

PROPOSAL FOR TEACHING AND LEARNING ENTREPRENEURSHIP FROM AN EARLY AGE BASED ON THE COLOMBIAN CONTEXT

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Abstract

The aim of this article is to analyze the situation of entrepreneurial education at an early age in the city of Ibagué, Colombia. This analysis involved the participation of 208 public and private educational institutions in the city, at pre-school and primary school levels. Main results show the absence of entrepreneurial education among the need to familiarize students with personal and social values related to entrepreneurship. Based on these results and current discussions in the field we propose some academic guidelines for teaching and learning entrepreneurship in the studied context. Our guidelines focus on the importance of articulating the family and other actors in the entrepreneurial ecosystem to create and foster an entrepreneurial culture. Additionally, we posit the need of reviewing the context for adapting it to the circumstances of the population, and institutional educational projects.

Keywords: Entrepreneurial education, entrepreneurial culture, values, entrepreneurial ecosystem.

Introduction

Entrepreneurship is a lifelong learning process (Henry & Lewis, 2018), in which a true transformation of the individual is achieved. In this process, the aim is to promote personal growth towards sustainable and dynamic enterprises that generate personal and social development (Johnson & Schaltegger, 2020). In the Colombian context governmental policies have focused on the role of education as crucial element of the process (Law 1014 of 2006 and Law 2069 of 2020, Congress of Colombia). In this sense, public policies at national and international levels posit the need

of improving schooling practices of entrepreneurship in early ages. This view is explained from a development perspective where some attitudes and values need to be developed in earlier stages of life to promote consciousness about individual growth (Gómez et al, 2017). Here elements such as leadership, creativity, teamwork, and complex thinking can be better developed in children education than in adult training. Therefore, it is necessary to review the process of entrepreneurship from the initial context, to evaluate educational procedures from an early age, where it is more conducive to generate entrepreneurial culture (Ministry of National Education of Colombia, 2012).

This debate of reviewing the educational process and its context has received special attention in recent years (Thomassen et al., 2020), where the importance of the context and its relation to entrepreneurship has been discussed. In this regard, Muñoz & Cohen (2017) argue that entrepreneurial activity is influenced by the spatial, social, and economic conditions of individuals. On the other hand, Robinson et al. (2016) comment on the relevance of designing learning processes articulated with real world practices to strengthen entrepreneurship. Finally, Hedström & Wennberg (2017) emphasize the necessary causal mechanisms and their relation to human agency, in which it is important to understand the processes that enable an entrepreneur through knowledge to achieve a specific outcome.

Understanding that the above processes in the Colombian context are related to universities and their training role of teachers and managers of schools within the national entrepreneurial ecosystem (Laws 1014 of 2006 and 2069 of 2020, Congress of Colombia), is an initial part of the analysis. In addition, it is crucial to emphasize that universities should not only assume adult training but should articulate with the community as part of their social projection. For this reason, the aim of this article is to analyze the situation of entrepreneurial education at an early age in the city of Ibagué, Colombia, to propose some educational guidelines for teaching and learning about entrepreneurship contextually.

These guidelines are aimed at training and generating an entrepreneurial culture from an early age so people can recognize themselves as entrepreneurs, leaders, and transformers of the environment, while contributing to their communities from a social, academic, business, economic, environmental, and cultural perspective, as proposed by Entrepreneurship for Sustainable Development (ESD) framework (Johnson & Schaltegger, 2020).

For the design of the guidelines, the research process was based on two methodological stages. Initially, a descriptive study was carried out to characterize Entrepreneurship Education in early stages in the city of Ibagué - Tolima. In 2018 according to the Municipal Education Secretariat the city had 287 registered schools offering preschool and primary education. We used a convenience sample of 208 educational

institutions where 50% belonged to the public sector and the remaining 50% to the private sector. In terms of data collection, a survey was constructed based on current Colombian legal aspects, as well as dichotomous questions validated by experts. The questionnaire also included Likert scale questions with an internal consistency of 0.821 according to Cronbach's Alpha. Subsequently, the instrument was tested with a pilot sample of 5% of the registered institutions, where communicative aspects and the order of some questions were corrected.

Once the context of the city of Ibagué had been characterised, in a second propositional stage, we design some educational guidelines for teaching and learning entrepreneurship at an early age. Our guidelines consist of six (6) learning moments ranging from pre-school to fifth grade of primary school. In this way, the first educational experiences are articulated with significant experiences in curricula and training in personal and social values (Welter et al., 2016). The criteria used in the guidelines are articulated with current debates in entrepreneurship education in terms of pedagogy (Neergaard & Christensen, 2017), attitudes towards entrepreneurship (Lee et al., 2006), current policies in the field of entrepreneurship (Bacigalupo et al., 2016) and course content (Neumeyer & McKenna, 2016). However, the guidelines only point out specific values to be addressed while leaving enough room for their application depending on the educational projects and strategies of each institution.

Consequently, we present a framework of reference on entrepreneurship and entrepreneurial education for pre-school and primary education. We highlight a systemic viewpoint, where the role of the family and the education system is vital to support the development of the individual and the process of entrepreneurship.

Development

Entrepreneurship education, understood as the formation of entrepreneurial human capital and culture, has been the focus of entrepreneurial ecosystems (Vera-Castillo, 2015). This focus leads us to specify that the quality of the relationships between the institutions that make them up will be responsible for generating or not the sustainability and growth sought for entrepreneurship (Johnson & Schaltegger, 2020).

In the Colombian case, there is evidence of efforts and opportunities deployed by various institutions that are part of an entrepreneurial ecosystem such as governments, chambers of commerce, universities, the National Learning Service (SENA), financial institutions, incubators, and foundations, which seek to support the generation, sustainability, and growth of ventures. However, one of the main problems in the regions is the low articulation of these actors (Reinoso, Macías & Pradilla, 2022) affecting the success of these ventures.

In addition, current literature shows that entrepreneurship is largely influenced by training and schooling related to entrepreneurial attitudes (Padilla-Angulo, García-Cabrera & Casademunt, 2022) and values such as persistence, initiative, teamwork, and autonomy (Thelken, & de Jong, 2020). In this sense, Kantis, Federico & Ibarra (2018) affirm that the formative process begins in the family, then moves on to the educational system and other institutions, such as companies. From this systemic vision, families have a significant influence on the formative processes of people from early childhood, which is later continued by educational institutions at different levels and finishes in companies through the work experience they provide.

In the same line of reasoning, Audretsch (2014) and Hahn et al. (2017) argue the importance of the educational system in contributing to students to develop entrepreneurship skills. In this way, universities promote the formation of "human capital" and are a hub within the entrepreneurial ecosystem (Kantis, Federico & Ibarra, 2018). This is how entrepreneurial competences will be promoted in the education system, through the encounter between education, science, and entrepreneurship, enabling the development of competences that will improve both actors in the system.

To strengthen the relationship between education and entrepreneurial culture, Law 1014 of 2006 (Congress of Colombia) establishes basic guidelines for the promotion of entrepreneurial cultures in schools with the support of entrepreneurial networks. These guidelines are taken up in Guide 39, the Toolbox designed by the Ministry of National Education (2012) and the recent Law 2069 (Congress of Colombia, 2020), which expands the areas of action, classifying entrepreneurship in terms of: cultural entrepreneurship, academic entrepreneurship, sports entrepreneurship, social entrepreneurship, and business entrepreneurship. The aforementioned laws 1014 and 2069 and the orientation of this article, maintain that entrepreneurial education from an early age becomes an important pillar for developing an entrepreneurial culture in later stages of life.

Mateo (2019), comments after making an analysis of entrepreneurship factors using the Global Entrepreneurship Monitor report (GEM) 2018 that:

Colombia is one of the countries that scored best in terms of entrepreneurial education in post-school stages, with a remarkable 5th place out of 54 countries surveyed, ahead of countries such as Argentina, Chile, Peru, and Uruguay. However, when analyzing entrepreneurial education at the primary school stage, Colombia drops to 18th place in the ranking, in the middle zone (s.p).

According to Robinson et al. (2016) and Varela (2014), entrepreneurship education requires educational institutions to provide their students with opportunities, practices, cultures, and environments conducive to

motivating and supporting entrepreneurship in such a way that it becomes part of institutional life. For the Colombian Ministry of National Education (2011) "the formation of children and young entrepreneurs requires educational institutions to foster a culture of entrepreneurship". In this sense, it is necessary to pay vital attention to educational models (Chauhan & Das, 2016) given some weaknesses in implementing entrepreneurial education. In the Colombian case, we can observe that some of the problems relate to the absence of educational resources in remote areas, the design of learning models for entrepreneurship, and the disarticulation of the current ecosystems (Reinoso, Macías & Pradilla, 2022). Thus, the possibility of providing children with a learning environment accompanied by the entrepreneurial ecosystem, and strengthening their personal and social values towards entrepreneurship, is diminished (Johnson & Schaltegger, 2020).

Concerning entrepreneurship education, Bejarano (2012) highlights the importance of emphasizing entrepreneurial characteristics related to personal and social values such as self-confidence, creativity, initiative, autonomy, leadership, innovation (creating new things that serve society) and teamwork. Regarding entrepreneurial education in primary school, Gómez et al. (2017) have studied entrepreneurial competences at a general level, detailing them in terms of knowing how to be (attitudes), knowing how to know (knowledge) and knowing how to do (skills). In the case of knowing how to be, specific competences such as proactivity, risk-taking, creativity, self-awareness, self-efficacy, self-confidence, tolerance of uncertainty and perseverance have been identified. Similarly, in case of competences related to knowledge extant literature has linked topics as economic and financial knowledge, business management processes, citizens' rights and duties as the most pressing ones. Finally, the entrepreneurial competences identified to knowing how to do are problem solving, exploring opportunities, communication, planning and teamwork.

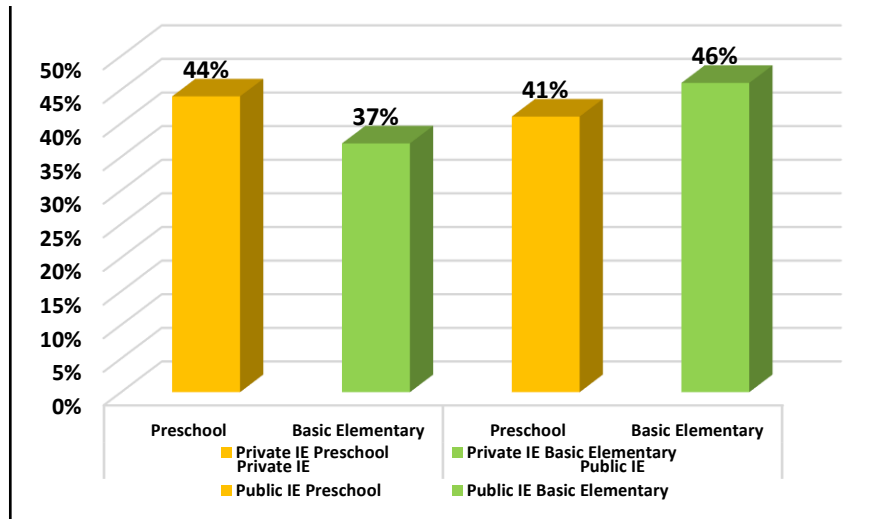
Results

The results of the two methodological moments are presented below, starting with the characterization of the educational institutions surveyed and the explanation of the context of Ibagué. Second, the educational guidelines for the teaching and learning of entrepreneurship are presented, composed by 6 learning moments aimed at the 6 educational levels from pre-school to fifth grade of primary school, where the training at early ages is observed.

1. Analysis of significant variables of early entrepreneurial education

Figure 1 shows the situation of educational institutions with respect to pre-school and basic primary education levels, associated with early education (at the initial levels of the individual).

Figure 1. Participation by educational level of the educational institutions of Ibagué, Colombia.

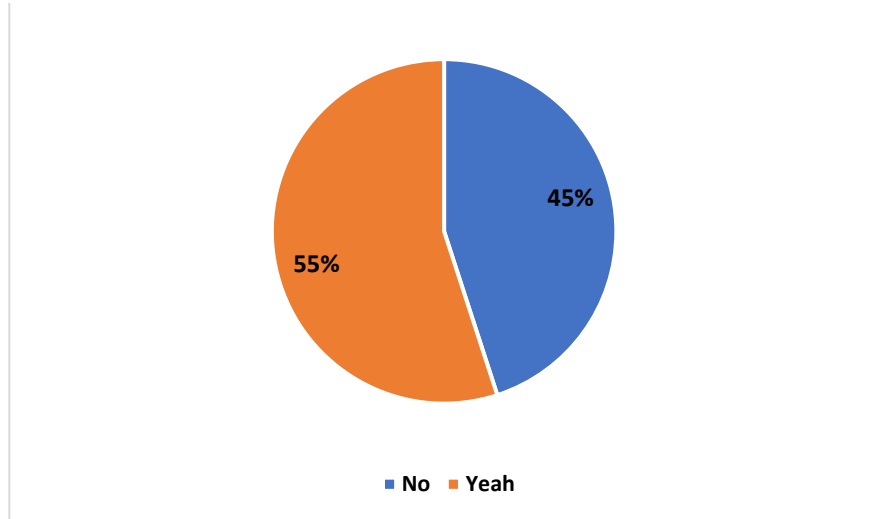


Source: Authors

Figure 1 shows that 83% of the educational institutions in Ibagué, Colombia, offer Primary Basic Education, with a greater number of public institutions offering this education. It was also found that 85% of the educational institutions offer pre-school education, with a narrow percentage in favor of private institutions. In this sense, the issue of developing entrepreneurial education for the early ages will have implications in both sectors and the articulation of the ecosystem should seek to understand the dynamics of public and private institutions.

Considering that the promotion of entrepreneurial culture in Colombia is based on the Law 1014 of 2006 (Congress of Colombia), figure 2 shows its articulation in educational institutions of the city. Thus, it can be established that the reference framework for the construction of educational actions is of little use for entrepreneurship training in Ibagué.

Figure 2. Application of Law 1014 of 2006 in educational institutions in Ibagué, Colombia.

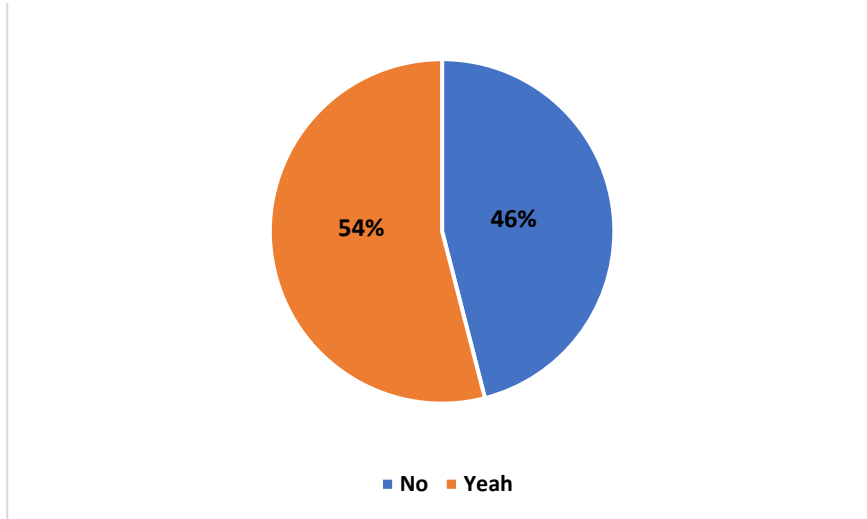


Source: Authors

This current situation is disquieting because it has at least three relevant impacts. First, there is a lack of knowledge of the public policies that seek to develop and strengthen entrepreneurship in the country. This lack of knowledge of the actors influences the development of values and attitudes that foster entrepreneurship in all stages of life (Bejarano, 2012). Secondly, it calls into question the content and understanding of entrepreneurship in early childhood education and its influence on the lifelong learning development of the individual (Henry & Lewis, 2018). Finally, it could be an indication of the disarticulation of the regional ecosystem, which in turn would be a variable in the explanation of the system's performance (Kantis, Federico & Ibarra, 2018).

Once the situation was established from the public policy framework, we proceeded to determine the implementation of entrepreneurial education processes in educational institutions in Ibagué, Colombia (Figure 3).

Figure 3. Implementation of Entrepreneurship Education in educational institutions in Ibagué, Colombia.

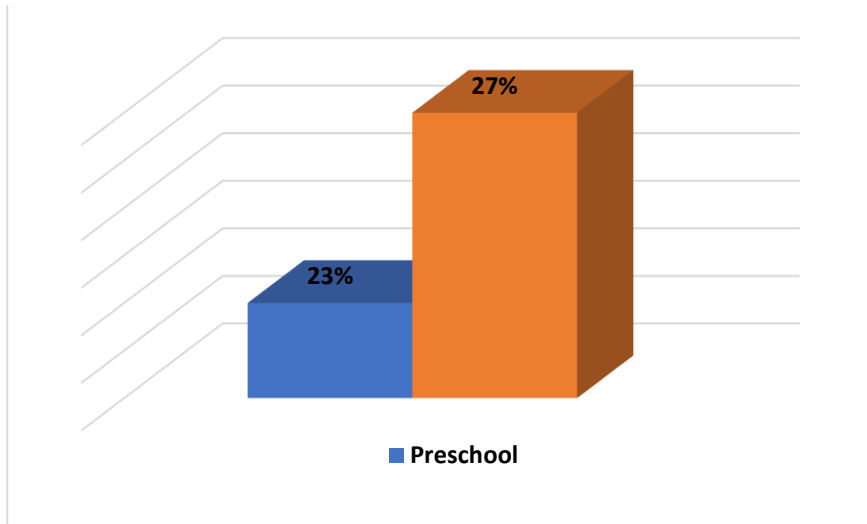


Source: Authors

These results seem to emulate the findings obtained in terms of public policy presented in figure 2. In this sense, a similar percentage of those institutions who are familiar with the Law 1014 of 2006 are those who appropriate the subject of entrepreneurship in their training. However, it is important to note that it is also evident that training in entrepreneurship is temporary and refers to specific actions such as exhibitions, and fairs. Therefore, we can assume that only some values and attitudes are being strengthened, leaving aside issues such as resilience, determination, and more importantly the processual understanding of entrepreneurship (Hahn et al., 2017).

We also inquired about the starting point of training in entrepreneurship. Here, we found that a very low percentage of the institutions (23%) provide training from pre-school onwards. In this sense, based on Bejarano's (2012) arguments the city is losing the opportunity of conducting schooling that can generate life changing impacts. Also, it is evident that the situation does not improve substantially in primary school, where only 27% of the institutions incorporate training on the subject. In general terms, Figure 4 presents a panorama of immediate intervention from the articulation that can be made by different actors in the entrepreneurial ecosystem.

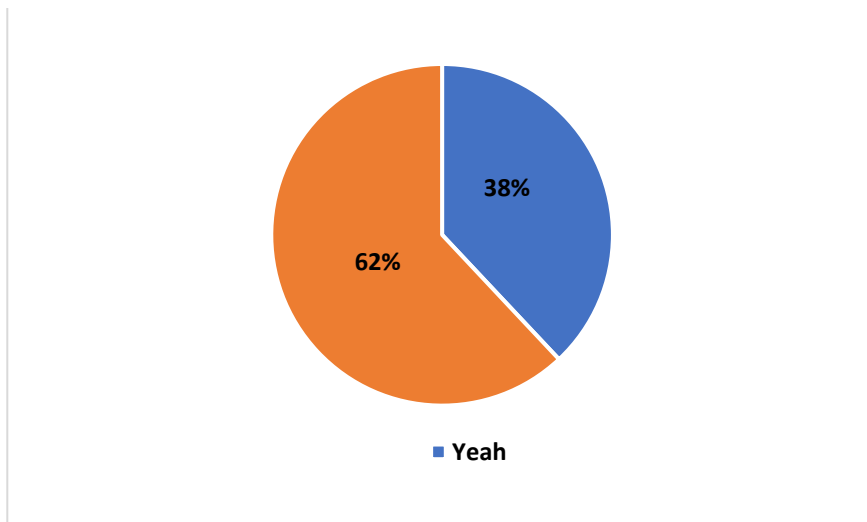
Figure 4. Educational levels at which Entrepreneurship and/or Business Education is implemented in educational institutions in Ibagué, Colombia.



Source: Authors

On the other hand, we wanted to explore how educational institutions incorporated the subject of entrepreneurship in their teaching. For this situation, figure 5 shows that the most used form is through institutional educational projects.

Figure 5. Implementation of Entrepreneurship in Institutional Educational Projects - PEI.



Source: Authors

In terms of educational projects, Neumeyer & McKenna (2016) emphasize the need to understand the objective selection of pedagogy,

didactics, and content in entrepreneurship education. In the case of Ibagué, this situation can be seen in the design of micro-curricula, the inclusion of entrepreneurship topics from other academic areas and in the formation of values and competences of teachers and students. Finally, it is important to highlight that the percentage found is quite precarious given the need for entrepreneurship education in the city.

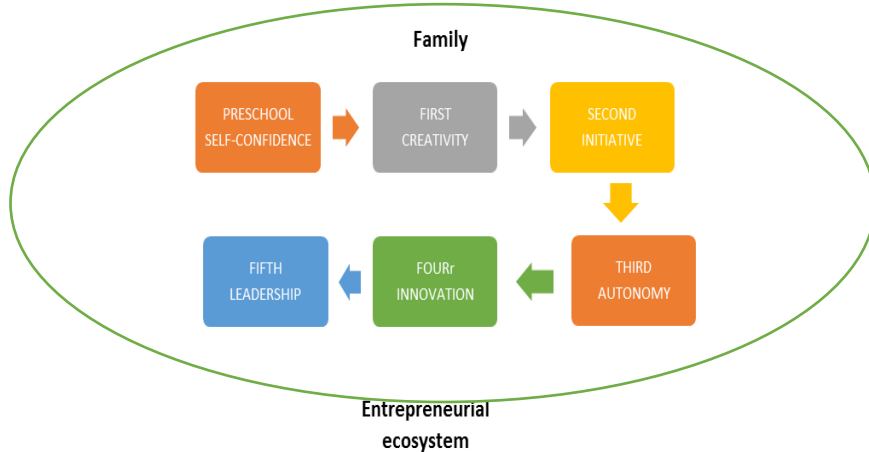
2. Proposal for educational guidelines for the teaching and learning of entrepreneurship.

After characterizing the current situation of Ibagué and based on current literature about educational experiences in entrepreneurship, we proceeded to propose some educational guidelines for the teaching and learning of entrepreneurship at an early age. These guidelines consider the context (Johnson & Schaltegger, 2020), the competences (Gómez et al, 2017) and the contents (Neumeyer & McKenna, 2016) to serve as parameters for educational institutions. Our guidelines are also based on understanding the entrepreneurial process starting in personal and social values, moving to form an entrepreneurial attitude, and having the family and the educational system as socializing agents.

The guidelines shown in figure 6, consist of one pedagogical proposal, composed of 6 levels or moments of teaching and learning. These moments are aimed at pre-school and primary education, where the student will deal with personal and social values. The guiding role of teachers, parents, and members of the entrepreneurial ecosystem such as universities, chambers of commerce, municipalities, companies, financial institutions, entrepreneurial associations, and foundations is vital for the implementation of the guidelines.

The personal and social values associated with each level of education were selected in the form of processual growth. However, as guidelines they leave plenty of room for the variety of educational projects present in the institutions as well as the distinctive commitments of each teacher to development of the themes. As can be seen in figure 6, each level is based on a value or personal characteristic related to entrepreneurship. The guidelines seek to strengthen entrepreneurial education through content related themes and by developing activities in the classroom and with the family. Additionally, we highlight the need to complement training through virtual objects and learning environments (Reinoso & Sánchez, 2018).

Figure 6. Educational guidelines for teaching and learning entrepreneurship at an early age



Source: Authors

In the following lines, we introduce the learning moments, a brief description of their pedagogical intention, and the concept of each entrepreneurial competence.

Learning moment 1. PRESCOLAR. Self-confidence.

This learning moment is aimed at encouraging self-confidence in schoolchildren through guides where the themes of entrepreneurial attitude, self-confidence, family affection, personal identity, know your environment, words of entrepreneurship and family entrepreneurship are developed. In congruence, it is relevant to link the meaning of self-confidence as a determinant for learning, citing Valencia (2013):

Self-confidence is the strength that allows us to feel autonomous and gives us the tools to relate to others effectively. All this promotes the desire to learn communally, to take ownership of our achievements and successes to seek more challenges; elements that will contribute to the construction of social relationships that will push us to continuous growth (p. 16).

Learning moment 2. FIRST GRADE. Creativity.

Creativity is a central focus of learning, due to its importance in the entrepreneurial attitude. In this learning moment, the themes of creativity in groups, knowing your strengths and weaknesses as an entrepreneur, the brain as an apparatus of creativity, the creative family, the creative spirit, and innovation are developed.

Furthermore, practical education must be implemented, linking the theoretical realm with the applied world, promoting creativity in a conscious way. An appropriate meaning of creativity is provided by Valqui (2009):

Creativity is the ability to question assumptions, to break boundaries, to recognize patterns, to see differently, to make new connections, to take risks and to push one's luck when approaching a problem. Furthermore, it is important to underline that the creative process is an intuitive one that allows for learning or discovery and is quite different from the rational and mechanical. In short, creativity is an intuitive process of discovery that leads to a product, a process, an idea, or simply a new experience. (p. 3)

In this sense, Guilera (2011), posits that:

It has been shown that all human beings are born with fairly high creative capacities and that the environment and the education received can favor them or, on the contrary, inhibit them to the point of disappearing. If we intervene too late, we have let a whole potential slip away that we may not be able to recover (p.26).

However, what is important is to develop the learning activity in early stages of life when the children are discovering the world and can be encouraged to think aside status quo.

Learning moment 3. SECOND GRADE. Initiative.

As an entrepreneurial competence, initiative is the personal disposition to devise and undertake activities, direct actions, play a leading role, promote, and develop ideas from the front lines, lead work teams. Based on this initiative, the person can propose and initiate actions with specific results. Having initiative is also a guarantee that decisions inherent to the creative process will be made quickly enough and that opportunities will not be missed (Guilera, 2011).

Therefore, it is essential to develop this skill in schoolchildren because, as indicated by (Gonzalez-Toruño, Ginebra and Lucas, 2002):

It is an attitude and is not innate, but can be acquired, partly with appropriate training and, above all, with the encouragement and contagion of others who have already shown initiative. We must also be aware that there can be an education and a social and cultural environment that can neuter almost any initiative (s.p.).

In this learning moment the following topics are addressed: learning to know oneself, what is initiative, attitude to study, reflection, discipline, achieving entrepreneurial goals, initiative, and creativity to solve problems, initiative to make decisions.

Learning moment 4. THIRD GRADE. Autonomy.

Autonomy is key to establishing effective teaching-learning processes, and it is in early education that the development of this ability and principle should be encouraged. According to Sepúlveda (2003) autonomy can be a determining factor in the construction and apprehension of knowledge:

In autonomy, a rule, a principle, or law is followed that is internal to the person's own consciousness, which has internalized it through a process of progressive and autonomous construction. In autonomy, the rule is the result of a free decision, and worthy of respect insofar as there is mutual consent (p. 29).

Here any teacher can draw on the multidimensionality offered by the concept, such as that of the Fundación Moderna (2013):

Autonomy refers to the regulation of behavior by rules that arise from the individual himself. Autonomous is anyone who consciously decides what rules will guide his or her behavior. To be autonomous means to be able to do what one thinks one should do, but not only that. It also means being able to analyze what we think we should do and consider whether it should be done or whether we are deluding ourselves. We are autonomous when we are reasonable and consider what we should do with all the facts at our disposal. In other words, we are truly autonomous when we use our moral conscience (p. 2).

This learning moment includes the following topics: personal autonomy, commitment, responsibility, environment, types of autonomy, opportunity, the entrepreneurial team, entrepreneurial identity, people.

Learning moment 5. GRADE FOUR: Innovation.

Innovation is presented as a trend of change that reformulates and reinvents processes, concepts and methods (Yépez, Frías & Asunción, 2019). As an entrepreneurial competence, innovation is thinking and action, or put it simply, it is a knowledge-based competences that generates value for society. For some authors, such as Garcia (2012) innovation is the application of creativity. Here, innovation is an essential component of meeting needs and expectations through the generation of value.

This learning moment addresses the following topics: innovation, entrepreneurship and innovation, innovative parents, the entrepreneurial vision, innovation and creativity, the team, honesty, the process of innovating, innovation exercises. Thus, a student will understand and apprehend that innovation equates to learn how to rethink, how to question the existing order, how to think about new things that contribute to collective well-being (Garcia, 2012).

Learning moment 6. GRADE FIVE. Leadership.

In entrepreneurship, leadership is the knowledge, attitudes and behaviors used to influence people to achieve the desired purpose (Leitch & Volery, 2017). In other words, leadership is the action of getting people to identify with a mission or vision so that they work towards its realization. Transformational leadership (Bass & Riggio, 2006) includes vision, planning, communication, and creative action. It

has a positive unifying effect on a group of people around a clear set of values and beliefs to achieve a collective goal.

Through this learning moment, the following topics can be developed: how to become the leader of my life, my identity as a leader, the leadership process, the leader's responsibility, teamwork, the leader and objectives, leadership and entrepreneurship, types of leadership, the leader's values, responsibility, goals, motivation, family leadership.

Conclusions

From a causal relationship between entrepreneurial education and entrepreneurial action, the findings presented demonstrate the need to implement clear guidelines for the development and strengthening of entrepreneurial education from an early age in a general and uniform manner, around Law 1014 of 2006 and Law 2069 of 2020 (Congress of Colombia).

Despite the average coverage of pre-school and primary education in Ibagué, Colombia, there is little implementation of entrepreneurial education to think about the promotion of an entrepreneurial culture. This situation, which is particular to this municipality, can be a point of analysis for other localities not only in Colombia but also in Latin America and emerging economies. In this way, our study offers a vision to justify the need to increase the level of implementation of entrepreneurial education and the relevance of educational learning guidelines designed for this purpose. Given that the Institutional Educational Project (PEI) is the point of reference and identity of an educational institution in Colombia, entrepreneurial education must begin by being included in these projects. Here, educators need a real commitment in its design and implementation to create favorable environments of entrepreneurship teaching.

Regarding the educational guidelines for learning entrepreneurship from pre-school to fifth grade of primary school, a flexible learning environment is proposed to explore, identify and strengthen the entrepreneurial potential of students through the development of entrepreneurial competences related to social and personal values. These guidelines provide a methodological orientation, as they emphasize values related to entrepreneurship such as self-confidence, creativity, initiative, autonomy, innovation and leadership. The guidelines aim to articulate recent discussions in the area of entrepreneurship education (Thomassen et al., 2020), competencies (Gómez et al., 2017) and content (Neumeyer & McKenna, 2016) for this purpose.

In this sense, the literature has fully identified that the main success factor in the development of plans, programs, projects, strategies, and policies for entrepreneurship is the attitude of the person (Varela, 2014),

associated with personal and cultural factors of the entrepreneur (Kantis, et al, 2018). For this reason, it is necessary to strengthen it from an early age, which is the most conducive to ingrain and strengthen it in future entrepreneurs.

From a systemic and holistic view of entrepreneurship (Reinoso, Macías & Pradilla, 2022), entrepreneurial education involves the entrepreneurial ecosystem and the family, as a complement to a pedagogical model based on personal and social values aimed at fostering an entrepreneurial culture. The aim is to show a causal relationship between entrepreneurial education from an early age to initiate and consolidate an entrepreneurial culture, which allows for the effective implementation of entrepreneurial policies and strategies, and how an educational model based on the strengthening of social and personal values, through entrepreneurial competences oriented towards entrepreneurship, can contribute to this end.

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