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# Notion for entrepreneurship in school entrepreneurial skills training

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#### **Abstract**

Entrepreneurial skills are understood as an attitude to solve new problems by unknown answers. A revision of the concept of "entrepreneurship" to be applied in an educational context is proposed. **Method:** its origin, its phases of conceptual variation, the diverse conceptions and the state of the art of the concept "entrepreneurship" are revised resorting to relational phenomenology in order to manage the evolution of the meaning. **Results**: The analysis identifies the nexus between economic activity and education aimed at encouraging the students' entrepreneurial skills. Such an aim is recommended by European and world institutions as adequate to confront the economic problems in digital society. **Conclusion:** the proposals to include a curricular discipline of "entrepreneurial economy" or applying a "cross-training" are not mutually exclusive. From a syncretic perspective, a specific discipline is complementary of an entrepreneurial cross-training.

#### **Keywords**

Entrepreneurship, entrepreneurial skill, school training for Entrepreneurship, entrepreneurial economy, innovative knowledge, creative initiative.

#### **Contents**

1. Introduction; 2.Method for the revision of the concept entrepreneurship; 3. Conceptual revision of the notion "entrepreneurship"; 3.1. Origins of the concept; 3.2. The endogenous growth: from Solow to Römer; 3.3 Application to small and medium enterprises; 3.4. The entrepreneurial filter and the Swedish paradox. 3.5. Quality of entrepreneurship and entrepreneurial skills; 3.6. New forms of social entrepreneurship; 4. Result: teaching of entrepreneurial skills; 4.1. Terminological aspects to centre the teaching of entrepreneurship; 4.2. Different perspectives for investigation and teaching; 5. Conclusions. 6. Notes; 7. Quoted references.

Traslate by Paul Gordon

#### 1. Introduction

A recent article published in *Revista Latina* poses a conceptual revision to determine the "valid meaning" of "entrepreneur" and other words associated with it, frequently used as scientific terms like "creativity" and "innovation". This text assumes the conclusion of Professor Rosa de Mateo about what she denominates "the logic of the entrepreneur" that, citing Weisberg (1989), "it is not an extraordinary way of thinking. Thinking creatively comes to be extraordinary as a result of what the thinker produces and not the way he produces it", because "any person can give a creative solution to a problem if they solve it with responses not previously known."

From the perspective of our investigation, that specifically focuses here on a revision of the state of the art of the notion of "entrepreneurship" from its original sense to be applied to a school context, any person can develop an "entrepreneurial intention" to give that answer. The concept "entrepreneurial intention", understood as a collection of external and internal elements that lead to undertake is applied in the intention models (Azjen, 1991) to the entrepreneurial behaviour (Carsrud and Krueger, 1993). We agree so far with Professor de Mateo's text, but, from our standpoint, we think it is necessary to add that the formation of an intention depends of external factors like social values and culture (Krueger et al., 2013) and internal factors (attitudes and behaviour) which can be learnt or fomented through an education based in non-cognitive abilities (Heckman, 200). For this it is necessary, as some authors ask for (Fayolle, 2013), to deepen in the meaning of "entrepreneurship" from the origin of the term to take it, without losing coherence, to the educational environment. This is what we pose in this article.

#### 1. Method for the revision of the concept of entrepreneurship

The method applied to this revision of the notion of "entrepreneurship" and terms linked to it like "entrepreneur", "business owner", "entrepreneurial intention", "entrepreneurial competence", "entrepreneurial education" and, in sum, "entrepreneurship", are based on relational phenomenology (Donati, 1991). We hermeneutically deal with the historical management of their meaning in their relations with the products of the social system, whether they are cultural, economic or any other type. Our revision of "entrepreneurship" is based on its origins in economic theory, deals with the doctrinal evolution and its relations with subsequently associated notions like "competency", "creativity" and "innovation". The revision aim has practical transcendence. Outlined aspects of the present circumstances induce to address with responsibility a theme from whose answers, accepted or rejected, depend the applications of policies that, when applying entrepreneurship to education, encourage or spoil promoting productivity, growth, employment or a welfare that, being desirable, is accessible to productive cooperation and to commodity exchange.

As prognosis is conditioned by diagnosis, descriptive error can lead to harmful consequences. World institutions and the European Union insist on directing education towards entrepreneurship in the same sense described by R. de Mateo (2015). They understand "entrepreneurial competence" as an activity orientated to solve new problems by responses not previously known. The concept of "competence" as an educational element arises enhanced by the OECD (Salganik *et al.*, 1999). They define the concept as "the capability to successfully meet complex demands leveraging

psychological and social resources in a specific environment" (OECD, 2005). The EU will adopt it afterwards...

The motivation for the EU to promote this competence (EC, 2006) from the school stage is not only economic (EC, 2004, 2012 and 2013). It is based on the conviction that enhancing entrepreneurial capacity has as a pedagogical aim to entrench the personal autonomy in the social environment. In order to place the reader interested in the importance assigned to the relationship between "entrepreneurship", "entrepreneurial competence" and "educational guidance to entrepreneurship" we have gathered in the references the main texts that have dealt with this issue, including the latest report (EC, 2006).

Despite that this pedagogical trend has become the centre of political and institutional agendas (EC, 2013), there is not a uniform criteria about his content. The way to relate the terms "education" and "entrepreneurship" is broad and it depends of the adopted perspective. What in English is denominated *entrepreneurship*; in Spanish can be "entrepreneurship", "entrepreneurial spirit" or "corporate function". As there is not a full terminological consensus, it is complicated to define the content of an "entrepreneurial competence". The following lines are proposed as a revision of the conceptual framework of the term "entrepreneurship" in order to determine, as the conclusion, the objective of an education aimed to promote it (Fayolle, 2013).

There is agreement about that if entrepreneurs contribute to economic growth, it is necessary to imbue an attitude that foments entrepreneurship in school education (Hitty and O'Gorman, 2004). Neither is there full agreement about how to do it. There are two main trends: one is including a specific subject on entrepreneurial education orientated to the creation of business (entrepreneurship education) and another is disseminating it as a cross-element in the educative syllabus (enterprise pedagogy) with a wider aim. In the first case, "entrepreneurial education" is understood as an economic discipline; "entrepreneurship" as a specific action aimed to promote business. In the second case, an interdisciplinary approach is adopted, as a method geared to action, to the realization of projects for different purposes through their own initiative, amongst which those with social or productive aims would be included. This substantive perspective is the one adopted by the research project CSO2013-42165-R "Domestic auctoritas, family training and the learning community in families with children at school ", in whose activity framework this contribution is included.

To be consistent, when clarifying the function of an entrepreneurial education, it is necessary to go over the aspects concerned by the notion of "entrepreneurship" in the economic theory, revise which content is included and renovated during its evolution and which are its current differential features. Well understood that the endeavor that the world and, specifically the EU, pay to foment this "competence" from school education is founded on the verified assumption of the relation between productivity, growth and entrepreneurship.

#### 2. Conceptual revision of the notion "entrepreneurship"

Entrepreneurship is defined as "the field that exams how, why and with what effect opportunities to create future goods or services are discovered, assess and utilize (Shane and Vekataranan, 2000: 218). Some authors like Audretsch (2009), Wennekers and Thurik (1999), maintain that it is not enough to argue that there is an inner relationship between entrepreneurship and economic growth, it also has to be proved. That was done in research which associated the birth of new enterprises and

the activity of small and medium-sized ones with employment growth in the United States of America during the 90s (Audretsch and Thurik, 2001 and 2004; Thurik and Wennekers, 2004; Carre and Thurik 2003; Acs, 2006). This association is not based on academic theories but on countless studies performed on the activity of starting a business. The revision of this literature entitles us to distinguish 4 stages of the notion.

### 2.1. Origins of the concept of entrepreneurship

There are many economists who have studied the origin and development of the term *entrepreneurship*. Professors Veciana (1999; 2005) and García Tabuenca (*et al.*2008) stand out in Spain. Generalizing, authors agree that the origin of the concept is in Richard Cantillon, it was settled by Jean-Baptiste Say and later on Stuart Mill detected the differential value of economic activity in "One person with a belief is a social power equal to ninety-nine who have only interests" (Mill, 1848).

At the beginning of the 20th century the criteria that economic growth is due to the entrepreneur's action at getting involved in productive activities and discovering profit opportunities began to be forged. The first ones to emphasize the growth thanks to the performance of the entrepreneur were Schumpeter (1912 and 1943) and Knight (1921). Their theories played second fiddle after the Second World War, except for, almost exceptionally, Kirzner (1979 and 1997), who explained entrepreneurship as the process where the entrepreneur takes the opportunity of previously undetected profit.

Nowadays there is virtual unanimity in the literature that the contributions of Schumpeter on *entrepreneurship*, especially in his works *The Theory of Economic Development* (1912) and *Capitalism, Socialism & Democracy* (1943) were the first ones to ponder the role of entrepreneurs as a growth driver. Schumpeter started some innovative aspects on how entrepreneurs, by their *innovations*, taking risks and learning to recover after failure, if any, introduce changes in the industries which upset the balance and result in the recomposition of markets, incorporating a more efficient and superior technology, main cause of progress and development.

"The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting on invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on...function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way..." (Schumpeter, 1943: 132).

The importance of Schumpeter's explanation lies in that he puts the entrepreneur's activity at the centre of the economic growth and conceives the entrepreneur's role as different from the capitalist's, as Say already anticipated. In his explanation on capitalism, as an example of development and change of the economic process, he warns that

"The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportations, the new markets, the new forms of industrial organization that capitalist enterprise creates." (Schumpeter 1943: 82-83)

The recognition of this opportunity search learning by rectification constitutes the well-known Schumpeterian theory of "creative destruction". His insistence that innovation is part of the creative process of entrepreneurship has greatly influenced his further studies. It is not founded on the specialization and division of work, like Adam Smith, or either on exogenous technological change, as in the theories of the neoclassic growth model. He points out entrepreneurs as being agents of a process of continuous transformation in production organization who promote a non-linear development of the economy. Economic growth, besides being spontaneous and discontinuous, is an endogenic change, notion that he did not use, subsequently introduced by Römer (1990).

The importance of this process is to do new things and rectify mistakes made. That is why he defines companies as the implementation of a new combination of factors already existing and entrepreneurs as "the ones who actually put into practice new combinations" (Schumpeter 1912: 88) to incorporate the innovation that produces advance. The entrepreneur is not only the individual who works on one's own account. Schumpeter includes also those who, working for a company, carry out into practice innovative combinations. Knight (1921) adds later that tackling risk with imagination in order to take advantage of an uncertain situation to develop new business opportunities is a typical feature of entrepreneurial activity.

It was Kirzner (1979) who studied the entrepreneur's role in growth presenting them as individuals with specific competences, such as the ability to manage in uncertain situations and the capacity to tackle this. He defined them as "the individual who is capable to be alert to see chances of profit not discovered until now." An entrepreneur is someone who realizes something before anybody else in an uncertain and unbalanced situation. The use of business opportunity is related to economic activity, flourishes in fluid situations. There is not a warehouse waiting to be discovered. They are generated by the activity itself. They rise up in the path spread by other predecessor entrepreneurs, become ingrained in precedent actions and take root in an economic expansion context where a renewal cycle takes place. The more expansion the more opportunities (Minniti and Bygrave, 2000 and 2001), but even crisis situations can be used by those who can understand them as an opportunity for innovation and adapt to an uncertain environment.

According to Kitzner's theory economic growth is, as Schumpeter anticipated, an endogenic process that explains why the origin of entrepreneurial activity has a competitive motivation (Kitzner 1997). When dealing with enterprise discovery as an entrepreneurial motor, Kitzner cites the Austrian economists as the first promoters of the idea that founds progress on the capacity for action of human beings (Kitzner, 1997: 69):

"For Mises, the term "entrepreneur" refers to an "acting man in regard to the changes occurring in the data of the market" (Mises, 1949: 255). Entrepreneurship is human action "seen from the aspect of the uncertainty inherent in every action" (Mises 1949, p. 254). The Misesian concept of human action thus implies the open-ended framework within which all decisions made must necessarily partake of the speculative character essential to the notion of entrepreneurship<sup>(1)</sup>."

Other important Austrian authors like Hayek (1933) contributed to spread entrepreneurship as a factor for innovation. His approach focuses on the incentives created to foment an "alert process" as it was called by Kitzner. Following Hayek, in a decentralized economy that entitles individuals to behave freely to obtain profit when applying their entrepreneurial ideas, there will be produced the nurturing environment for the emergence of new productive ideas. To the foregoing descriptions, the incentive function is added. Nonetheless, during the second half of the 20th century, economists turned these authors away. Much of the explanation why entrepreneurship disappeared from the majority of the political agendas is the exclusion of Solow's exogenous growth model (1957). In this model, growth is due to technological changes produced by independent and external forces to industry. The economic growth theories focused on the big multinational companies and on the state interventional role. Economists focused their attention on macroeconomic instruments, above all the ones related to investment and a certain amount of planning.

#### 2.2. Endogenous growth: from Solow to Römer

From the 90s, academic literature recovers Schumpeter's opinions and starts to put in the centre of macroeconomic measures the necessity to foment new companies promotion policies', providing facilities to small entrepreneurs and middle sized companies to foment their competitiveness.

In 1990 and 1994 Römer introduced the notion of "endogenous growth", carrying it out from Solow's previous theory, for whom, economic production was due to the interaction of physical capital and work, classic variables of the production model. According to Solow (1957), capital investment does not necessarily guarantee growth, due to diminishing returns; consequently it only reaches growth if this investment produced technological progress. From his work, the interest for the creation of business as the main explicative variable of collective economic growth reappears. The exogenous models had meant progress at focusing the attention on the human factor investment in big corporations instead of the former idea of capital investment, but they do not yet pay attention to entrepreneurship as an action that becomes knowledge in a productive factor of economic growth. Römer took the plunge when relating human factor with the discovery of new technology. Thereby, change and technological progress were not anymore out of the model, but within it.

Growth becomes linked to the human factor, to personal innovative capacity. Entrepreneurial competence is in the origin of the process of technological renovation. This inner connection has a special relevance as giving rise to theories of entrepreneurial capital as a growth factor and a concept derived from the attention given to personal competence carried out by Audretsch (2009). Thus, it is possible to think about the importance of entrepreneurial skills training.

### 3.3. Application to small and medium enterprises

At the end of the 90s, the theories about economic growth that predominated did not explain why a remarkable development happened in countries where there have barely been investments or expenses in R+D, while the development in others where significant expenses have been made was disproportionately low. Authors like Acs, Audretsch and Feldman (1994) started to focus their attention on small and little enterprises and start-ups, generally ignored or barely highlighted in previous growth models. Relevant studies of this stage as Baumol's (1990), on the importance of the

institutional framework which delivers incentives for entrepreneurial activity to be productive and foment innovation, shed light on the nexus between entrepreneurship and economic growth, and established the first forms of measuring the impact of the birth of new companies in productivity. Other research showed that the institutional framework can discourage entrepreneurial human skills to be applied to noxious activities for the community (Low and MacMillan, 1988).

In Spain, Veciana (1999 and 2005) studied the development of the entrepreneurial function. She described the decisive role played by business creation on growth. She noted that the importance of scientific investigation in the entrepreneurship field as a macroeconomic variable took place from Birch's theories (1981) with the publication of the report "*The Job Generation Process*", which demonstrated that more than half of the new jobs in United States were positions in start-ups. Other studies, such as Reynolds' (1999) that relate economic progress with entrepreneurial initiative, are indispensable to understand the boom of entrepreneurship investigation of recent decades. Without their efforts the birth in 1997 of the entrepreneurship global measuring project in the world known as *Global Entrepreneurship Monitor* (GEM) <sup>(2)</sup> would not have been possible.

Other authors have contributed form the 90s to bring the consequences of entrepreneurial activity to the centre of attention of macroeconomic policies. Initially, these works were focused on the economic growth of the United States during the 70s and 80s and afterwards in Europe. Acs (et. al 1994) observed that small or medium enterprises acquired importance in the North American economy. As an example, they mentioned that the first 500 of the fortune list of companies went down from providing 20% of employment in 1970 to 8.5% in 1996. In their studies, they proved the repercussions of SMEs' activities in the GDP of the North American and European economies. Mostly based on the employment variable, Carree and Thurik (2003) demonstrate the effect of entrepreneurship on production and growth. After a deep theoretical and empirical analysis, they demonstrated that development policies must understand entrepreneurship as a macroeconomic variable. Their proposals meant advancement in public policies for employment creation. Acs' more recent contributions (2006) explain why inversion on cognitive competences drive endogenous growth through knowledge spillovers.

#### 3.4. The entrepreneurial filter and the Swedish paradox

From Audretsch and Thurik's concept of "knowledge filter" (2001), based on the idea that the accumulation of information produces a "knowledge spillover" (Audretsch 2009), economic policies started to focus more on "capturing" knowledge to be productive (Acs *et al* 1994) than on generating knowledge to boost investment in R & D. According to these authors, "knowledge filter" prevents knowledge transmission for its commercialization and, therefore, weakens the impact of R&D investment over economic growth.

Knowledge capital is, for Audretsch (2009), university education and investigation. However, at analysing Swedish economy, Audretsch concluded that investment was not sufficient condition: "Throughout the whole postwar period, Sweden steadily appeared at the top of world ranking investments in new knowledge. Although, in terms of private R&D, levels of education, university or public investments, Sweden has shown high and steady investment in knowledge, the feedback in terms of job creation and economic growth have been modest and disheartening in the opinion of the managers of Swedish economic policy. The continuing stagnation of economic growth and

unemployment rising, even after having made large and sustained investment in new knowledge, led the managers of Swedish economic policy to coin a new term:<the Swedish paradox>."

Audretsch highlights the necessity to incorporate a new factor that he denominates "entrepreneurship capital" to explain growth. This means that investment in new knowledge do not necessarily imply growth. It is necessary that this knowledge becomes economic knowledge through the commercialization and generation of favorable externalities. In his opinion, entrepreneurial activity is an important mechanism for knowledge transmission which entitles to cross the knowledge filter. The growth in entrepreneurship capital approach is the missing link between knowledge capital and economic growth. The more important as a production factor knowledge is, the more essential entrepreneurship capital becomes, as it is the mechanism through which created knowledge is commercialized and contributes to employment and economic productivity as a whole. Audretsch and Thurik (2004) describe the process as "entrepreneurship economy", based on Schumpeterian models. What is really differential is not the discovered knowledge, or the R&D investment, but entrepreneurs that, with their innovative capacity, opportunity perception (Shane and Venkataraman, 2000) and willingness to bear the risk of a loss in the expectation of an enrichment or future benefit, can produce a new initiative and translate to the market that opportunity.

In the new digital environment, where competitiveness, uncertainty, globalization and market fragmentation are its main characteristics, flexibility, innovation and seeking opportunities is the way of ensuring growth and economic development (Carre and Thurik, 2003). This change of conditions places entrepreneurship "at the heart of the nations development", as Porter forwarded (1990).

Political and economic interest has resulted in scientific interest. Nowadays, the studies on entrepreneurship are characterized for being more complex and specific. The concept is now associated to "entrepreneurial skills", innovation and the use of digital technology. As De Mateo points out (2015), in the cited article, any individual is capable of searching for and creating new opportunities departing from their competence to notice and size chance from knowledge. Entrepreneurs apply it when introducing to the market the technological discoveries of investigation and transforming it into marketable knowledge.

#### 3.5. Quality of entrepreneurship and entrepreneurial skills

The analysis of differences between different parts of the world encourages the explanation of the causes of the different "quality" of entrepreneurship. Minnity (2012) distinguishes two kinds of entrepreneurs: the imitator and the researcher. The kind will depend on the context where they develop their activity. In advanced countries, researchers discover new technology. In developing countries, imitators, with untapped resources, increase wealth through its merchandising. The GEM reports distinguish, depending on the motivation, between *necessity entrepreneurship* and *opportunity entrepreneurship*. Since 2002, these reports incorporated the three categories of economic development use by The World Economic Forum based on Porter's model (Porter *et al.*, 2002): factor-driven, efficiency-driven and innovation-driven economies, in order to study the different impact of entrepreneurship on economic growth according to the development level of economies.

In less developed countries or at an intermediate level, the entrepreneurial tendency arises to cover the forced necessity of subsistence or the lack of employment options, because of which it has a different "quality" and a lesser impact on growth. In economies in which a high level of entrepreneurship goes together with a high capacity of technological innovation, as is the case of the USA, Singapore, the UK, Finland and Denmark, growth estimates are very high and a relation can be observed between the quality of entrepreneurship and the rise in GDP per capita. Thurk and Wennekers (2004) proved this when relating the variables such as per capita income of the World Bank, the Global Competiveness Report ranking, the GEM TEA indicator and GDP according to the International Monetary Fund.

In this change we have to point out the birth of other indicators such as the Global Entrepreneurship and Development Institute (GEDI) (3). The Global Entrepreneurship Index report has been published since 2012. It makes a complete and complex analysis of the factors which influence entrepreneurship. It has been developed by a group of researchers led by Professor Acs. It is based on a more qualitative methodology of analysis, not merely quantitative, which contemplates different individual and institutional aspects in 14 pillars. In 2015 (see Acs et al. 2014), last published, 130 countries participate. Entrepreneurship is recognised as having a different impact depending on the region and institutional contexts in which it develops. The criteria applied consider the importance in a strong institutional environment which allows productive entrepreneurial activity with unproductive, or prejudicial ones, are not attractive.

Institutional stability is an essential element so that the entrepreneurship spirit is directed towards activities that provide social welfare and economic development. Therefore, they include in their analysis institutional variables (4) from other important world organizations referring to economic freedom, institution strength, etc. In this environment, entrepreneurship rides high as an economic engine. We follow Baumol (2004) when he explains how small companies and their innovations are competing with big corporations and easily adapting, if given free market conditions and few entry barriers. Economic freedom, measured in terms of the size of administrations, bureaucracy, legal certainty and protection of property rights are, amongst other conditions, essential institutional factors for productive entrepreneurship.

Taking into account these circumstances, one understands that it is not the same starting a business in Kenia than in Silicon Valley or Germany. The institutional strength of the free market ruled by fair competition regulations permits this entrepreneurship to become innovative and encourage development. While in other countries it can be linked to other motivations such as contacts, seeking favours or preferences to obtain the corresponding licenses, etc. An incentive structure and institutional strength that encourages entrepreneurial competition is necessary. Without these conditions little will the efforts in education of culture serve for. It requires a cultural change that integrates knowledge about institutional framework and the economic importance of entrepreneurship in school education.

#### 3.6. New forms of social entrepreneurship

Fomenting an entrepreneurial attitude is not limited to business creation; it also covers other social realities which arise from initiative and civil society to apply entrepreneurship to social innovation. The Global Entrepreneurship Monitor has incorporated two indicators to measure two new types of

entrepreneurship: social and corporative. Social entrepreneurs recognize a social scope problem and, through sensing an opportunity, create or improve a service without looking straight ahead for benefit, ensuring the viability of their project to procure a community improvement. Acs (et al., 1994) underlines that this entrepreneurship branch becomes especially important. In many countries it is promoted as a cost-effective way of allocating resources.

Corporative entrepreneurs or "intraentrepreneurs" are the ones that, from an already consolidated enterprise, introduce innovations or begin a *start-up*. There is even talk of "entrepreneur politicians" whose "enterprise" is to provide innovation to the implementation of public policies to improve the management and efficiency of the administrative institutions.

Within social policies, entrepreneurship is a way for those groups at greater risk to find a way to create self-employment and to contribute to the interest of strengthening social cohesion. It's an "inclusive entrepreneurship". In the United States and other countries, the training programmes on entrepreneurship among young people in risk of exclusion, are very developed, like the ones accomplished by the NFTE organization in the city of New York (5) (Kantor, 2006).

According to Acs et *al.* (2014) modern societies face the new change from the scenario of an economy managed or directed, that prevailed until few decades ago, to an entrepreneurial economy. Its feature lies in those intangible variables, such as, knowledge and technology, are boosters of growth. Small companies, together with great corporations which, in many cases were started as minuscule, play an essential role in the creation of knowledge and in the translation of the innovations into the market. In the new production function, individual cognitional entrepreneurial skills are prominent elements upon which to support institutional policies. As a consequence of these policies and of the beneficial spiral of generating entrepreneurship through entrepreneurship, the appearance of new forms, such as *startups and venture capital*, etc., have been encouraged.

#### 3.7. Cause-consequence of entrepreneurship

At this micro-macro level, many economists have been interested to argue which are the distinctive characteristics of entrepreneurs and to understand the essence of their role in economic growth as innovation generators (Acs, 2006). Entrepreneurs contribute to economic development because they are capable of producing profitability creating new opportunities for other entrepreneurs (Minniti y Bygrave 2000). Thurik *et al.* (2005) state this idea in the following definition: "Entrepreneurship is the ability and the professed willingness of individuals by themselves, or in a team, in an organization that already exists or outside them, to perceive and create new economic opportunities (new products, new methods of production, organization schemes, new market-product combinations) and to introduce their ideas into the market, confronting uncertainties and obstacles, through decisions about the location, the manner and the use of the resources and the institutions: essentially *entrepreneurship* is a way of behaviour".

From this evolution of thought about the relation between entrepreneurship and economic growth, it can be concluded that currently there is a wide academic and institutional consensus on the close connection between economic prosperity, enterprise creation and entrepreneurial activity in general. After the current years of crisis and recession, international institutions and the governments of the democratic countries have in their sights to promote activities for the creation of new companies.

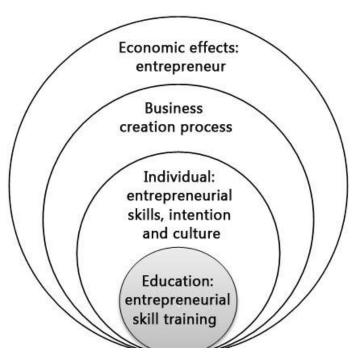
Policies that promote the entrepreneurial spirit and, amongst them, education is an indispensable instrument that contributes to awaken the interest for innovation, enterprising motivation and entrepreneurial activity.

### 4. Result: training of entrepreneurial skills

The perspectives of the research on entrepreneurship have changed very much. Currently, different social sciences refer to it: economy, psychology, sociology, pedagogy and business administration, principally. In the intersection of the fields of the knowledge of economy and education, entrepreneurial education arises as a school discipline. The research of this vast subject opens up a new perspective.

#### 4.1. Different perspectives for research and training

It is congruent to understand the entrepreneurial activity as an expression of *entrepreneurship*, a complex human activity which makes sense to study from different *points* of view. As Davidsson and Wiklund (2001) say, the specific characteristics of entrepreneurial activity contribute to the necessity of distinguishing levels of analysis which are both necessary and complementary. We have represented this complementarity through an illustration in which each "layer" of the procedure has relation with the following. (Graph):



Source: own development

#### 4.2.1. Economic perspectives of entrepreneurship and creation of businesses

We have seen that economic science, from its origins in the classical economists to the present studies of entrepreneurial economies, dealt with analysing the profile of entrepreneurs, their activities, their environment and social relevance. The researchers focused on studying how to organize an idea, how it is planned and how later on it is put into practice. By his works the concept of an entrepreneur is forged.

It is interesting now to focus the topic on the new business developing process, the procedure to implement it and the result of the new business. Gartner (1988) and Veciana (1999), among others, refer to the events that concur with its appearance, to the strategy adopted, organizational structure, funding, environment, etc. They make reference to the entrepreneur's figure as a trigger of the creative production process and as a key actor in its execution. A linear process is usually described from this perspective, composed of a series of concatenated activities, grouped in stages. Certain authors show that it does not exist as a sequence or unitary events model for the birth of a new company (Hansen and Bird, 1997). In this perspective, the projects of Low and MacMillan stand out (1988) for those who suggest that *entrepreneurship* should be defined as the creation process of new companies. Authors like Gartner or Veciana inquire about the relevance of the personal characteristics of an entrepreneur, to which we refer further on. From this perspective, entrepreneurial pedagogy has to take into account the economic motivation of the entrepreneurship.

#### 4. 2. 2. Individual entrepreneurial approach

The level of analysis has been taking shape from the studies of the phenomenon of entrepreneurship as a business process or for its economic impact. Nevertheless, a more psychological analysis, interested in the cognitive aspects of individuals, has generated a current of research centered on the personal creativity and personal initiative and the factors that motivate them. The authors that study a company's process focus on the role of the enterprising individual, on the conception of the idea and on the variables that influence in the planning and in its implementation. Their object of study centers on the finding of indicators that can anticipate the future decision of starting a business and what aspects of the individuals better describe the entrepreneurs' behaviour.

Many authors ask themselves about the motivations, way of thinking and behaviour of an entrepreneurial personality, how the idea originates or where the intention of starting a business comes from (Carsrud y Krueger, 1993); how the individual's entrepreneurial future can be predicted; which are the personality traits that characterize them (McClellan 1961, Frese, 2009 and 2014); how they think and behave to spot an opportunity (Shane and Venkataraman 2000); which are the social values and the beliefs and cultural aspects that affect the decision of starting a business (Krueger, Liñán and Nabi 2013). The way of thinking of an entrepreneur, *entrepreneurial thinking* (Carsrud y Brannback, 2009), their way of acting, *entrepreneurial method* (Sarasvathy and Venkataraman, 2011), the way of learning, *entrepreneurial teaching* (Minniti y Bygrave, 2001).

Understanding that the non-cognitive aspects of individuals, their attitudes and behaviour (Liñán, 2008) are the ones that make an action incline towards entrepreneurship and that it does not only depend on personality (Baum et al, 2007), it is the basis for the education of entrepreneurial skills. This inclination for action derives from the concept that individuals have about their own possibilities of achieving it (Bandura 1997). The educational context is part of the external factors that influence in the creation of a social model that predispose to an entrepreneurial conduct (Shapero and Sokol, 1982). The influence of education on the intention of starting a business is framed in the more subjective aspects of human motivation. From other perspectives, the argument is completed with a clear economic basis to promote educational policies that foster the development of the non-cognitive aspects of individuals (Heckman, 2000).

### 4.2.3. Application to entrepreneurial education

As it is assumed that this entrepreneurial behaviour can be and must be taught or, at least, promoted (Drücker, 1985; Kuratko 2005), interest is spread to promote entrepreneurial education. As Gibb advanced (2002), this education is a pedagogic response to the new economic, social and political challenges. At present, this field of research (Katz 2003) renews the conceptual debate since, the content of education will depend on what is understood as entrepreneurship (Fayolle, 2013).

Entrepreneurial education arises in American Universities with a clear business orientation; it gradually moves to Europe – the British the first to introduce it in the 90's, as a way of economic revitalization of the country- and, in recent years, hand in hand with world institutions and the EU, the emphasis is placed on the necessity to educate in entrepreneurship starting at school level (CE, 2013). At this level of education the concept of entrepreneurship as a pedagogy is chosen, which implies not only to educate "to" start a business, but to educate "through" entrepreneurship as the most efficient way to inculcate attitudes and behaviour that lead to the action of starting a business (Gibb. 2002). The teaching of entrepreneurial education can be concretized as a substantive aspect of the skills training of the students. These approaches coincide in that an entrepreneurial pedagogy has to encourage the understanding of business as a cooperation factor to collective welfare (Kirby, 2004). While in North America the establishment of new companies and promoting private initiative as a method of creating new jobs is decisively directed, the EU, with a broader vision of the concept, insists in conferring on entrepreneurial education a crucial role to revitalize the economic and productive, distinguishing between the ways of being implemented in the different educational stages, with contents and pedagogic objectives different in each one of them and integrating them in a transversal way throughout the curriculum (CE, 2008).

The performance of entrepreneurial education is understood as a teaching method (Fayolle, 2013), a way of learning through the experience of Kolb (1984) in which the teacher does not give answers to the student, does not always provide knowledge, is not an information vehicle: makes questions, listens, considers and helps to consider, they are a guide in a learning process (Neck y Green, 2011). Its practice can be framed in the constructivism currencies of Berger and Luckman (1966).

### 4.2.4. Syncretic point of view

To take entrepreneurial education to primary and secondary education, the object of our conceptual revision, it is necessary to understand the relation, in the research undertaken, between the concept of entrepreneurship and the more generic one of entrepreneurship applied to non-university education. Having understood the context, all perspectives are important. On the one hand, the macroeconomic point of view, through which education is linked to the development of the human factor (Volery et al. 2013), and this last one, with entrepreneurship and economic growth (Davidsson y Honig, 2003; Jones and Jayawarna, 2011; Audretsch 2009; Jaen and Liñán 2013). On the other hand, the personal dimension concreted in entrepreneurial skills training, focusing on non-cognitive aspects linked to attitudes and behaviour as a way of teaching (Liñán 2008; Sánchez, 2013; Bae et al., 2014). It is not only a question of teaching students. It is also a question of incentivizing the entrepreneurial attitude of teachers and transferring it to their teaching practices as an axis to promote an education policy that favours the spirit of entrepreneurship (Ruskovaara, 2014). The current challenge is to verify the efficiency or not of these practices and their impact on the entrepreneurial initiative of students. Several studies show positive results (Johansen and Schanke, 2012; Jones and Colwill, 2013; Volery et al., 2013; Rosendahl Huber et al., 2014; Sánchez, 2013; Cárdenas and Bernal, 2014).), and some contradictory results (Ooserbeek et al, 2010). From the relation between these criteria comes the implementation of education to entrepreneurship from the school period, a proposition that has won impulse in the recommendations of the Europe 2020 Agenda so that the European economy undertakes with guarantees a global market competitiveness scenario.

#### 5. Conclusions

Unlike other countries where it is more developed, like in Finland or the United Kingdom, in Spain the task of orientating education towards entrepreneurship is in its "infancy" (Sánchez 2013). Nevertheless, there are important researchers in our country who are contributing, in a decisive way, to the global academic debate, such as the professors Guzmán and Liñán, Sánchez, Corduras and Veciana, Salas, to name the most important ones.

Recent research is inclined to favour the use as a conceptual base of the discipline, the explanations that refer to the model of behaviour and thinking of the entrepreneur or businessman (Sarasvathy and Ventakeraman 2011). Increasingly, economists, like Nobel Prize winner Heckman (2000), insist on the importance of education from early childhood, especially in non-cognitive aspects for the important social and economic benefits that derive from these training skills.

We can conclude that, depending on the approach that is adopted, different approaches to entrepreneurial education can occur. We point out three major ones: economists, centered principally on the creation process of companies or in entrepreneurship; the psychological, which primarily attends to personal characteristics and cognitive processes of individuals; and the didactic one that seeks to adapt entrepreneurship training oriented to the type of recipient, as it is not the same a school child, a college student or postgraduate training specialising (Gibb 2000; Fayolle, 2013). We conclude that the different perspectives on entrepreneurship complement each other, because the generic comes from the specific. They are not opposed; they converge to be applied to the educational point of view.

Here, we have taken care of the conceptual revision of "entrepreneurship" to center the problematic implied when transferring entrepreneurial training to the educational setting. The interest in revising this concept has the aim to determine what orientation will be of greater social utility. Applying the distinctions that we have gradually been specifying, we conclude that "entrepreneurship" is a type that, as a concept, can be applied to different activities, between them and originally, to "business entrepreneurship", that it is the specific sense from which the voice of "starting a business" proceeds. As a type that comes from the specific it serves no purpose to oppose the broad meaning to the specific one since they mutually imply each other in acceptance of the significant process. But we can concretize an important variation with respect to the types of recipients of that educational orientation. And, we believe, this variation is expressed in the dispute if it is necessary or not to promote, at the school level, a specific discipline of entrepreneurship education or to encourage the attitude towards entrepreneurship with a transversal purpose in the school education system (Marina 2010 and 2013). We conclude that it is not about excluding positions but about complementary, suitable and convergent approaches. An education that makes error part of learning, that promotes personal autonomy, inclination to weighted risk, to innovation and adoption of the applicable initiatives is the adequate breeding ground to impregnate students with an entrepreneurial attitude in the broadest sense of the word, as a setting to understand the social importance of entrepreneurial activity and, as the case may be, propitiate that in the future they can be adopted as a personal option. A detailed revision of this conclusion relative to open debate for this purpose requires a specific piece of work.

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https://sede.micinn.gob.es/stfls/eSede/Ficheros/2014/Anexo Preseleccionados Propu esta Resolucion Provisional Proyectos Retos 2013.pdf http://w3.bocm.es/boletin/CM\_Orden\_BOCM/2015/12/18/BOCM-20151218-10.PDF

#### 6. Footnotes

- (1) In the Spanish translation of *La acción humana*, see the pages 391 and 392.
- (2) GEM rises as a joint initiative of Babson College in United States and The London Business School in the UK. Since 1999 it offers comparative studies in entrepreneurial activity. The GEM report uses Reynold's concept of entrepreneurship (et al.) in its first world report in 1999:

- "Any attempt at new business or new venture creation, such as self-employment, a new business organization or the expansion of an existing business by an individual, a team of individuals or an established business." (Reynolds *et al...*, 1999: 3)
- (3) From the beginning the GED project is led by very important academic figures as Professor Acs, with the purpose of carrying out research and full specialized reports on entrepreneurship, understanding it as a complex system. The most outstanding aspects of this methodology are that it lends an essential value to the entrepreneurial ecosystem, in which individual and institutional dimensions integrate. See more in www. <a href="http://thegedi.org/">http://thegedi.org/</a>
- (4) The variables introduced are, we substitute with other widely used relevant data from Transparency International (Corruption Perception Index), UNESCO (tertiary education enrollment, GERD), World Economic Forum (domestic market size, business sophistication, technology absorption and technology transfer capability, staff training, market dominance), International Telecommunication Union (Internet Usage), The Heritage Foundation and World Bank (economic freedom), United Nations (urbanization index), KOF Swiss Economic Institute (economic globalization), Coface (business climate risk), and Groh et al...(depth of capital market).
- (5) Founded by Steve Mariotti in 1987, this organization seeks to promote entrepreneurship amongst youth at risk of social exclusion and school leavers. This author discovered that students from disadvantaged environments had the basic necessary attitudes that favour an entrepreneurial spirit, were more daring and more creative. Its programmes are based on developing entrepreneurial creativity and understanding the economic rules of the free market, as a way to improve the projection of life of the most disadvantaged people in society. (see http://www.nffe.com)

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