asas Cadangan Pembangunan Projek Perumahan. Penang: Penerbit USM; 2009.
10. Abdul-Aziz AR, Ho SY, Jaafar M. Impact of Firm Characteristics on the Value of Resources for Malaysian Private Housing Developers. Journal of Financial Management of Property and Construction 2007;12(2) 95-105.
11. Jaafar M, Nuruddin AR, Syed-Abu-Bakar SP. Business Successes of Malaysian Housing Developers. In: Wang J. (ed.) Encyclopedia of Business Analytics and Optimization. Hershey, PA: IGI Global; 2014. p418-428.
12. Anikeeff MA, Sriram V. Construction Management Strategy and Developer Performance. Engineering, Construction and Architectural Management 2008;15(6) 504-513.
13. Goh BL. Housing Today. In: Mohd-Don A. (ed.) Housing the Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p71-106.
14. Othman A. The effect of the planning system on housing development: A study of developers' behaviour in Kuala Lumpur and Johor Bahru, Malaysia. PhD thesis. University of Aberdeen; 1999.
15. Khalid MS. Abandoned housing development: The Malaysian experience. PhD thesis. Heriot-Watt University; 2010.

16. Jaafar M, Wan-Daud WD. Strategic Collaborative Approach: A Case Study on Training New Housing Entrepreneurs in Malaysia. International e-Journal of Community & Industry Engagement 2014;1(1) 10-19.
17. Sirat M, Che-Hamat AF, Abdul-Aziz AR, Rahim A, Salleh H, Yaakob U. Low-Cost Housing in Urban Centres of Malaysia: Issues and Challenges. Penang: Penerbit USM; 1999.
18. Agus MR. The Role of State and Market in the Malaysian Housing Sector. Journal of Housing and the Built Environment 2002;17 49-67.
19. Bujang AA, Zarin HA, Jumadi N. The Relationship between Demographic Factors and Housing Affordability. Malaysian Journal of Real Estate 2010;5(1) 49-58.
20. Khor SCS, Abu-Bakar AH. Incorporating Sustainable Management System into Housing Development Practice in Malaysia. International Journal of Sustainable Development 2012;15(3) 277-291.
21. Idrus N, Ho CS. Affordable and quality housing through the low-cost housing provision in Malaysia. Paper presented at: Seminar of Sustainable Development and Governance; 2008 June 26; Toyohashi, Japan.
22. Mahari Z. Demographic transition in Malaysia: The changing roles of women. Paper presented at the 15th Conference of Commonwealth Statisticians; 2011 February 7-10; New Delhi, India.
23. Abu-Bakar AH, Razak AA, Abdullah S, Awang A, Perumal V. Critical Success Factors for Sustainable Housing: A Framework from the Project Management View. Asian Journal of Management Research 2010;1(1) 66-80.
24. Abdul-Aziz AR, Jahn-Kassim PS. Objectives, Success and Failure Factors of Housing Public Private Partnerships in Malaysia. Habitat International 2011;35(1) 150-157.
25. Omar D. Communal Living Environment in Low Cost Housing Development in Malaysia. Asian Social Science 2008;4(10) 98-105.
26. Abdullah AA, Harun Z, Abdul-Rahman H. Planning Process of Development Project in the Malaysian Context: A Crucial Brief Overview. International Journal of Applied Science and Technology 2011;1(2) 74-81.
27. Sudin, PW. International Experiences III: Low-Cost Housing. In: Mohd-Don A. (ed.) Housing the Nation: A Definitive Study. Kuala Lumpur: Cagamas Berhad; 1997. p823-843.
28. Jaafar M, Abdul-Aziz AR, Ali R. Entrepreneurship: A Critical Outlook on Housing Developers in Malaysia. The International Journal of Construction Management 2010;10(4) 77-101.
29. Hynes B, Richardson I. Entrepreneurship Education: A Mechanism for Engaging and Exchanging with the Small Business Sector. Education+Training 2007;49(8/9) 732-744.
30. Upton N, Sexton D, Moore C. Have we made a difference? An examination of career activity of entrepreneurship major since 1981. In: Hay M, Birley S, Bygrave WD, Churchill NC. (eds.) frontiers of entrepreneurship research, 1995: proceedings of the 15th Annual Entrepreneurship Research Conference. Wellesley, MA: Babson College; 1995.
31. Farashah AD. The Process of Impact of Entrepreneurship Education and Training on Entrepreneurship Perception and Intention: Study of Educational System of Iran. Education+Training 2013;55(8/9) 868-885.

32. de Mel S, McKenzie D, Woodruff C. Business Training and Female Enterprise Start-Up, Growth, and Dynamics: Experimental Evidence from Sri Lanka. Journal of Development Economics 2014;106 199-210.
33. Giné X, Mansuri G. Money or Ideas? A Field Experiment on Constraints to Entrepreneurship in Rural Pakistan. Washington, DC: World Bank; 2011.
34. Elias H, Pihie ZAL. Profile of Malaysian Entrepreneurs in Relation to their Achievement Motivation. Malaysian Management Review 1995;30(4) 25-31.
35. Baron RA, Ensley MD. Opportunity Recognition as the Detection of Meaningful Patterns: Evidence from Comparisons of Novice and Experienced Entrepreneurs. Management Science 2006;52(9) 1331-1344.
36. Smith E, Perks S. Training Interventions Needed for Developing Black Micro-Entrepreneurial Skills in the Informal Sector: A Qualitative Perspective. SA Journal of Human Resource Management 2006;4(1) 17-26.
37. Mano Y, Iddrisu AH, Yoshino Y, Sonobe T. How Can Micro and Small Enterprises in Sub-Saharan Africa Become More Productive? The Impacts of Experimental Basic Managerial Training. World Development 2012;40(3) 458-468.
38. Banomyong R, Supatn N. Thailand: Relationship Marketing in Thailand: A Case of the Real Estate Industry. In: Paliwoda S, Andrews T, Chen J. (eds.) Marketing Management in Asia. New York, NY: Routledge; 2013. p120-137.
39. Raffo C, O'Connor J, Lovatt A, Banks M. Attitudes to Formal Business Training and Learning amongst Entrepreneurs in the Cultural Industries: Situated Business Learning through 'Doing with Others'. Journal of Education and Work 2000;13(2) 215-230.
40. Sanchez, J.C. University Training for entrepreneurial competencies: Its impact in intention of venture creation. International. Journal Management Journal 2011;(7) 239-254).
41. Stuart, R and Lindsay, P. Beyond the frame of management competencies: toward a contextually embedded framework of managerial competence in organization. Journal of European Industrial Training 1997;21(1) 26-33.
42. Sharma H. Importance and Performance of Managerial Training in Indian Companies-An Empirical Study. Journal of Management Development 2014;33(2) 75-89.
43. Valdivia M. Training or Technical Assistance for Female Entrepreneurship? Evidence from a Field Experiment in Peru. Washington, DC: World Bank; 2011.

Chapter 12 New Perspectives in Entrepreneurship Education — A Brazilian Viewpoint

by Eric Charles Henri Dorion [1], Cristine Hermann Nodari [2], Pelayo Munhoz Olea [3], Paula Patricia Ganzer [4] and Claudio Baltazar Côrrea de Mello [5]

12.1 Introduction

In the era of global economy, Brazil is actually transforming its socio-economical needs, creating a new base for local businesses that compete on the national and international markets. This global force is provoking pressure to local entrepreneurs in terms of effectiveness and efficiency. Considering that Brazil has, in the past, suffered many deficiencies; its socio-economical development profile is still showing many signs of weakness that seem to become latent [6].

The origins of a country are strongly related with the way it establishes and solidifies its educational base, and consequently, if it considers that education constitutes a clear determinant in which it may generate sustainable socio-economic development [7].

However, in a process of reorganization of education and in order to establish consistent educational practices that are promising for the future of our university students, from where emerges the importance of change? How is being elaborated a proper education program capable to introduce an entrepreneurial dimension? The first question is linked to the necessity of recognizing the importance of the entrepreneurial force in Brazil and not to accept in a simplistic way new educative norms to be implemented but. We then have to sow a ground reform of thinking, to

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4. Departament of Administration, University of Caxias do Sul, Francisco Getúlio Vargas, Petrópolis, Caxias do Sul – RS, Brasil
5. Departament of Administration, University of Caxias do Sul, Francisco Getúlio Vargas, Petrópolis, Caxias do Sul – RS, Brasil
6. Dorion, E. Entrepreneurship Education: Innovative Strategies and Contexts Research. In: Roundtable on Entrepreneurship Education for Scientist & Engineers, 2006, Guayaquil. Roundtable on Entrepreneurship Education for scientists & Engineers. Stanford, USA: 2006. < http://web.stanford.edu/group/ree/archives/archive06/latinamerica/presentations/REELA2006_9_EricDorionPaper.pdf > (accessed 10 February 2014).
7. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).

create auto-consciousness within the educators and to provoke a multiplying effect of positive change.

The theory foundations refer to various fields of research. The first dimension deals about Globalization, Culture and Education. The globalization process stimulates access to information on a wide scale, providing disruption of the territorial borders. Through technology of information, access to knowledge is spread out in real time. Consequently, the era of information provokes time and space compression that makes viable interactions from all places of the planet.

The entrepreneurs, therefore, already perceive that the market must be analyzed in a global perspective. This fact requires that Brazilian companies have to become more efficient and effective to reach a superior performance, as a base of competitive advantage, to be suited to compete on a global scale.

As a socio-political entity, Brazil counts as the “Giant” of South America. Its internal diversity constitutes one of the strongest aspects of the Brazilian culture. As an economical entity, Brazil counts with a huge amount of micro and small businesses. This data demonstrates that the majority of the 88 million Brazilians who constitute the Active Work Force (PEA) works or has some kind of labor link with the Small and Medium Businesses (SMEs), showing that the Brazilian population is intensely entrepreneur [8].

At the beginning of the XXIst century, SMEs were currently the main generating factor of work force because the major companies, with their necessity of increasing productivity and with the new requirements of the market, tend to automatize each time more and thus, hire less. Unfortunately, the Brazilian micro and small business culture seems to have converged more toward interpersonal and social interactions rather than scientific and business performance, provoking alarming rates of business mortality in Brazil and demonstrating that the entrepreneurial Brazilian culture is showing an obvious of lack of core competency.

> *...The entrepreneur, unprepared, still learns by doing. Taxes, costs of finance, low level of education still are problems that obstruct growth and stanch the mortality rate of small businesses in Brazil. The Brazilian demonstrates that he wants to make things happen, but this is not enough. Beyond the "want to do", it is necessary "to know how to do" and also to "be able to do" ...* [9]

The most developed economic systems characterizes themselves as capable of generating constant innovation initiatives, which distinguishes them from any productive complex where technology spreads by incremental copy or imitation

8. GEM. Global Entrepreneurship Monitor. GEM Brazil 2012 Report; 2013. http://www.gemconsortium.org/docs/2806/gem-brazil-2012-report (accessed 15 March 2014).
9. *SEBRAE. Serviço Brasileiro de apoio às micro e pequenas empresas. Sobrevivência das Empresas no Brasil. Coleção Estudos e Pesquisas; 2013. http://www.sebrae.com.br/customizado/estudos-e-pesquisas/taxa-de-sobrevivencia-das-empresas-no-brasil/sobrevivencia-das-empresas-no-brasil.pdf (accessed on: 09 March 2014).*

actions [10], [11], [12] In that context, Brazil has recently started to participate more actively in this debate, because its universe of innovative entrepreneurs has been growing in recent years. The urgency of training the entrepreneurs and forming new entrepreneurs that have the capacity of acquiring competitive knowledge merges with the necessary to re-think Brazil educational system.

The second dimension involves the importance of Change, Uncertainty, Learning and Innovation in the entrepreneur's life. Morin refers to the necessity of reforming our way of thinking, in which the individual enhances his ability to "re-organize" knowledge, or "think". Morin's view basically constitutes a ground of educative transformation where cognitive stimulation offers a new dimension for the subject in a learning process and crucial in an educational context. Such pattern constitutes a key conceptual base for the making of a Pilot Training Course in Entrepreneurship. Morin's view is that it is possible to guide the student thru a real journey of discovery, which does mean encounter new lands but, to have a different view of the world. Reforming our way of thinking may suggests, in a pedagogic perspective, that it is more accurate to train our student in a systemic perspective, with a broader intellectual view, able ling to reach the meaning of local culture, and also able ling to obtain a sufficient level of cognitive energy required to build an education that train generations capable of thinking [13].

A different perspective about education can suggest a permanent and constant process of review and actualization of learning. Consequently, it is possible to reconsider the concepts of student and teacher and review all levels of education without any absolute connotation [14]. Such hypothesis can be characterized as a new paradigm of pedagogy, where usually in education; the actors actually do not allow themselves to be influenced by such a change of path.

The learning process constitutes the result of our own recognition of the necessity of change, which happens when we allow space for reconstruction and maintain stimulus [15]. Thus, the environment of the classroom can constitute an opportunity to the educator to recognize himself thru the stimulating experience of making decisions, of being responsible and of having his own liberty. His role is basically to assist in the analysis of the possible consequences of the decision being made.

10. Schumpeter JA. The theory of economic development. Cambridge: Harvard University Press; 1934.
11. Maruani T, Amit-Cohen I. Characteristics of Developers and Their Relations to Open Space Conservation. Land Use Policy 2011;28(4) 887-897.
12. Dorion ECH, Severo EA, Olea PM, Nodari CH. Brazilian Entrepreneurship Reality: A Trilogy of Imitation, Invention and Innovation. In: Thierry Burger-Helmchen. (ed.) Entrepreneurship Creativity and Innovative Business Models. Rijeka: InTech; 2012.
13. Morin E. A cabeça bem-feita: repensar a reforma, reformar o pensamento. Rio de Janeiro: Bertrand Brasil; 2004.
14. Freire P. Educação e mudança. Rio de Janeiro: Paz e Terra; 1979. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_educacao_e_mudanca.pdf (accessed 24 November 2013).
15. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).

> *Educators are like old trees. They have a face, a name, and their own story to be counted. They live in a world where what is /worth is their relation with the students, considering the each and every one of them in an "entity" sui generis, titular of a name and of a story, suffering sadness and feeding hopes. And the education is something that's happens in this dense and invisible world that is being established by both* [16]

The wisdom comes from the ignorance, being a process for constant overcoming through critical conscience [17]. The role of the educator who opts for change consists in acting and reflecting together with the individuals with whom he interacts to acquire his own conscience together with them of the real difficulties of society.

This means the necessity of the educator to extend each time more its knowledge, not only under his own view of selecting such method and technique of action, but also thru the limits with which he faces in his activity.

> *In a permanent training process of education, the basics moments are the ones where we can be critical and think about our practices. In fact, it is only by being critical about our practices of the day or the past that we can improve our future practices* [18]

The third dimension involves the issues of Context, Strategy and Leadership in teaching at the university. In order to be able to judge the quality of the development of an existing training program, a review of the literature from different author on Education has been realized. One refers to the concepts of training and experience [19], [20] and other refers to pedagogy as a base for understanding educational contexts and learning strategy [21]. This brief review shows the importance for the teacher to emerge with a reflection based on epistemological foundations on educational realities, referring to the notions of training, experience; or else tacit and explicit knowledge. It is also important to worry about the roles of the professor and the student; to develop teaching strategies that correspond best to the realities of the conveyed teaching project and, to recognize the essential character to work in an educational reality in order to develop projects of holistic character that responds to the needs of the students.

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16. Alves R. Conversas com quem gosta de ensinar. Campinas: Papirus; 2000.

17. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).

18. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).

19. Barbier JM. Les saviors théoriques et les savoirs d'action. Paris: Conservatoire National des Arts et des Métiers France; 1996.

20. Júnior PFG, Cordeiro AT. Proceedings of 26th Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Administração. Associação Nacional de Pós-Graduação e Pesquisa em Administração, September 24-30, 2002, Salvador Convention Centre, Salvador, Brazil; 2002.

21. Legendre R. Dicionário Atual da Educação. Larousse; 1988.

For example, see [22] educational model proposes a pedagogical situation evolving from a systemic pattern between the professor, the student, the contents and the problematic referring to the teaching, the methods and techniques of formation and the learning process. This model is considered as traditional in the field of Education. The role of the professor is to question the realities concerning the teacher, the potential environments of formation, the contents, and the problematic referring to the experiences and resources that the environments can offer the exchanges that connect the teacher to the environments and the methods and techniques used [23]. This educational context constitutes the prism that permits to recognize the situation allowing the teacher to bloom while conforming to the norms prescribed in the exercise of his work. Also, the role of the student is to question the realities concerning the student, the potential environments of formation, the contents, and the problematic referring to the experiences and resources that the environments can offer, the supports that allow the student integration in the environments and the learning process as a strategy of acquirement of the knowledge.

This pedagogical context constitutes a prism that permits to recognize the situation allowing the student to bloom while conforming to the norms prescribed in the classroom. In a traditional model, the student is generally less involved and least aware of the pedagogical situation in which he evolves. The student shows a passive attitude, which is contrary to what is expected from a student learning in an entrepreneurial course.

The word student refers to the learners in quest of formation in an integrated process with the teacher [24], [25]. The student's learning platform becomes in itself the reflection of the one of the educator, constituting its own identity. This situation is important in an entrepreneurial educative situation. The participant happens to be the center of its own educational reality, putting in dynamics the context that position him in relation to the other actors. The student in entrepreneurship comes out of this positivist reality that outdistances him of the professor and the contents formation and, let free course to the passions that guide him in the process of learning.

The participant develops an attitude that implies a responsibility oriented to a process that he borrows. The actions that he achieves are at a time the result of personal initiatives, subject to a redefinition of his own contexts. This redefinition is hybrid, contaminated by the influence of the professor's model and the learning contents proposed to the student. The student's pedagogical context becomes symbiotic and dialectic with the role of the professor and the contents that are lavished.

22. Legendre R. Dicionário Atual da Educação. Larousse; 1988.
23. Dorion ECH. La formation universitaire en entrepreneurship: une expérience brésilienne à Novo Hamburgo (RS). PhD Thesis. Université de Sherbrooke; 2003.
24. Dorion, E. Entrepreneurship Education: Innovative Strategies and Contexts Research. In: Roundtable on Entrepreneurship Education for Scientist & Engineers, 2006, Guayaquil. Roundtable on Entrepreneurship Education for scientists & Engineers. Stanford, USA: 2006. < http://web.stanford.edu/group/ree/archives/archive06/latinamerica/presentations/REELA2006_9_EricDorionPaper.pdf > (accessed 10 February 2014).
25. Legendre R. Dicionário Atual da Educação. Larousse; 1988.

See [26], [27] presents a model that establishes a systemized pedagogical situation that constitutes one of the pillars of the proposed paradigm (Figure 12.1).

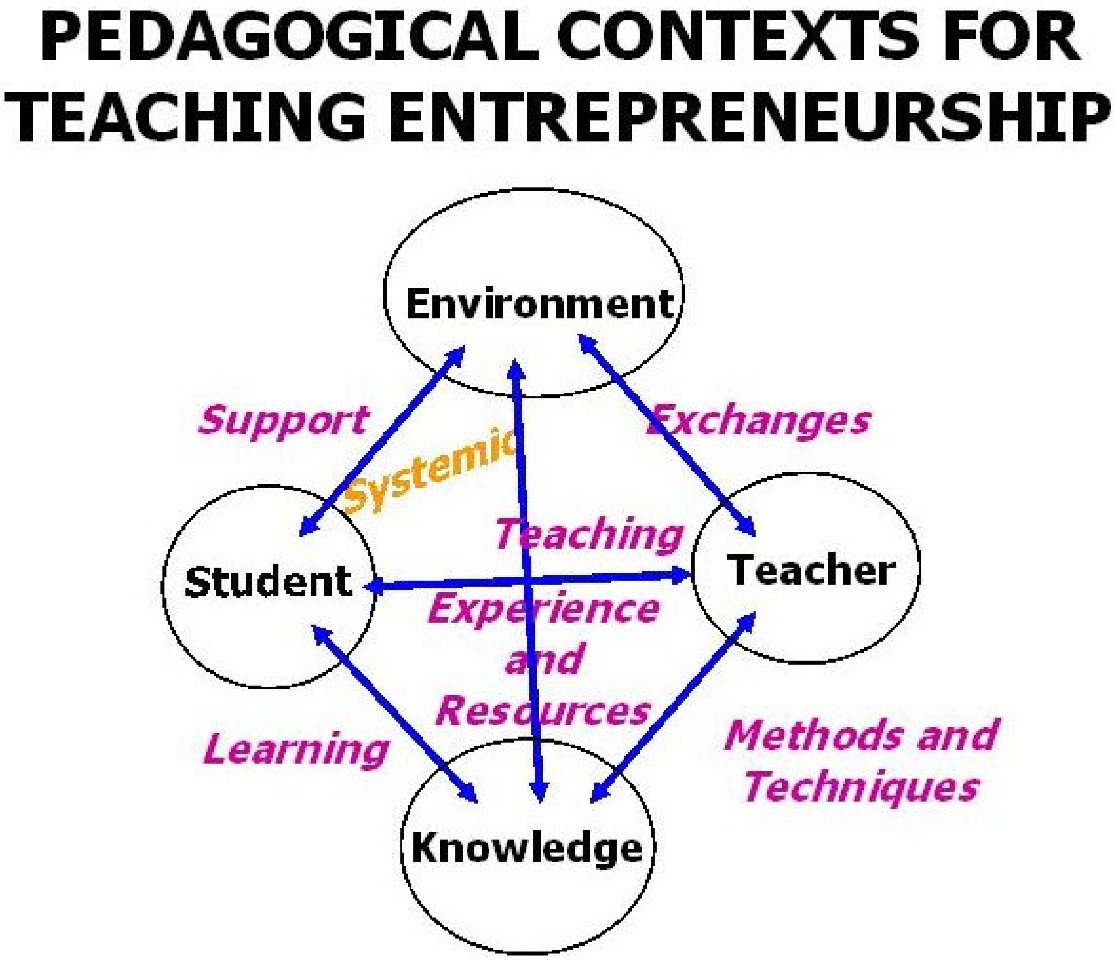

Figure 12.1 Pedagogical Contexts for Teaching Entrepreneurship

The main author and his collaborators consider that the teacher of entrepreneurship becomes a model entrepreneur who detains the strategies and the leadership required to transform his class. The teacher is, in one hand, a researcher habilitated to identify and to interpret the theoretical foundations of the field of knowledge, and on the other hand, imprints himself of the entrepreneurial reality in order to allow the student to be able to integrate explicit and tacit knowledge in a constructivist way. He becomes an educator capable of guiding his student towards a world where interiority makes the difference, where people re-define themselves by their own vision, their passions, their expectations and their utopian horizons.

Teaching constitutes a unidirectional process between the professor and the student that permits a transfer of knowledge [28]. In these terms, teaching requires a positivist approach. In an entrepreneurial perspective, teaching becomes an indefectible complement of the learning process. The works of Paulo Freire are explicit on this

26. Dorion, E. Entrepreneurship Education: Innovative Strategies and Contexts Research. In: Roundtable on Entrepreneurship Education for Scientist & Engineers, 2006, Guayaquil. Roundtable on Entrepreneurship Education for scientists & Engineers. Stanford, USA: 2006. < http://web.stanford.edu/group/ree/archives/archive06/latinamerica/presentations/REELA2006_9_EricDorionPaper.pdf > (accessed 10 February 2014).
27. Dorion ECH. La formation universitaire en entrepreneurship: une expérience brésilienne à Novo Hamburgo (RS). PhD Thesis. Université de Sherbrooke; 2003.
28. Legendre R. Dicionário Atual da Educação. Larousse; 1988.

topic [29], [30]. The author, in one of his various works, mentions that: 1) there is no professor without student; 2) teaching is not a transfer of knowledge; and 3) to teach is a human specificity. The author refers to a multitude of behaviors and attitude, which explains that teaching, can only exist if these educational values are put in evidence. The teacher, as a model, to the student's benefit, deliberately frees the values.

Learning pulls its existence in its complement with this proposed process of teaching. More specifically, experimental learning constitutes an avenue of training that answers to the needs of the entrepreneur. See [31] helps to understand this reality. His approach enhances a redefinition of teaching strategies, which encourages a process of transformation (Figure 12.2); a process of change, based on the proper "history" of the student and the teacher. Caring about this incorporation of the daily problems and to join them to theory knowledge constitutes the most realistic solution in an entrepreneurial pedagogical reality.

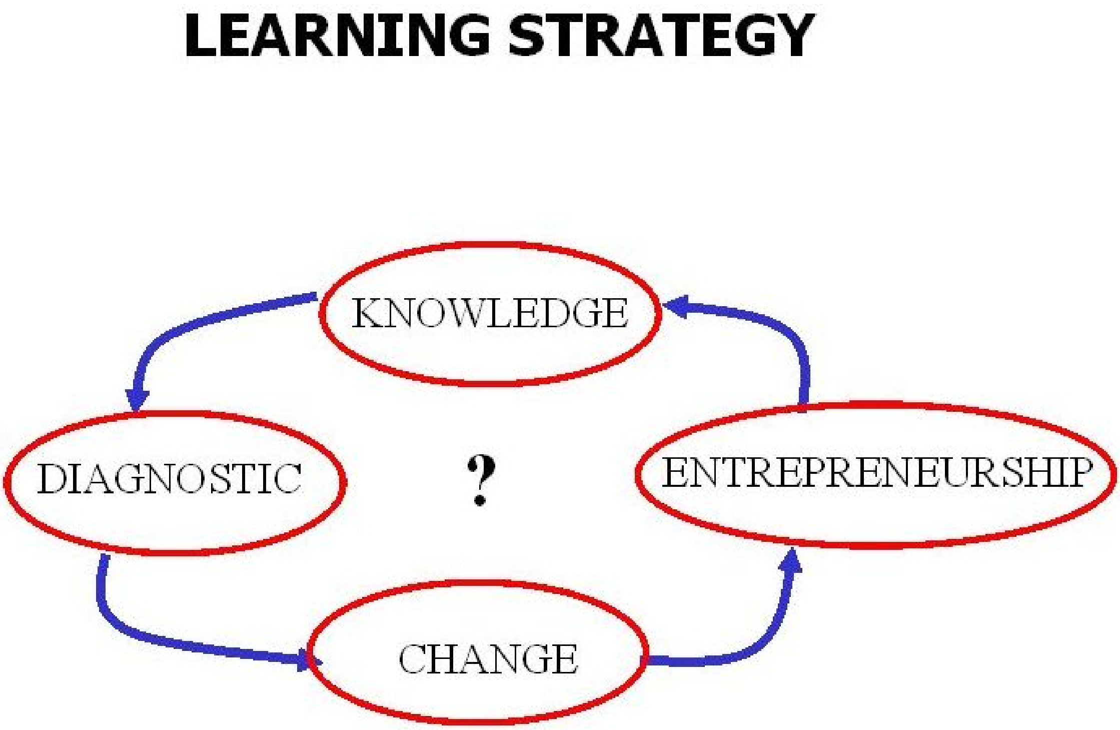

Figure 12.2 Learning strategy

The output involves the conceptualization of an entrepreneurial educational process, but also of a tool of thinking and a clear and realistic educative strategy. It must remain innovative by integrating various contexts of formation and by setting up new educational strategies. It must become communal to offer to the student different tools of valorization of the entrepreneurial culture. It must be associative to permit the implication of the teachers and the students in concrete projects, with an approach of renewed partnership. Finally, it must be holistic because the systemic implies a global and reconsidered view. Learning strategy in entrepreneurship education has to offer

29. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).
30. Freire P. Educação como prática da liberdade. Rio de Janeiro: Paz e Terra; 1967. http://www.dhnet.org.br/direitos/militantes/paulofreire/livro_freire_educacao_pratica_liberdade.pdf (accessed 11 january 2014)
31. Kolb D. Inventário de estilo de aprendizagem. Caderno técnico: Boston McBer; 1976.

an approach more likely humanistic than organizational, with actions more integrated than divided. Basically, learning strategy has to create a path for a social dimension of the educational environment and enhance a phenomenon of transformation or change.

12.2 Brazilian educational background

The Brazilian reality shows that about 90% of domestic entrepreneurs do not engage in educational activities in higher education related to business venture [32]. Most Brazilian entrepreneurs seek other organisations and institutions outside the universities to develop and guide their entrepreneurial skills, such as trade associations, chambers of commerce, industry associations, Brazilian Service of Support for Micro and Small Enterprises (SEBRAE), National Commercial Apprenticeship Service (SENAC), National Industrial Apprenticeship Service (SENAI) and Commerce Social Service (SESC).

Cultural specificities and diversities confer to Brazil its unique trait. Today, micro and small enterprises (MSEs) represent 99.2% of the Brazilian business sector with 4.9 million formal businesses, which accounts for 20% of the GDP and employs 56.1% of the formal labor force, and 9.5 million informal businesses, for a total of 14.5 million businesses [33]. Brazil is already recognized as a country of opportunities, with intra-entrepreneur, who design and innovate within their work environment or, as new entrepreneurs, by creating their own business through an extension of their current work (Spin-off), either through the assistance and support of a business incubator, as new technological entrepreneur or as a manager of a small business [34].

In an educational context, Brazil faces severe difficulties in proposing quality solutions to entrepreneurs with high level of potential. Today, the Brazilian educational system counts for more than 1,500 institutions of higher education [35], which enhance the development of skilled professionals able to generate new projects and ventures, specifically those involving high technology. However, the low level of higher education in the country, combined with the traditionalist educational model of the leading universities, create realities that are clearly deficient in their ability to lead students to an entrepreneurial reality. Both universities and vocational courses, such as technical colleges, are geared towards the formation of a job applicant and do not to develop entrepreneurial skills and potential, through initiative and creativity [36].

Moreover, an inconsistency in research and development occurs between the expenses of research institutions and business needs. Most researches have kept a historical distance from the needs of the population, which creates a lack of

32. GEM. Global Entrepreneurship Monitor. GEM Brazil 2012 Report; 2013. http://www.gemconsortium.org/docs/2806/gem-brazil-2012-report (accessed 15 March 2014).
33. IBGE. Instituto Brasileiro de Geografia e Estatística. Indicadores IBGE; 2014. ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Mensal_de_Emprego/fasciculo_indicadores_ibge/2014/pme_201403pubCompleta.pdf (accessed 13 March 2014).
34. Dorion E. Inovação e Empreendedorismo. Belo Horizonte: FEAD; 2008.
35. Brasil. Ministério da Educação. Instituições Credenciadas em 2013. http://portal.mec.gov.br/index.php?option=com_content&view=article&id=12467&Itemid=783&msg=1 (accessed 12 March 2014).
36. Dorion E. Inovação e Empreendedorismo. Belo Horizonte: FEAD; 2008.

knowledge for the entrepreneurs, limiting their ability to develop their products in a competitive market.

Thus, the scenario of entrepreneurial education demonstrates the low level of ability of the national educational institutions to adapt their curricula to the changing needs of the labor force [37]. Entrepreneurship education enhances training that focus on the individual who may be interested in an opportunity or either for whom is in a prior stage before creating a new venture [38]. It is also relevant for whom who are already in the process of developing a project and even for those who are concerned about their strategies to stay active or expand the business. The inclusion of entrepreneurship education in Brazil is recent. It is in the 80s that it emerged at the Getúlio Vargas Foundation in São Paulo, with the development of a New Business Venture discipline in the Business Administration course and in the technology related disciplines, from a market pressure and the growing importance of the Brazilian micro and small business. The main initiatives in support to entrepreneurship education in Brazil are known by the scientific community as Instituto ENDEAVOUR and Fundação Getúlio Vargas (FGV). Instituto Endeavour is a private organization, headquartered in the United States, which stimulates the mobilization of public and private organizations in the sharing of tacit knowledge through its network, strengthening the entrepreneurial culture in Brazil. One case is the consolidation of a digital platform that enables educators in entrepreneurship and innovation, which provides educational content for the Brazilian professors, named *Educação Empreendedora Brasil*. The other initiative is with the FGV and its Center for Entrepreneurship and New Business, whose mission is to build a culture of entrepreneurship. Among the main projects of the Center is a participation in the Global Entrepreneurship Monitor (GEM) report, in which the FGV act as an institutional partner of the Brazilian Institute for Quality and Productivity (IBQP), enriching the content of research with scholarly analysis and business plan competitions [39].

However, the logic of teaching, nevertheless its structure or pedagogical strategy, still presents “closed model” obstacles that follow an “informative” path instead of a “training” one, giving no incentive to a student to analyze and learn to be “pragmatically critical”, with the ability to understand the organisation contexts as a whole through the use of flexible mental models and tools [40]. Since it is understood that the search for new strategies and pedagogical alternatives capable of meeting the demands from the turbulent market becomes necessary to attain the expectations of the student in the evolution of the practice of entrepreneurship education, their education related terms, such as techniques, methods and procedures do represent an “application of the available means in order to achieve their goals” [41].

In a Brazilian perspective, the education institutions still compartmentalize the areas of knowledge for the purpose of teaching, even though some key Brazilian authors

37. GEM. Global Entrepreneurship Monitor. GEM Brazil 2012 Report; 2013. http://www.gemconsortium.org/docs/2806/gem-brazil-2012-report (accessed 15 March 2014).
38. Lopes RMA. Referenciais para a Educação empreendedora. In: LOPES RMA. (ed.). Educação empreendedora: conceitos, modelos e práticas. Rio de Janeiro: Elsevier; 2010.
39. GEM. Global Entrepreneurship Monitor. GEM Brazil 2012 Report; 2013. http://www.gemconsortium.org/docs/2806/gem-brazil-2012-report (accessed 15 March 2014).
40. Lavieri C. Educação empreendedora? In: LOPES RMA. (ed.). Educação empreendedora: conceitos, modelos e práticas. Rio de Janeiro: Elsevier; 2010.
41. Katz JA. The chronology and intellectual trajectory of American entrepreneurship education: 1876-1999. Journal of Business Venturing, 2003; 18 (1) 321-345.

have already introduced thoughts and means that could allow such transformation [42], [43], [44], [45]. Such type of education would require training focused on a local social perspective, which includes the necessary skills to solve local organizational problems. Any learning strategy of entrepreneurship education requires the development of a more humanistic approach, based on a systemic perspective, which includes the involvement of the levels of a local community. It could either integrate established education schemes and strategies created by real institutional reforms, but it must keep in mind the necessity to stimulate the understanding of the conduct of a business development process, once organized and committed to a common local objective, the transformation of the student's mind to an engine of pro-activeness.

Consequently, there is a need to broaden these horizons of research, which involves themes and experiences of the local Brazilian entrepreneurs mixed with rigorous consolidated administrative contents.

12.3 Tools for entrepreneurial education

Teaching cases, as defined in an educational context, are stories that may include reports of situations in organizational life, built with specific educational purposes, thus constituting an inductive method of teaching and learning. In a perspective of entrepreneurship education, their main objectives are to enhance the development of skills and attitudes considered as key for achieving managerial success; and allow familiarity with the organisations and their environment in a social, economic and environmental perspective.

This tool for entrepreneurship education is based on the construction of a case-problem method, which has been used for about a hundred years in the North American Business schools and more recently in Europe and Asia. This Case Method was developed by Harvard Business School and established to enable participants to identify and solve managerial problems and dealing with risk factors. Indexed Journals that publish teaching cases give preference to cases-problem, although they may accept other cases to be used as complementary.

Teaching cases are stories that resemble to factual journalism, including a substantial content of facts and testimony, mostly presented in a chronological order. Its goal is to provide a well-informed discussion of the case in the classroom. In a case, there is no narrator advocating an idea or opinion, or even analyzing practice-based theory, as in an academic text. Nor is there room for rhetoric and ideology, because the purpose is not to persuade the reader, but allow the emergence of different interpretations emerging from the discussion of probabilities and approaching the factual reality.

42. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).
43. Freire P. Educação e mudança. Rio de Janeiro: Paz e Terra; 1979. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_educacao_e_mudanca.pdf (accessed 24 November 2013).
44. Alves R. Conversas com quem gosta de ensinar. Campinas: Papirus; 2000.
45. Freire P. Educação como prática da liberdade. Rio de Janeiro: Paz e Terra; 1967. http://www.dhnet.org.br/direitos/militantes/paulofreire/livro_freire_educacao_pratica_liberdade.pdf (accessed 11 january 2014)

See [46] introduces a list of the ten most important characteristics of good cases, which are summarized below: a) it must contain one or more management issues to be confronted and selected through debate; b) it must deal with topics relevant to the geographic area; c) it must provide a journey of discovery that separate the symptoms of some more fundamental problems; d) it must raise controversies providing different interpretations, decisions and action plans; e) it must contain contrasts and comparisons; f) it must allow participants to generalize lessons and concepts underlying the case for other situations; g) it must contain accurate data such as product description, the industry and markets; h) it must exhibit a personal touch with a dialogue and the description of the formal and informal organizational processes; i) it must be reported and well structured, and; j) it must be short, for a maximum of 10 pages.

The distribution of the Harvard cases happened in Brazil during the 70s, by the establishment of a Brazilian Cases Center, with three poles of diffusion in three specific universities, cataloging and regulating its distribution in parts of the Brazilian territory [47]. The system worked until the 80s and was then disabled. Ultimately, there seems to be a resurgence of the use of cases in business Faculties, albeit incipient, through the interest of some professor and educational institutions, which research, develop and utilize local teaching cases.

However, most new cases used in Brazil are of foreign origin, some translated into Portuguese, with the permission of Harvard Business School and other institutions, the others are mostly passed on to students in English [48]. The local relevance of the case is crucial to the interest of the students in a discussion because it promotes the identification of micro and macro-environmental variables that affect the analysis to resolve conflicts and problems presented in the case [49].

12.4 An endogenous vision of the Brazilian cases for education

Teaching cases are based on empirical research. Most of the “remembered” organizational stories are relevant. For the teacher, the starting point is usually the identification of educational goals and the choice of a topic within their discipline program. The teaching case is usually made up of three central blocks plus teaching notes. The first part presents a historical context by introducing the characters, the location and the overall situation of the problem. The second block develops the narrative of the history of the organisation and the description of the context and the situation. The third part introduces the problem, which establishes a cutoff for the beginning of an argumentation and discussion activities. The teaching notes serve to guide and direct alternative case analysis, discussion questions and recommended literature for the reasoning.

46. Abell D. What makes a good case? The Newsletter of the European Case. London: Autumn/Fall; 1997.
47. Roesch S. Como escrever casos para o ensino de administração. São Paulo: Atlas; 2007.
48. Roesch S. Como escrever casos para o ensino de administração. São Paulo: Atlas; 2007.
49. Erskine J. Cases don’t travel well and need to belocally engineered. ECCHO – The Newsletter of the European Case Clearing House, 1999; 20 (3) 4-6.

The reading and discussion of a teaching case brings the reader to remind similar events that happened to him in the past (cognitive domain), which are normally accompanied by personal memory feelings (affective domain). Such context allows the opportunity to use endogenous educational situations, through data written in a Brazilian perspective, to specifically cognitive abilities, such as: i) problem analysis; ii) reasoning organizational aspects, and; iii) analyzing and reviewing the literature on the basis of the evidence presented in the case of education. From an emotional standpoint, it enhances the student's ability to: i) question the decisions; ii) communicate ideas to the group; iii) argue and persuade about the position of the different characters, and; iv) accept the point of view of the other participants during the discussion.

The traditional teaching methods, mainly based on lectures, are not infrequently criticized for neglecting the pragmatic training and development of the experimental spirit among students [50]. A teaching case facilitates the development of student skills since it uses situations that require analysis or management decision, within a specific context, without risk in a classroom. It is expected to lead to the development of analytical reasoning skills, examination and evaluation of data, problem solving and decision making, among other objectives [51]. Therefore the skills reached by the student by learning through case study is to present alternative solutions to the initial questions, by building and adapting descriptions, elements, and situations encountered in macro and micro environment, and by taking into consideration the local conditions.

In Brazil, truly national and endogenous teaching cases are still at an incipient stage of development, and are done by very few research groups. But it is growing and the key to this growth factor was the implementation of Workshop Case for Teaching Administration who was created in 2007 from the idea of preparing students in Masters of Science programs, such as COPPEAD, from Rio de Janeiro, and the Graduate Program of Administration of the University of Caxias do Sul, Brazil.

This course came from a regional necessity, aligning theory and practice, and is embedded within the Department of Business and Operations Management (Master and Doctorate Degrees in Administration). Moreover, was initiated in 2006 under coordination of Prof. Dr. Eric Charles Henri Dorion and the responsibility of Prof. Dr. Pelayo Munhoz Olea and the collaboration of Professor Dr. Sylvia Maria Azevedo Roesch.

The proposed method has formed more than 150 students in the MSc program and 40 PhD students; producing more than 90 Brazilian cases for teaching in management that currently make up the cases data bank of the Program. More than 10% of them have been published in Indexed Journals, International Journals, the Brazilian WebQualis system or some scientific Conferences abroad. As a result, one of the most important Brazilian Scientific Journal - *Revista de Administração Contemporânea* – which covers the area of business administration, presented a paper from the research group on a bibliometric analysis for the period 2007-2011, where it evaluated the

50. Mumford A. The case method – does learning theory matter? Development and Learning in Organizations, 2005; 19 (8) 15-19.
51. Mumford A. When to use the case method. London: Autumn/Fall; 1997.

number of articles published in the National Association of Graduate Studies and Research in Administration (EnANPAD) [52].

In 2007, the National Association for Research in Administration (ANPAD) accepted its first teaching cases on the conference program (EnANPAD proceedings). At that time, the cases represented 2.5% of all accepted papers for presentation and subsequent publication in the proceedings of the event. At the EnANPAD Conference of 2008, the volume fell to 1.8% of the total number of presented articles and worsened in 2009, with a decrease to 1.5%. Since then, the number of cases still is incipient, compared to the total number of article, with only 1% in 2011.

With regard to the authors of the published cases, more than 230 academics signed the 107 cases produced, and 35 have authors have produced and published more than one case. The main two group of research that lead such activity in Brazil are the COPPEAD Institute of the Federal University of Rio de Janeiro and the Graduate Program of Administration of the University of Caxias do Sul, which incentivizes the development and publication of cases for teaching.

See [53], [54] also corroborate the importance of developing teaching cases with focus on Brazilian companies for Brazilian teachers; to have at their disposal cases that portray the reality of their students, since one of the main criticisms directed to the case teaching method is precisely that the scenario depicted in the cases does not correspond to a Brazilian reality.

The importance of teaching about the national situation through case teaching transcends elements of relevant teaching and learning. Since the concept of teaching - learning is taking importance in Brazilian schools, the act of teaching through "teaching cases" promotes "science put into practice" by a method of rediscovery, which enhances questioning for alternative responses, experiments that allow a real transformation of the student that goes beyond formation [55], [56]. With these assumptions, the courses that bring a practical-local concept serve different functions for different conceptions of the role of education and the way of learning.

12.5 Conclusion

The case of education in Brazil shows a state of radical change. In a national perspective, education is now perceived with a different angle from the stakeholders of economic development and draws e new profile between business and universities. The reality about entrepreneurship education, as an economic development tool, raises a lot of interrogations about the necessity of systemizing before acting. The

52. Faria M, Figueiredo FK. Casos de Ensino no Brasil: Análise Bibliométrica e Orientações para Autores. Revista de Administração Contemporânea, 2011; 17 (5): 176 -197.
53. Faria M, Figueiredo FK. Casos de Ensino no Brasil: Análise Bibliométrica e Orientações para Autores. Revista de Administração Contemporânea, 2011; 17 (5): 176 -197.
54. Randolph P, Posner L. Designing meaning learning situations in management: a contingency, decision tree approach. Academy of Management Review, 1979; 44 (2) 459-467.
55. Roesch S. Como escrever casos para o ensino de administração. São Paulo: Atlas; 2007.
56. Erskine J. Cases don't travel well and need to belocally engineered. ECCHO – The Newsletter of the European Case Clearing House, 1999; 20 (3) 4-6.

pedagogic perspective of teaching as a context, nor a process, seems to bring a solution to the obvious lack of results, permitting to establish the bases to develop the adequate vision for the entrepreneurial reality and to shows a context of action. This combination, thru an innovative educative strategy enhances both the necessity to establish new parameters in function of both context and strategy.

An endogenous pedagogical perspective becomes relevant when any pedagogical thinking establishes itself in a systematic way. Based on the Brazilian thinkers and practitioners, an entrepreneurship education pattern arises through the multidisciplinary aspects related to the realities of Brazilian entrepreneur, their business and socio-economic realities, in which teaching and learning must have a distinct dynamic. The development and application of such pedagogy takes force in the intersection of the importance of realism as the basis of educational thinking, and the importance of research as a source of evaluation of the educational process.

In general, Brazilian universities are not prepared to develop accurate training for entrepreneurs. As exposed previously, the field of entrepreneurship has a particular complexity, involving multidisciplinary aspects, which cannot be accomplished neither by traditional universities or foreign partners. Pedagogies in the classroom must be developed on the basis of a local reality.

All together, the contributions of the chapter will offer rich avenues of realistic reflection, practice and review for all actors involved in the teaching of entrepreneurship. The result, we believe, is a chapter that promises to put students, practitioners, teachers, and researchers in an insight that is a lot more than proper luxury, but real necessity. Re-thinking the effort of teaching in entrepreneurship, with the aim of achieving a transformation process of the student is vital to entrepreneurship education. It raises the importance of generating education results thru a process of change and action in an entrepreneurial context, but in a truly Brazilian perspective.

12.6 Notes

1. Some content of this introductory chapter is based on an article produced by Eric Dorion, one of the authors of this book chapter, and presented at the Roundtable on Entrepreneurship Education for Scientist & Engineers (REELA): Stanford, USA. Reference Notes: Dorion, E. Entrepreneurship Education: Innovative Strategies and Contexts Research. In: Roundtable on Entrepreneurship Education for Scientist & Engineers, 2006, Guayaquil. Roundtable on Entrepreneurship Education for scientists & Engineers. Stanford, USA: 2006. Available in: < http://web.stanford.edu/group/ree/archives/archive06/latinamerica/presentations/REELA2006_9_EricDorionPaper.pdf >

12.7 References

1. Dorion, E. Entrepreneurship Education: Innovative Strategies and Contexts Research. In: Roundtable on Entrepreneurship Education for Scientist & Engineers, 2006, Guayaquil. Roundtable on Entrepreneurship Education for scientists & Engineers. Stanford, USA: 2006. < http://web.stanford.edu/group/ree/archives/archive06/latinamerica/presentations/REELA2006_9_EricDorionPaper.pdf > (accessed 10 February 2014).
2. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. São Paulo: Paz e Terra; 2002. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_pedagogia_da_autonomia.pdf (accessed 12 January 2014).
3. GEM. Global Entrepreneurship Monitor. GEM Brazil 2012 Report; 2013. http://www.gemconsortium.org/docs/2806/gem-brazil-2012-report (accessed 15 March 2014).
4. SEBRAE. Serviço Brasileiro de apoio às micro e pequenas empresas. Sobrevivência das Empresas no Brasil. Coleção Estudos e Pesquisas; 2013. http://www.sebrae.com.br/customizado/estudos-e-pesquisas/taxa-de-sobrevivencia-das-empresas-no-brasil/sobrevivencia-das-empresas-no-brasil.pdf (accessed on: 09 March 2014).
5. Schumpeter JA. The theory of economic development. Cambridge: Harvard University Press; 1934.
6. Dorion ECH, Pavoni ET, Chalela LR, Severo EA. Brazilian entrepreneurship: e comparative study on imitation and innovation practices. International Journal of Entrepreneurship and Small Business, 2011; 14 (2) 190-204.
7. Dorion ECH, Severo EA, Olea PM, Nodari CH. Brazilian Entrepreneurship Reality: A Trilogy of Imitation, Invention and Innovation. In: Thierry Burger-Helmchen. (ed.) Entrepreneurship Creativity and Innovative Business Models. Rijeka: InTech; 2012.
8. Morin E. A cabeça bem-feita: repensar a reforma, reformar o pensamento. Rio de Janeiro: Bertrand Brasil; 2004.
9. Freire P. Educação e mudança. Rio de Janeiro: Paz e Terra; 1979. http://www.dhnet.org.br/direitos/militantes/paulofreire/paulo_freire_educacao_e_mudanca.pdf (accessed 24 November 2013).
10. Alves R. Conversas com quem gosta de ensinar. Campinas: Papirus; 2000.
11. Barbier JM. Les saviors théoriques et les savoirs d'action. Paris: Conservatoire National des Arts et des Métiers France; 1996.
12. Júnior PFG, Cordeiro AT. Proceedings of 26th Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Administração. Associação Nacional de Pós-Graduação e Pesquisa em Administração, September 24-30, 2002, Salvador Convention Centre, Salvador, Brazil; 2002.
13. Legendre R. Dicionário Atual da Educação. Larousse; 1988.
14. Dorion ECH. La formation universitaire en entrepreneurship: une expérience brésilienne à Novo Hamburgo (RS). PhD Thesis. Université de Sherbrooke; 2003.
15. Freire P. Educação como prática da liberdade. Rio de Janeiro: Paz e Terra; 1967. http://www.dhnet.org.br/direitos/militantes/paulofreire/livro_freire_educacao_pratica_liberdade.pdf (accessed 11 january 2014)

16. Kolb D. Inventário de estilo de aprendizagem. Caderno técnico: Boston McBer; 1976.
17. IBGE. Instituto Brasileiro de Geografia e Estatística. Indicadores IBGE; 2014. ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Mensal_de_Emprego/fasciculo_indicadores_ibge/2014/pme_201403pubCompleta.pdf (accessed 13 March 2014).
18. Dorion E. Inovação e Empreendedorismo. Belo Horizonte: FEAD; 2008.
19. Brasil. Ministério da Educação. Instituições Credenciadas em 2013. http://portal.mec.gov.br/index.php?option=com_content&view=article&id=12467&Itemid=783&msg=1 (http://portal.mec.gov.br/index.php?option=com_content&view=article&id=12467&Itemid=783&msg=1) (accessed 12 March 2014).
20. Lopes RMA. Referenciais para a Educação empreendedora. In: LOPES RMA. (ed.). Educação empreendedora: conceitos, modelos e práticas. Rio de Janeiro: Elsevier; 2010.
21. Lavieri C. Educação empreendedora? In: LOPES RMA. (ed.). Educação empreendedora: conceitos, modelos e práticas. Rio de Janeiro: Elsevier; 2010.
22. Katz JA. The chronology and intellectual trajectory of American entrepreneurship education: 1876-1999. Journal of Business Venturing, 2003; 18 (1) 321-345.
23. Abell D. What makes a good case? The Newsletter of the European Case. London: Autumn/Fall; 1997.
24. Roesch S. Como escrever casos para o ensino de administração. São Paulo: Atlas; 2007.
25. Erskine J. Cases don’t travel well and need to belocally engineered. ECCHO – The Newsletter of the European Case Clearing House, 1999; 20 (3) 4-6.
26. Mumford A. The case method – does learning theory matter? Development and Learning in Organizations, 2005; 19 (8) 15-19.
27. Mumford A. When to use the case method. London: Autumn/Fall; 1997.
28. Faria M, Figueiredo FK. Casos de Ensino no Brasil: Análise Bibliométrica e Orientações para Autores. Revista de Administração Contemporânea, 2011; 17 (5): 176 -197.
29. Randolph P, Posner L. Designing meaning learning situations in management: a contingency, decision tree approach. Academy of Management Review, 1979; 44 (2) 459-467.

Chapter 13 Mismatch in Teachers' Ontological Conception of Entrepreneurship Education

by Kaarlo Paloniemi [1] and Pekka Belt [2]

13.1 Introduction

According to literature, entrepreneurship education (EE) teachers face difficulties in their everyday work when they attempt to combine the content of entrepreneurship and the educational methods required to teach it [3], [4], [5], [6]. To understand this phenomenon more thoroughly, Fayolle [7] raises a question relating to the basic elements of EE: *"What are we talking about when we talk about entrepreneurship education?"* To overcome the conceptual confusion, researchers in the field call for theoretical and conceptual studies focusing on ontological and epistemological issues.

In entrepreneurship, there are two ontologically different theories describing its core: opportunity discovery and opportunity creation. These two theories share some key aspects; however, their ontological bases are very different. While discovery theorists see opportunities as existing independently of entrepreneurs, for creation theorists opportunities are created by entrepreneurs [8]. Moreover, discovery theorists see entrepreneurship as systematic cognitive calculation where the level of risk can be calculated and future predicted once enough information has been collected. According to this view, the reality is the same for everybody and, consequently, any intelligent entrepreneur will get the same calculation result and will be able to evaluate the feasibility of any existing opportunity. In other words, the ontological view of discovery theory is based on realism; that is, opportunities exist independently of perceptions of them [9]. However, for the creation theorists, the context is uncertain

1. Oulu Business School, University of Oulu, Oulu, Finland
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3. Fiet JO. The theoretical side of teaching entrepreneurship. Journal of Business Venturing 2000; 16(1) 1–24.
4. Seikkula-Leino J. Advancing entrepreneurship education in the Finnish basic education–the prospect of developing local curricula. The dynamics between entrepreneurship, environment and education 2008; 168–90.
5. Solomon G. An examination of entrepreneurship education in the United States. Journal of Small Business and Enterprise Development 2007; 14(2) 168–182.
6. Ruskovaara E, Pihkala T. Teachers implementing entrepreneurship education: classroom practices. Education+Training 2013; 55(2) 204–216.
7. Fayolle A. Personal views on the future of entrepreneurship education. Entrepreneurship & Regional Development 2013; 25(7-8) 692–701.
8. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
9. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.

or ambiguous (i.e., entrepreneurs are unable to predict the future) [10]. The future needs to be created by human actions. Therefore, the ontological view of creation theory is based on idealism, meaning that opportunities are creations of human beings [11].

In education, behavioristic learning conception bases itself on ontological assumptions originating from realism in the same manner as discovery theory in entrepreneurship. The knowledge to be taught is viewed to exist already and the knowledge is considered as a fact that is similar for everybody [12]. Moreover, the teacher is capable of systematically transferring this knowledge unchanged according to objectives set beforehand. Conversely, social constructionist learning conception bases itself, in line with creation theory, on idealism; knowledge is not ready to be picked up; rather, learners construct new knowledge in cooperation with peer students, using the knowledge and know-how of these colleagues as well as the support of their teachers [13], [14].

The ontological bases of behaviorism and social constructionism learning theories are fundamentally different. Behaviorists, because of their roots in realism [15], [16], believe that reality exists independently of perceptions of it. Social constructionists believe that no independent reality exists, or that reality may exist but cannot be known ex ante. Thus, they base their theoretical thinking on idealism (i.e., only our constructions of reality exist) [17], [18]. Therefore, we believe that both behaviorists and opportunity discoverers focus on external observations of observable issues (stimuli) and the reactions that follow. Thus, they reject the idea that knowledge depends on an individual's mental state. That is, *"there is no subjective element to learning-either in determining what to study or how information is interpreted, used, or understood"* [19]. Social constructivists and opportunity creators believe that human beings are able to construct their own knowledge by interpreting multiple perspectives of the world, rather than by replicating only one true perspective, as viewed by realists. Thus, realism and idealism represent two polarized perspectives on reality; objective reality at one end and subjective reality consisting of multiple realities on the other. If EE teachers adopt a realist position, then, at the same time, they reject the possibility that their students will construct their own interpretations of the findings. That is, they just assume that what is reported as opportunity actually is a true opportunity. If EE teachers follow idealism, it leads them to conclude that it is students who create opportunities through exploration, collaboration, or co-creation. The opportunities they create can never be known as "true" opportunities ex ante. That is because there

10. Sarasvathy SD. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. The Academy of Management Review 2001; 26 243–263.
11. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
12. Skinner BF. Origins of a Behaviorist. Psychology Today 1983; 22–33.
13. Berger PL, Luckmann T. The social construction of reality: A treatise in the sociology of knowledge No. 10. Penguin UK; 1991.
14. Gergen KJ. The social constructionist movement in modern psychology. American Psychologist 1985; 40(3) 266–275.
15. Cooper PA. Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.
16. Richardson V. From Behaviorism to Constructivism in Teacher Education. Teacher Education and Special Education 1996;19(3) 263–271.
17. Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. Annual Review of Psychology, 49, 345–375.
18. Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.
19. Boghossian P. Behaviorism, Constructivism, and Socratic Pedagogy. Educational Philosophy and Theory 2006; 38(6) 713–722.

is no single reality, but multiple realities, none of which has precedence over the other in terms of claims to represent the truth about social phenomena [20].

The aim of this chapter is to study, from an ontological point of view, the recent theoretical developments in both entrepreneurship and education, and to discuss the impact of possible ontological discrepancies in teachers' conceptions of entrepreneurship education. That is, we base our approach on the insight that, first, the modern entrepreneurship literature favors opportunity creation over opportunity discovery and that, simultaneously, the modern literature on education prefers the views of social constructionism to behaviorism. Second, we see that while teachers of entrepreneurship education at any level of our education system are able to match these recent theoretical standpoints, they still seem to base the entrepreneurial part of entrepreneurship education on traditional theories, rather than on the modern view of entrepreneurship. Finally, we see that teachers at the university level seem to cling to ontological conceptions of traditional theories of both entrepreneurship and education. Thus, there seems to be a mismatch in entrepreneurship teachers' ontological conception between entrepreneurship and the educational methods teachers are using to organize their activities for entrepreneurship education.

In order to ease EE teachers' ontological headaches in understanding entrepreneurship and education, we will first focus on literature to find out whether or not there is a mismatch between EE teachers' conceptions of entrepreneurship and education. Second, we will focus on opportunity creation from the middle-ground perspective of critical realism to ease some of the ontological controversy in EE teachers' conceptions of entrepreneurship and education.

13.2 Method

In this conceptual study, our focus is on EE teachers' conceptions of entrepreneurship and education. The aim of the study is to clarify the ontological factors that explain the confusion EE teachers face in conceiving entrepreneurship and the methods used to teach it. In addition, we aim to depict a coherent model of ontological aspects that explicitly looks at both theoretical entities of EE: entrepreneurship and education as EE teachers' conceptions of EE can be expected to be influenced by their conceptions of entrepreneurship and education. Because there is no shared understanding to conceptualize EE, we aim to describe EE as an integration of two domains: entrepreneurship and education.

20. Boghossian P. Behaviorism, Constructivism, and Socratic Pedagogy. Educational Philosophy and Theory 2006; 38(6) 713–722.

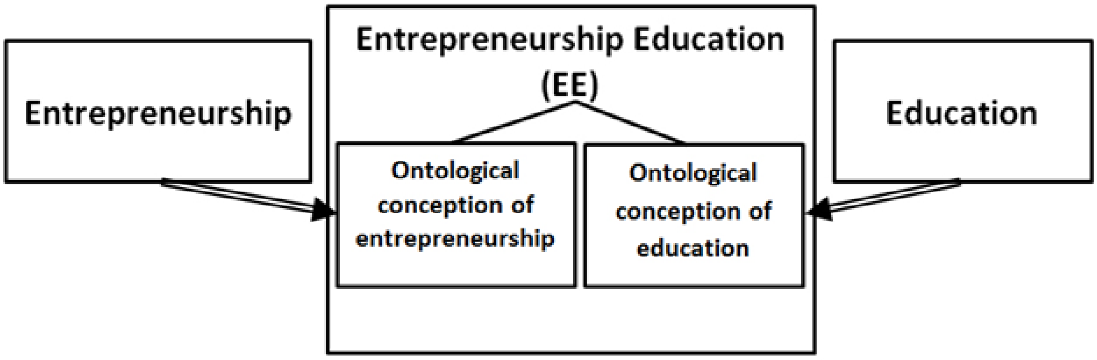

Figure 13.1 The components of EE teachers' ontological conception of EE when EE is viewed as an integration of entrepreneurship and education

To analyze a potential ontological mismatch in EE teachers' conceptions between entrepreneurship and education, we first review scientific journal articles, project reports, and official European and national documents discussing EE. We then compare our findings with the feedback we have received from EE teachers at primary, secondary, and tertiary educational levels, as well as with our own personal experiences. We also juxtapose the ontological perspectives of entrepreneurship and education. Combining conceptual reasoning and empirical observations enables fruitful interplay between theory and practice. Therefore, our methodological approach follows the reflective practice described in [21], [22].

13.3 Literature review and analysis

13.3.1 Entrepreneurship

There are two entrepreneurship theories for EE teachers to choose from: opportunity discovery and opportunity creation. According to the scientific literature, these two theories share some key aspects; nevertheless, they are very different. Even though both of these theories seek to explain entrepreneurial actions and their impact on the entrepreneur's ability to form and exploit opportunities, their ontological conceptions of opportunity, entrepreneur, and entrepreneurial decision-making differ [23]. Discovery theorists see opportunities as existing independently of entrepreneurs, and opportunities are formed by shocks in industries or markets [24], [25]. According to creation theorists, entrepreneurs create opportunities. Discovery theorists believe that entrepreneurs, as persons, differ – *ex ante* – from non-entrepreneurs. Creation

21. Hayward LM. Becoming a self-reflective teacher: a meaningful research process. Journal of Physical Therapy Education 2000; 14(1) 21–30.
22. Jones C, Penaluna A. Moving beyond the business plan in enterprise education. Education+Training 2013; 55(8/9) 804–814.
23. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
24. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
25. Shane S, Venkataraman S. The promise of entrepreneurship as a field of research. The Academy of management review 2000; (2) 217–226.

theorists agree that there may be differences; nevertheless, those differences may be experienced only *ex post*. Also, the contexts where entrepreneurs make their decisions are viewed differently by discovery and creation theorists. While discoverists view the context as risky (i.e., entrepreneurs may calculate the risk level by collecting adequate amounts of information), creation theorists see the context as uncertain or ambiguous (i.e., entrepreneurs cannot predict the future).

Recent entrepreneurship literature favors a paradigm shift from causation to effectuation that better suits entrepreneurship in uncertain business environments [26], [27]. Causation follows the traditional decision-making process, requiring the entrepreneur to collect information for goal-setting and planning. As a consequence, the entrepreneur is able to predict future actions and events [28], [29], [30]. Thus, causation is based on the assumption that a business opportunity is first discovered, after which business functions are systematically established. Therefore, causation prefers EE that promotes understanding of business functions and business planning. We can conclude that there are obvious ontological parallels between opportunity discovery theory and causation.

In a turbulent business environment, successful entrepreneurs typically use effectuation [31], [32], [33]. Effectual entrepreneurs start by thinking of who they are, what they know and whom they know [34]. Instead of first setting goals, effectual entrepreneurs start with given resources and let goals develop over time from the imagination and actions of involved people. Thus, effectuation is based on the awareness of available resources, including the entrepreneur's personal competences and those of stakeholders [35], [36]. We conclude that effectuation is based on the assumption that entrepreneurs create business opportunities in interaction with other stakeholders and with the environment. From the ontological perspective, effectuation and opportunity creation can thus be assimilated. In addition, the ontological perception of effectuation can be considered to match with the ontological perception of social constructionism.

26. Sarasvathy SD. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. The Academy of Management Review 2001; 26 243–263.
27. Dew D, Read S, Sarasvathy SD, Wiltbank R. Effectual versus predictive logics in entrepreneurial decision-making: Differences between expert and novices. Journal of Business Venturing 2008; 24 287–309.
28. Dew D, Read S, Sarasvathy SD, Wiltbank R. Effectual versus predictive logics in entrepreneurial decision-making: Differences between expert and novices. Journal of Business Venturing 2008; 24 287–309.
29. Read S, Sarasvathy SD. Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise. The Journal of Private Equity 2005; 9 45–61.
30. Sanz-Velasco SA. Opportunity development as a learning process for entrepreneurs. International Journal of Entrepreneurial Behaviour & Research 2006; 12 251– 271.
31. Dew D, Read S, Sarasvathy SD, Wiltbank R. Effectual versus predictive logics in entrepreneurial decision-making: Differences between expert and novices. Journal of Business Venturing 2008; 24 287–309.
32. Read S, Sarasvathy SD. Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise. The Journal of Private Equity 2005; 9 45–61.
33. Sanz-Velasco SA. Opportunity development as a learning process for entrepreneurs. International Journal of Entrepreneurial Behaviour & Research 2006; 12 251– 271.
34. Sarasvathy SD. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. The Academy of Management Review 2001; 26 243–263.
35. Dew D, Read S, Sarasvathy SD, Wiltbank R. Effectual versus predictive logics in entrepreneurial decision-making: Differences between expert and novices. Journal of Business Venturing 2008; 24 287–309.
36. Read S, Sarasvathy SD. Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise. The Journal of Private Equity 2005; 9 45–61.

13.3.2 Entrepreneurship education

Entrepreneurship has traditionally been viewed as needing managerial competences and knowledge about business functions. More recent scientific entrepreneurship literature, however, highlights innovative, entrepreneurial competences in turbulent operational environments. The same viewpoints can be traced in EE; while traditional EE aims to develop students' competences as managerial entrepreneurs [37], entrepreneurship in uncertain business environments is seen as requiring creative, even playful, entrepreneurs [38], [39].

Knowledge of facts is not in the core of entrepreneurship; rather entrepreneurship is a way of thinking and acting [40]. Consequently, EE providing knowledge about entrepreneurship does not significantly promote an entrepreneurial mindset, and new approaches are required [41]. According to Engeström [42], uncertain environments require simultaneous creation and learning of new knowledge. Daring experimentation and reliance on one's own and partners' competences are of vital importance because it is practically impossible to collect the information required for managerial decision-making [43].

Modern EE researchers view entrepreneurship as a valid concept in all human activities, not just in business [44], [45]. Accordingly, entrepreneurship is defined broadly, including enterprising behaviors, even outside the business context. In basic education, teachers typically have a strong educational background and EE is seen as an inseparable part of other education. As a consequence, education dominates EE and the role of entrepreneurship is marginal [46].

Far too often, EE teachers follow outdated definitions of entrepreneurship. We can partly blame the ambiguous definition of entrepreneurship by the European Communities [47] and the Ministry of Education and Culture of Finland [48]. The Finnish ministry defines entrepreneurship as *"the individual's ability to translate ideas into*

37. Hjorth D. Rewriting Entrepreneurship–for a New Perspective on Organisational Creativity. PhD thesis. Lund University; 2003.
38. Hjorth D. Creating space for play/invention – concepts of space and organizational entrepreneurship. Entrepreneurship and Regional Development 2004; 16 413–432.
39. Steyaert C, Katz J. Reclaiming the space of entrepreneurship in society: geographical, discursive and social dimensions. Entrepreneurship and Regional Development 2004; 16 179–196.
40. Gibb AA. The Enterprise Culture and Education: Understanding Enterprise Education and its Links with Small Business, Entrepreneurship and Wider Educational Goals. International Small Business Journal 1993; 3 11–34.
41. Bennett M. Business lecturers' perception of the nature of entrepreneurship. International Journal of Entrepreneurial Behaviour & Research 2006; 12 165–188.
42. Engeström Y. Expansive learning at work: toward an activity theoretical reconceptualization. Journal of Education and Work 2001; 14 133–156.
43. Sarasvathy SD. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. The Academy of Management Review 2001; 26 243–263.
44. Gibb AA. The Enterprise Culture and Education: Understanding Enterprise Education and its Links with Small Business, Entrepreneurship and Wider Educational Goals. International Small Business Journal 1993; 3 11–34.
45. Kirby DA. Entrepreneurship education: can business schools meet the challenge? Education+Training 2004; 46 510–519.
46. Fayolle A, Gailly B, Lassas-Clerc N. Assessing the impact of entrepreneurship education programmes: a new methodology. Journal of European industrial training 2006; 30(9) 701–720.
47. Commission of the European Communities. Brussels, 10.11.2005. COM 548 final. 2005/0221(COD). Proposal for a RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on key competences for lifelong learning; 2005.
48. Ministry of Education and Culture of Finland Guidelines for entrepreneurship education. Publications of the Ministry of Education 2009:9.

action. It encompasses creativity, innovativeness and risk-taking, as well as an ability to plan and direct action towards the achievement of goals" [49]. Even though this definition acknowledges an individual's creative and innovative role in "transforming ideas into action", this definition assumes that the entrepreneurial process starts with an existing opportunity (according to discovery theory) and focuses on "risk-taking attitude (trait theory), skills to plan and meet preset goals" (managing business functions). The EE teachers seem, in their everyday work, to have problems in combining their understanding of pedagogy and entrepreneurship. As a consequence, they either adopt the discovery theory or follow their own observations of how entrepreneurs run their businesses.

Teachers with strong pedagogical backgrounds rely on learning theories based on creativity and experiential and collaborative pedagogical elements. They aim to make curricula closer to reality by utilizing company visits, business games, creativity training, self-directed learning, problem-based learning, distance learning, behavioral simulations, and lifelong learning for those working in industry [50]. Nevertheless, they base their assumptions of entrepreneurship on opposite assumptions than when considering education. In addition, teachers' strong educational backgrounds result in educational choices overshadowing the entrepreneurial ones [51]. Approximately half of teachers put less emphasis on entrepreneurship than on education [52].

13.3.3 Comparison of ontological conceptions of entrepreneurship and education

There has been a shift from realism toward idealism in scientific literature on entrepreneurial processes during the early part of the first decade of this millennium. The same shift occurred significantly earlier in the educational literature [53]. In entrepreneurship, the dominant discovery theory that views opportunities as independently existing has been complemented by scholars who see opportunities as created rather than discovered [54], [55], [56]. In education, the shift means that teachers and students interactively create new knowledge together and with the environment

49. Ministry of Education and Culture of Finland Guidelines for entrepreneurship education. Publications of the Ministry of Education 2009:9.
50. Wilson K. Entrepreneurship education in Europe. In: Jonathan P. (ed.) Local Economic and Employment Development (LEED) Entrepreneurship and Higher Education (No. 18). OECD Publishing; 2008; 119–138.
51. Gustafsson-Pesonen A, Kiuru P. Ideoita ja oivalluksia yrittäjyyskasvatukseen YKOONTI. Aalto-yliopiston julkaisusarja KAUPPA+TALOUS 2012; 4/2012.
52. Gustafsson-Pesonen A, Kiuru P. Ideoita ja oivalluksia yrittäjyyskasvatukseen YKOONTI. Aalto-yliopiston julkaisusarja KAUPPA+TALOUS 2012; 4/2012.
53. Knoester M. Who will benefit from 'the sociocultural turn' in education? Pedagogy, Culture & Society 2011; 19(2) 311–318.
54. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
55. Ardichvili A, Cardozo R, Ray S. A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing 2003; 18 105–123.
56. Sarasvathy SD, Dew N, Velamuri SR, Venkataraman S. Three views of entrepreneurial opportunity. In: Audretsch DB, Acs ZJ. (eds.) Handbook of entrepreneurship research. New York: Springer; 2010; 77–96.

rather than that students are given more knowledge, [57], [58], [59]. Table 13.1 presents our views on the main ontological characteristics of entrepreneurship and education.

Ontology	Conception of entrepreneurship/ opportunity	Conception of education/learning
Realism	Reality exists independently of perceptions of it; objectivist ontology/ epistemology; (*Discovery theory:* [60])	Reality exists independently of perceptions of it; objectivist ontology/ epistemology; (*Behaviorism:* [61], [62])
Idealism	Reality is creations of human actions; subjectivist ontology/ epistemology; (*Creation theory:* [63])	Reality is construction of human behavior; subjectivist ontology/ epistemology; (*Social constructionism:* [64], [65])

Table 13.1 Comparison of EE teachers' ontological/epistemological conception of opportunity and education

According to realism, reality exists independently of the observer's perceptions of it. The upper part of Table 13.1 presents (following realism) entrepreneurship according to discovery theory and education according to behaviorism. Discovery theory and behaviorism have the same ontological starting point, realism, and can therefore be seen to ontologically match with each other. Following idealism, the lower half of Table 13.1 presents entrepreneurship according to creation theory and education according to social constructionism. According to idealism, reality is created by the observer. We conclude that creation theory and social constructionism match ontologically.

57. Richardson V. From Behaviorism to Constructivism in Teacher Education. Teacher Education and Special Education 1996;19(3) 263–271.
58. Knoester M. Who will benefit from 'the sociocultural turn' in education? Pedagogy, Culture & Society 2011; 19(2) 311–318.
59. Cooper PA. (1993). Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.
60. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
61. Richardson V. From Behaviorism to Constructivism in Teacher Education. Teacher Education and Special Education 1996;19(3) 263–271.
62. Cooper PA. (1993). Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.
63. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
64. Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. Annual Review of Psychology, 49, 345–375.
65. Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

13.3.4 Critical realism — A potential way forward

Realism and idealism can be considered, from the ontological perspective, as two extremities. Critical realism [66] can be located between these two extremes, and is therefore a potential way to ease EE teachers' ontological headache. Critical realism recognizes a reality that is common to everybody, but simultaneously (in line with idealism) views this reality as always being observed and interpreted through human brains. The entrepreneurship concept of creation theory can be described using critical realism so that the objective reality provides material for entrepreneurs to create opportunities or new businesses.

The ontological bases of both discovery theory and behaviorism originate from the realist point of view. This means that, because reality exists independently of the observer [67], EE teachers, their students, and all human beings experience it in the same way [68]. As a result, EE teachers need to focus on the content of certain means, which they know are the most feasible for their EE courses. From the learning/teaching point of view, EE teachers need to select appropriate exercises through which students learn what is important for discovering existing opportunities and for developing them successfully through actions in the context of business or elsewhere.

In contrast to the realist viewpoint of behaviorism and opportunity discovery, idealism-based creation theory and social constructionism explicitly shows that, rather than discovering the true nature of reality, people construct multiple realities based on their subjective experiences [69], [70]. Consequently, EE teachers need to focus on activities that promote students' abilities to construct (or create) their individual reality as well as opportunities they view as feasible for that reality. Then, students will be able to carry on in transforming the created opportunities into real-life activities.

However, if EE teachers do not choose their teaching contents and methods from the matched pairs of discovery–behaviorism and creation–social constructionism (Table 13.1), they may, we believe, face difficulties in their teaching (e.g., how to cope with a situation in which their teaching is based on both social constructionism and discovery theory). Whereas the former rejects the notion of one true reality to be discovered by human beings, the latter is built on the very same assumption. According to this, EE teachers will be focusing on searching existing opportunities rather than on how to create them individually. This is because there is nothing to be created in the existing reality. Furthermore, if EE teachers' conceptions of teaching and entrepreneurship in the context of EE are based on behaviorism and creation theory, trying to create something not yet existing is unnecessary or impossible if the reality is knowable and the same for all human beings (see: bricoleur in [71]). If students creatively choose their

66. Archer M. Realism and morphogenesis. In Archer M, Bhaskar R, Collier A, Lawson T, Norrie A. (eds.) Critical Realism: Essential Readings. Routledge; 1998; 356–382.
67. Casti JL. Paradigms lost: Tackling the unanswered mysteries of modern science. New York: Avon Books; 1989; 15–48.
68. Osborne JF. Beyond constructivism. Science Education 1996; 80(1) 53–82.
69. Driscoll MP. Psychology of Learning for Instruction. Boston, MA: Allyn & Bacon; 1994.
70. Nola R. Relativism and Realism in Science. Dordrecht, The Netherlands: Kluwer; 1988.
71. Garud R, Karnøe P. (2003). Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. Research policy 2003; 32(2) 277–300.

learning methods, a behavioristic EE teacher may begin to think that students are *off task* and need to get back to *real stuff* as soon as possible because, in behaviorism, *"learners are told about the world and are expected to replicate its contents"* [72].

The upper part of Table 13.1 presents the realism-based views of entrepreneurship and education, whereas the lower part follows idealism. In our story above, we have hinted that, by systematically selecting either the upper or lower part of the table for both entrepreneurship and education, one can avoid the ontological mismatch. However, real situations in the EE context may be very different. For example, EE teachers may wish to utilize teaching methods following social constructionism, even though they simultaneously take discovery theory for granted. In a different case, the deviation from the symmetrical upper or lower part of the table may mean a teacher wishes to behavioristically teach entrepreneurship according to creation theory. Is it possible to avoid the headache of ontological mismatch even if one follows Table 13.1 diagonally, as described in these two examples? We believe that critical realism enables the conception of reality based on realism and simultaneously accepts the construction of reality according to idealism. Thus, the dichotomy of the table may be potentially eased if one approaches the phenomenon of EE via critical realism. Table 13.2 explains the nature of critical realism.

Ontology	Conception of entrepreneurship/ opportunity	Conception of education/learning
Realism	Reality exists independently of perceptions of it: objectivist ontology/ epistemology: (*Discovery theory*: [73])	Reality exists independently of perceptions of it: objectivist ontology/ epistemology: (*Behaviorism* : [74], [75])
Critical realism	**Reality exists as source for opportunity creation process; Reality is creative outcome of human actions; objectivist ontology and subjectivist epistemology** ([76], [77], [78])	

Table 13.2 Critical realist perspective on EE teachers' ontological conception of entrepreneurship and education

72. Jonassen D. Evaluating Constructivist Learning. Educational Technology 1991; 36(9) 28–33.
73. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
74. Richardson V. From Behaviorism to Constructivism in Teacher Education. Teacher Education and Special Education 1996;19(3) 263–271.
75. Cooper PA. (1993). Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.

Idealism	Reality is creation of human actions; subjectivist ontology/ epistemology; (*Creation theory:* [79])	Reality is construction of human behavior; subjectivist ontology/ epistemology; (*Social constructionism:* [80], [81])

Table 13.2 Critical realist perspective on EE teachers' ontological conception of entrepreneurship and education

When entrepreneurial process scholars talk about opportunities for future business development in the context of both startups and established firms, they refer to a wide range of actions (see: [82]). If we look at opportunity more thoroughly from a process perspective, opportunity becomes obvious at the same time as we see it, but not before [83]. Then there remain unanswered questions: *What do we actually see? Do we see the opportunity as an explicit entity, or as a process? What is the nature of the opportunity, then?* If we understand opportunity as an outcome rather than a starting point of the entrepreneurial process, how does this understanding affect this process?

Critical realists claim that people do not only overcome the dichotomy between discovery–creation and behaviorism–social constructionism by defining social reality as existing (the realist ontological positioning). They are also in an active position in dealing with social reality by possessing the power to either reproduce or transform preceding structures [84]. To think about the nature of opportunity more thoroughly, we see that critical realists claim that opportunity exists only in human imagination. That is, it exists as artifact (i.e., documented ideas for future business ventures, business models, or business plans) and manifests itself as imagined opportunities [85].

We believe that critical realism may overcome the dichotomy between realism and idealism by conflating them. As a consequence, human beings are in the position of entrepreneurs and are able to reproduce existing knowledge as artifacts (as in realism), or transform, construct, or create new knowledge through their own imaginations and creativity (as in idealism).

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76. Archer M. Realism and morphogenesis. In Archer M, Bhaskar R, Collier A, Lawson T, Norrie A. (eds.) Critical Realism: Essential Readings. Routledge; 1998; 356–382.
77. Fleetwood S. Ontology in Organization and Management Studies: A Critical Realist Perspective. Organization 2005; 12(2) 197–222.
78. Scott D. Critical realism and empirical research methods in education. Journal of Philosophy of Education 2005; 39(4) 633–646.
79. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
80. Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. Annual Review of Psychology, 49, 345–375.
81. Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.
82. Scott D. Critical realism and empirical research methods in education. Journal of Philosophy of Education 2005; 39(4) 633–646.
83. Corbett AC, Katz JA., editors. Entrepreneurial Action. Emerald Group Publishing; 2012.
84. Archer M. Realism and morphogenesis. In Archer M, Bhaskar R, Collier A, Lawson T, Norrie A. (eds.) Critical Realism: Essential Readings. Routledge; 1998; 356–382.
85. Klein PG. Opportunity, discovery, entrepreneurial action and economic organization. Strategic Entrepreneurship Journal 2008; 2 175–190.

13.4 Findings

13.4.1 Ontological conceptions of EE teachers at universities

In universities, entrepreneurship education teachers tend to either adopt the discovery theory or follow their own instincts originating from their everyday observations of how entrepreneurs seem to manage their businesses. Figure 13.2 shows EE teachers' typical ontological conceptions at the university level. Discovery and trait theories as well as business functions dominate their understanding and, consequently, these traditional theories guide how EE teachers at universities run their EE courses. As a result, EE teachers typically concentrate on *how to run a business* rather than *how to create new business opportunities or how to create a new business*.

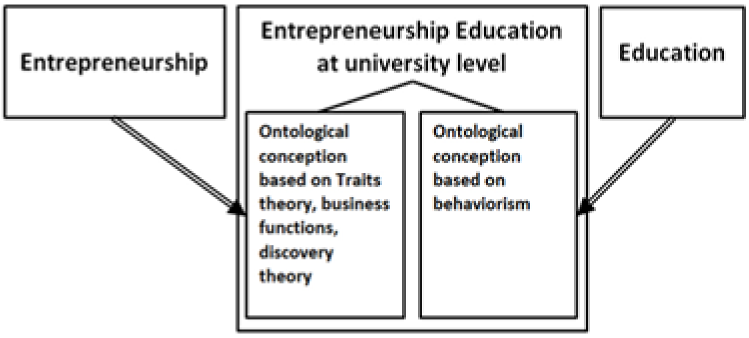

Figure 13.2 Ontological conceptions of EE teachers at universities

It is noteworthy that there is no ontological mismatch as such between these conceptions of entrepreneurship and education, despite applying the traditional behaviorist perspective on teaching and the traditional conception of entrepreneurship. However, these two outdated conceptions are not optimal because none of them acknowledge the student's active and creative role. From the entrepreneurship viewpoint, this type of understanding means that the students are expected to discover existing opportunities, then use their gained business skills in developing successful businesses. From the educational perspective, students are viewed as passive and are expected to adopt the information their teachers have selected for them.

13.4.2 Ontological conceptions of EE teachers in schools at the basic education level

At the basic education level, EE teachers typically view entrepreneurship as business-related functions and entrepreneurs as opportunity discoverers as well as persons with certain characteristics or traits. Thus, EE teachers at schools share the traditional conceptions of entrepreneurship with university teachers. However, unlike university-teachers who base their teaching on behaviorism, school teachers tend to follow the social constructionist perspective in their teaching, with only some of the older teachers being exceptions. Therefore, there is a mismatch between their conceptions of entrepreneurship and education. In practice, this means that school teachers acknowledge students' active roles in learning and their own roles as facilitators and co-learners. Nevertheless, their conception of entrepreneurship is based on traditional discovery theory, which makes it difficult for them to use their advanced educational backgrounds. Figure 13.3 shows EE teachers' typical ontological conceptions at the basic education level.

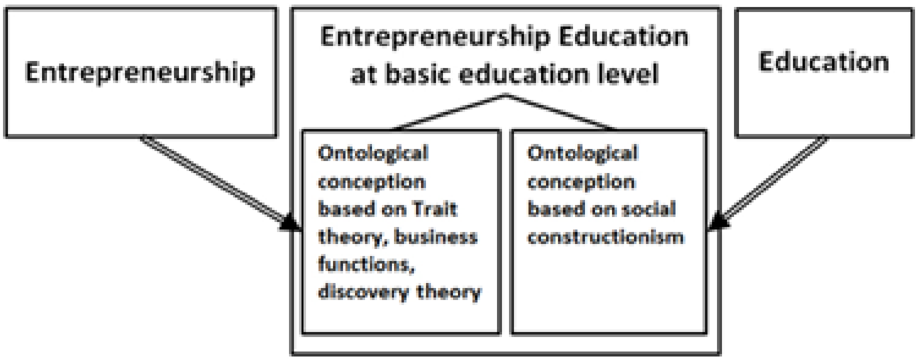

Figure 13.3 Ontological conceptions of EE teachers in schools at the basic education level

Both the European Commission and the Finnish National Board of Education consider promotion of entrepreneurial behavior as a general goal for European schools. As such, this goal is in line with social constructionism. Nevertheless, a concept that includes the term *entrepreneur* but is outside of business context may cause further confusion about the meaning of entrepreneurship, as teachers typically understand entrepreneurship in a business context according to discovery theory, which is not in line with social constructionism.

13.4.3 Our proposal to ease EE teachers' ontological mismatch—a critical realist perspective

13.4.3.1 Theoretical basis for our proposal

We believe that EE teachers may ease the ontological mismatch they face in their teaching by selecting the conceptions of entrepreneurship as opportunity creation and education as social constructionism. However, by choosing the critical realist perspective, EE teachers can use some aspects from both idealism and realism. That is, one can accept some things as existing and simultaneously accept other things as human creations. In the context of EE, this means that EE teachers may base their everyday teachings on something that they take as given, and on something they create themselves, together with their students.

The entrepreneurial opportunity creation process typically starts after people feel they have found something interesting through observing their everyday realities (according to realism). After this finding, the opportunity process continues iteratively through creation and recreation, potentially leading to a business venture (reality is created by human actions, according to idealism). The same process often takes place outside the business context as well. This process includes elements from both realism and idealism potentially causing ontological headaches for EE teachers. Critical realism may ease these headaches.

Critical realist perspective allows us to see that entrepreneurs (i.e., key actors of the opportunity creation process) are deeply embedded in their social and natural realities (environments). This means that they may interact with other people and that they may find interesting and utilizable sources for their opportunity-creating processes. As Figure 13.4 shows, the construct of opportunity includes three sub-processes (future business ideating, business modeling, and business planning). In each sub-process, the entrepreneur utilizes creative problem-solving (CPS) [86] for creating an outcome that becomes an input for the other two sub-processes in an iterative manner. Each sub-process has an idealist ontological foundation; however, the output of this sub-process is viewed as a realism-based input for other sub-processes.

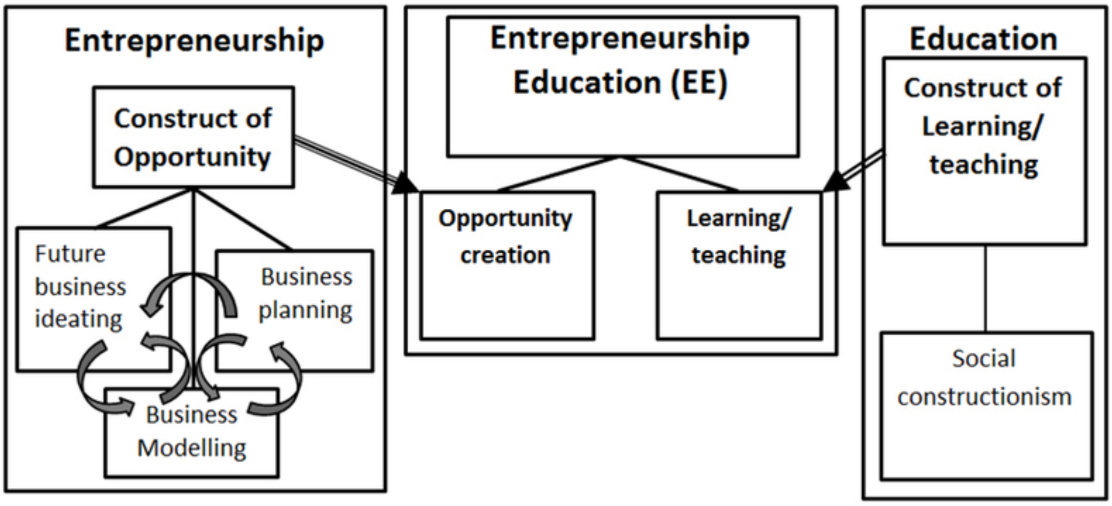

Figure 13.4 Entrepreneurship Education (EE) as integration of entrepreneurship and education

By defining entrepreneurship as an entrepreneurial process focusing on opportunity creation and education focusing on social constructionism opens up new avenues for EE teachers and students. The EE teachers and students will be capable for creating opportunities rather than just finding them. Furthermore, EE teachers may apply this kind of process both in business context and outside of it, even in the educational context. In addition, this process is applicable at every educational level because it is up to the EE teacher and participating students to decide into which direction they order each sub-process.

86. Tassoul M, Buijs J. Clustering: An Essential Step from Diverging to Converging. Creativity and Innovation Management Journal 2007; 16(1) 16–26.

13.4.3.2 Practical application of our proposal

Table 13.3 illustrates our proposal, which is based on the idea of seeing EE as an integration of entrepreneurship and education. We emphasize the importance of both these elements; entrepreneurship gives the context and education offers the method for EE teachers to facilitate students' learning processes. Both of these EE elements can be based on critical realism. Further, we believe that seeing entrepreneurship through a process perspective will help EE teachers to overcome the confusion of comprehending how to exploit entrepreneurship in business, education, or any other non-business context. We also believe that this approach is valid at all levels of education and also outside business and economics studies. Our proposal is applicable for any activity students want to create for the benefit of themselves, their friends, their acquaintances, their customers, or their end-users. We use the term *activity* in any non-business context in a manner similar to the use of the term *business* to describe business opportunity, business modeling, and business planning.

As shown in Figure 13.4, we base our suggestion on the construct of opportunity consisting of three sub-processes: ideating an initial idea for future business, business modeling, and business planning. Even though these three sub-processes are typically seen as pure business-focused processes, we now apply these into the educational context and label them as follows: ideating an initial idea for a new activity, activity modeling, and activity planning. See Table 13.3 for details.

Our processual approach to EE starts after people have imagined and reached new thoughts during their everyday lives. Only some of these thoughts are worth further elaborating. If a thought is considered desirable enough, then it is time to start a business/activity opportunity process to creatively develop it into a full-blown business/action opportunity that is ready for implementation (or exploitation). As shown in Table 13.3, people will go through every sub-process by utilizing the CPS method (i.e., divergent thinking-clustering–convergent thinking in [87]). This method helps people in the position of an entrepreneur or student (or even an EE teacher) to generate a lot of possible answers to interesting questions, to create expected and unexpected combinations between them, and to then select the most desirable combination to be used as an input for further CPS actions in the next sub-process. If all combinations in clustering are felt to be unsatisfactory, people may start the sub-process again. Alternatively, they may go back a previous sub-process to create a different output.

In the position of entrepreneur or student, or even in the position of EE teacher, people start asking questions when ideating, such as: Who is the customer/end-user/beneficiary? How do I get in contact with them? What is the value proposition? What is our own commitment? (See: 4 Cs in [88]). After creating a great amount of possible and impossible answers based on divergent thinking, people try to find new, unexpected,

87. Tassoul M, Buijs J. Clustering: An Essential Step from Diverging to Converging. Creativity and Innovation Management Journal 2007; 16(1) 16–26.
88. Gartner WB, Bellamy MG. Enterprise. 1st ed. Cengage Learning; 2010.

innovative combinations between ideas (clustering) to proceed with the most promising one.

We believe that by using nine elements (value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structure) originally developed for business (Business Model Canvas (BMC) in [89], [90]), it is possible to define all the elements of the business/activity model to understand that any change in one element will actually affect the entirety. Familiarizing with BMC helps in modeling elements of business/activity element by element, and to understand that any change in one element will actually affect the entirety. Any change may open up new avenues during the modeling process. It is useful to generate as many different versions as possible to see what may even be surprising ways to build future business/activity. The outcome of modeling represents a conceptual description of a desired model of future business or other activity and the input for the following sub-process.

According to our interpretation of EE literature, EE teachers have treated business planning as the key content of EE (at least at the secondary and tertiary levels of the education system). At the same time, some scholars in the field of entrepreneurship have questioned its importance (e.g., because of the strong focus on convergent thinking, that is, how to make rational plans for implementing the desired B/A model into real-life context [91], [92]). However, we see that from the CPS point of view, one may use creativity (defined as novel and feasible outcome) in business/activity modeling.

Entrepreneurship in business context	**Entrepreneurship in education context**
From everyday idea to ideating future business/action through Creative Problem Solving (CPS: divergent thinking – clustering – convergent thinking) – focus on desirability	
Ideating an initial idea for future business	**Ideating an initial idea for future activities**
Including:	Including:

Table 13.3 Business/action opportunity creation in the entrepreneurship education context

89. Gartner WB, Bellamy MG. Enterprise. 1st ed. Cengage Learning; 2010.
90. Osterwalder A. The business model ontology: A proposition in a design science approach. PhD thesis. Institut d'Informatique et Organisation. Lausanne, Switzerland, University of Lausanne, Ecole des Hautes Etudes Commerciales HEC; 2004.
91. Honig B. Entrepreneurship education: Toward a model of contingency-based business planning. Academy of Management Learning & Education 2004; 3(3) 258–273.
92. Delmar F, Shane S. Does business planning facilitate the development of new ventures? Strategic Management Journal 2003; 24(12) 1165–1185.

Our key customer is … Our value proposition … We contact our customer with … Our commitment to the idea …	Our activity benefits … The value we try to bring to them is … We contact our people with … We will go as far as …
OUTCOME/INPUT: This idea is the most promising! This is with what I/we want to proceed. This is how I/we like to do.	
From initial idea for future action to creating Business/Activity Model through Creative Problem Solving (CPS: divergent thinking – clustering – convergent thinking) – focus on the big picture	
Business Modeling (BM)	**Activity Modeling (AM)**
The most desirable and selected BM includes descriptions of: means that would generate the proposed value customer segmentation abilities and competences to execute BM	The most desirable and selected AM includes descriptions of: means that would generate the proposed value to whom activities are meant for objects abilities and competences to execute AM what it will give for us

Table 13.3 Business/action opportunity creation in the entrepreneurship education context

value gathering for business venture entrepreneur's satisfaction	
OUTCOME/INPUT: Conceptual description of desired activity	
From Business/Action Model to creating Business Plan through Creative Problem Solving (CPS: divergent thinking– clustering – convergent thinking) – focus on implementation	
Business Planning (BP)	**Activity Planning AP)**
Creating the implementation plan for the most desirable BM	Creating the implementation plan for the most desirable AM
OUTCOME: Plan for implementing the BM/AM	

Table 13.3 Business/action opportunity creation in the entrepreneurship education context

13.5 Conclusion

This chapter discussed the entrepreneurship education teachers' ontological conceptions of entrepreneurship and education and studied potential mismatches in these conceptions. We started with analyzing literature on entrepreneurship and education. The analyzed literature included scientific journal articles, project reports, and official documents at the European and national levels discussing EE. We concluded from this literature review that there is an ontological mismatch between entrepreneurship and education because the development of education is ahead of entrepreneurship in the paradigm shift from realism to idealism. This mismatch is visible in scientific thinking and also appears, according to our theoretical analysis and practical observations, as an ontological headache in practicing EE teachers' conceptions of entrepreneurship and education.

According to our results, EE teachers in basic education at the primary and secondary levels have a strong pedagogical education and tend to base their pedagogical thinking on social constructionism. At the same time, however, they tend to follow a traditional view of entrepreneurship that is the opposite of their pedagogical thinking. Conversely, university teachers, with backgrounds in, for example, business school or technology, all too often tend to base their pedagogical thinking on behavioristic pedagogy. At the same time, they tend to emphasize managerial competencies, business functions, etc. in entrepreneurship education. These empirical observations confirm our conclusions in the conceptual reasoning that there might be an ontological mismatch between entrepreneurship and education.

To ease the EE ontological headache, we have used the critical realist perspective in entrepreneurship and education as well as in their integration (i.e., in EE). The critical realist perspective bridges, on the one hand, realism-based discovery theory and idealism-based creation theory, and on the other, realism-based behaviorism and idealism-based social constructionism. Combining the critical realist perspective with the processual view on entrepreneurship enables acceptance that reality exists as a source for the opportunity creation process, and simultaneously, that reality is a creative outcome of human actions.

Based on critical realism, we suggest a practical model for EE teachers to use as content for their EE. We believe EE students will be able to utilize the model in both a business and non-business context when they wish to create new activities. In the business context, this may mean better abilities to create their own business startups or to create new business activities in established firms. In the non-business context, students may use the model to create activities in different types of organizations, including their schools.

In this chapter, our aim was to address the calls for theoretical and conceptual studies in entrepreneurship education focusing on ontological issues. Entrepreneurship education can be seen as an integration of entrepreneurship and education, and we argue that the ontologies of both of these EE components influence EE. Therefore, we have first juxtaposed the theoretical paradigm shifts in entrepreneurship and education from the ontological viewpoint. We have taken a first cut at building a practical model to ease the ontological headaches of EE actors with respect to the concept of entrepreneurship and the educational methods for teaching it.

13.6 References

1. Fiet JO. The theoretical side of teaching entrepreneurship. Journal of Business Venturing 2000; 16(1) 1–24.
2. Seikkula-Leino J. Advancing entrepreneurship education in the Finnish basic education–the prospect of developing local curricula. The dynamics between entrepreneurship, environment and education 2008; 168–90.

3. Solomon G. An examination of entrepreneurship education in the United States. Journal of Small Business and Enterprise Development 2007; 14(2) 168–182.
4. Ruskovaara E, Pihkala T. Teachers implementing entrepreneurship education: classroom practices. Education+Training 2013; 55(2) 204–216.
5. Fayolle A. Personal views on the future of entrepreneurship education. Entrepreneurship & Regional Development 2013; 25(7-8) 692–701.
6. Alvarez SA, Barney JB. Discovery and creation: Alternative theories of entrepreneurial action. Strategic entrepreneurship journal 2007; 1(1-2) 11–26.
7. Sarasvathy SD. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. The Academy of Management Review 2001; 26 243–263.
8. Skinner BF. Origins of a Behaviorist. Psychology Today 1983; 22–33.
9. Berger PL, Luckmann T. The social construction of reality: A treatise in the sociology of knowledge No. 10. Penguin UK; 1991.
10. Gergen KJ. The social constructionist movement in modern psychology. American Psychologist 1985; 40(3) 266–275.
11. Cooper PA. Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.
12. Richardson V. From Behaviorism to Constructivism in Teacher Education. Teacher Education and Special Education 1996;19(3) 263–271.
13. Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology, 49*, 345–375.
14. Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.
15. Boghossian P. Behaviorism, Constructivism, and Socratic Pedagogy. Educational Philosophy and Theory 2006; 38(6) 713–722.
16. Hayward LM. Becoming a self-reflective teacher: a meaningful research process. Journal of Physical Therapy Education 2000; 14(1) 21–30.
17. Jones C, Penaluna A. Moving beyond the business plan in enterprise education. Education+Training 2013; 55(8/9) 804–814.
18. Shane S, Venkataraman S. The promise of entrepreneurship as a field of research. The Academy of management review 2000; (2) 217–226.
19. Dew D, Read S, Sarasvathy SD, Wiltbank R. Effectual versus predictive logics in entrepreneurial decision-making: Differences between expert and novices. Journal of Business Venturing 2008; 24 287–309.
20. Read S, Sarasvathy SD. Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise. The Journal of Private Equity 2005; 9 45–61.
21. Sanz-Velasco SA. Opportunity development as a learning process for entrepreneurs. International Journal of Entrepreneurial Behaviour & Research 2006; 12 251– 271.
22. Hjorth D. Rewriting Entrepreneurship–for a New Perspective on Organisational Creativity. PhD thesis. Lund University; 2003.
23. Hjorth D. Creating space for play/invention – concepts of space and organizational entrepreneurship. Entrepreneurship and Regional Development 2004; 16 413–432.

24. Steyaert C, Katz J. Reclaiming the space of entrepreneurship in society: geographical, discursive and social dimensions. Entrepreneurship and Regional Development 2004; 16 179–196.
25. Gibb AA. The Enterprise Culture and Education: Understanding Enterprise Education and its Links with Small Business, Entrepreneurship and Wider Educational Goals. International Small Business Journal 1993; 3 11–34.
26. Bennett M. Business lecturers' perception of the nature of entrepreneurship. International Journal of Entrepreneurial Behaviour & Research 2006; 12 165–188.
27. Engeström Y. Expansive learning at work: toward an activity theoretical reconceptualization. Journal of Education and Work 2001; 14 133–156.
28. Kirby DA. Entrepreneurship education: can business schools meet the challenge? Education+Training 2004; 46 510–519.
29. Fayolle A, Gailly B, Lassas-Clerc N. Assessing the impact of entrepreneurship education programmes: a new methodology. Journal of European industrial training 2006; 30(9) 701–720.
30. Commission of the European Communities. Brussels, 10.11.2005. COM 548 final. 2005/0221(COD). Proposal for a RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on key competences for lifelong learning; 2005.
31. Ministry of Education and Culture of Finland Guidelines for entrepreneurship education*.* Publications of the Ministry of Education 2009:9.
32. Wilson K. Entrepreneurship education in Europe. In: Jonathan P. (ed.) Local Economic and Employment Development (LEED) Entrepreneurship and Higher Education (No. 18). OECD Publishing; 2008; 119–138.
33. Gustafsson-Pesonen A, Kiuru P. Ideoita ja oivalluksia yrittäjyyskasvatukseen YKOONTI. Aalto-yliopiston julkaisusarja KAUPPA+TALOUS 2012; 4*/2012*.
34. Knoester M. Who will benefit from 'the sociocultural turn' in education? Pedagogy, Culture & Society 2011; 19(2) 311–318.
35. Ardichvili A, Cardozo R, Ray S. A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing 2003; 18 105–123.
36. Sarasvathy SD, Dew N, Velamuri SR, Venkataraman S. Three views of entrepreneurial opportunity. In: Audretsch DB, Acs ZJ. (eds.) Handbook of entrepreneurship research. New York: Springer; 2010; 77–96.
37. Cooper PA. (1993). Paradigm Shifts in Designed Instruction: From Behaviorism to Cognitivism to Constructivism. Educational technology 1993; 33(5) 12–19.
38. Archer M. Realism and morphogenesis. In Archer M, Bhaskar R, Collier A, Lawson T, Norrie A. (eds.) Critical Realism: Essential Readings. Routledge; 1998; 356–382.
39. Casti JL. Paradigms lost: Tackling the unanswered mysteries of modern science. New York: Avon Books; 1989; 15–48.
40. Osborne JF. Beyond constructivism. Science Education 1996; 80(1) 53–82.
41. Driscoll MP. Psychology of Learning for Instruction. Boston, MA: Allyn & Bacon; 1994.
42. Nola R. Relativism and Realism in Science. Dordrecht, The Netherlands: Kluwer; 1988.
43. Garud R, Karnøe P. (2003). Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. Research policy 2003; 32(2) 277–300.

44. Jonassen D. Evaluating Constructivist Learning. Educational Technology 1991; 36(9) 28–33.
45. Fleetwood S. Ontology in Organization and Management Studies: A Critical Realist Perspective. Organization 2005; 12(2) 197–222.
46. Scott D. Critical realism and empirical research methods in education. Journal of Philosophy of Education 2005; 39(4) 633–646.
47. Corbett AC, Katz JA., editors. Entrepreneurial Action. Emerald Group Publishing; 2012.
48. Dimov D. Grappling with the unbearable elusiveness of entrepreneurial opportunities. Entrepreneurship Theory and Practice 2011; 35(1) 57–81.
49. Klein PG. Opportunity, discovery, entrepreneurial action and economic organization. Strategic Entrepreneurship Journal 2008; 2 175–190.
50. Tassoul M, Buijs J. Clustering: An Essential Step from Diverging to Converging. Creativity and Innovation Management Journal 2007; 16(1) 16–26.
51. Gartner WB, Bellamy MG. *Enterprise*. 1st ed. Cengage Learning; 2010.
52. Osterwalder A. The business model ontology: A proposition in a design science approach. PhD thesis. *Institut d'Informatique et Organisation. Lausanne, Switzerland, University of Lausanne, Ecole des Hautes Etudes Commerciales HEC*; 2004.
53. Osterwalder A, Pigneur Y, Tucci CL. Clarifying Business Models: Origins, Present, and Future of the Concept. Communications of the Association for Information Systems 2005;16 1–25.
54. Honig B. Entrepreneurship education: Toward a model of contingency-based business planning. Academy of Management Learning & Education 2004; 3(3) 258–273.
55. Delmar F, Shane S. Does business planning facilitate the development of new ventures? Strategic Management Journal 2003; 24(12) 1165–1185.