Entrepreneurship Education in Socioeconomically Disadvantaged Contexts in Brazil

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Abstract

This article discusses the impact of entrepreneurship education in socioeconomically disadvantaged contexts, emphasizing its perceived dynamic nature in reflecting personal values, social changes, and cultural differences (Lackéus, 2015; Loi et al., 2022; Berglund et al., 2020; Berglund & Johansson, 2007). The focus is on the implementation of the *Empreende Jovem Fluminense* (EJF) Program for high school students in poor communities in Rio de Janeiro. The EJF had the support of school directors, the State Department of Education, and a non-governmental organization serving children and adolescents at risk. A case study using content analysis was conducted to analyze speeches from school principals, coordinators, students, teachers, parents/guardians, and NGO representatives. The study found that the main contribution of education for entrepreneurship in disadvantaged contexts was the development of non-cognitive skills that can impact academic performance and job market outcomes. The program's location on university premises also broadened the educational perspectives of the participants. Overall, the EJF is believed to be highly beneficial for the professional development of its participants.

Keywords: entrepreneurship education, socioeconomically disadvantaged contexts, high school students

1. Introduction

In Brazil, 30% of the population lives below the poverty line, surviving on less than USD 100.00 per month (The World Bank and IBGE in 2022). Additionally, approximately 85% (35.3 million) of children and young people are enrolled in free public education system. Given this background, this article aims to investigate how Entrepreneurship Education can help prepare young people who face significant social disadvantages.

In an effort to improve Brazilian education, the Ministry of Education (MEC, 2017) has proposed various initiatives, including the restructuring of secondary education with the introduction of a National Common Curricular Base (NCCB) that offers more relevant and practical content to make school more engaging for young people, and an increase in the number of school hours in basic education. To promote greater youth protagonism, as part of the NCCB, 40% of the curricular content will consist of diverse training paths (MEC, 2017) organized around four thematic axes: (i) scientific research, (ii) creative processes (iii), mediation and sociocultural intervention and (iv) entrepreneurship. Entrepreneurship, as defined in the NCCB, involves mobilizing knowledge from various domains to establish organizations with diverse missions that develop innovative products and provide services using technology (MEC, 2017).

The inclusion of entrepreneurship education in the NCCB places Brazil in line with the approach followed by education systems in the OECD countries. These systems aim to foster responsible behavior, creativity, the ability to identify opportunities, and help pupils assess and take calculated risks, as well as manage suitably sized projects, by incorporating pedagogical practices specifically tailored to entrepreneurship (Hoare & Ruskovaara, 2015). As such, curricula should embody the 'can do' mentality that is a key goal of entrepreneurship education.

Based on this rationale, the *Empreende Jovem Fluminense* (EJF) Program was created by the Fluminense Federal University (UFF), in partnership with the State Department of Education of Rio de Janeiro (SEEDUC-RJ), to

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offer Entrepreneurship Education to high school students on an experimental basis. Initially, the EJF was implemented in three public schools located in socioeconomically disadvantaged communities in Rio de Janeiro (RJ). The program was further supported by a non-governmental organization focused on assisting children and young people at risk in these communities. Additionally, the project was endorsed by the directors of the three schools and received the backing of the State Department of Education (SEEDUC-RJ).

This article presents the outcomes achieved by the EJF. The study outlines the benefits of providing in socioeconomically disadvantaged contexts, providing insights into the positive impacts that such programs can have on the education of young people.

2. Entrepreneurship Education (EE)

The pursuit of improved living standards, which is entwined with the sustainable socioeconomic growth of nations, has led to a demand for the increasingly early introduction of EE in schools. This is due to the perception that entrepreneurship plays a crucial role in generating value for society and acts as a fundamental pillar supporting development, regardless of the starting conditions unique to each country (Winkel et al., 2013; Galindo-Martín et al., 2021).

However, entrepreneurship itself is influenced by a range of factors, including politics, government policies, laws, taxes, technology, economic conditions, income, age, social status, and education among others. Education, in particular, is regarded as a crucial factor in the development of entrepreneurship as it is considered a discipline that can be learned (Zhang et al., 2013; Grivokostopoulou et al., 2019; Doan, 2022). In this regard, education assumes a central role as it influences the development of psychological characteristics, skills, and abilities that are fundamental for entrepreneurship (Garrido-Yserte et al., 2020; Doan, 2022). Thus, the promotion of entrepreneurship among younger age groups becomes increasingly important since personality begins to be formed early on in life (Peterman & Kennedy, 2003; Fayolle & Klandt, 2006; Schott et al., 2015). Consequently, it is essential to introduce entrepreneurship education in schools to provide young people with the necessary skills and attitudes to become successful entrepreneurs (Heuer & Kolvereid, 2014; Porfirio, 2022).

Therefore, there is a growing interest in EE, leading researchers to strive for greater rigor in their studies to support the development of a theory for EE. Despite the increased interest, there is still a lack of consensus on the components of what would constitute an applicable model of EE and limited evidence of a well-articulated theory in this field (Vanevenhoven & Liguori, 2013; Rideout & Gray, 2013).

As Lackéus (2015) points out, EE aims to develop some level of entrepreneurial competence among individuals. Hence, "entrepreneurship education comprises contents, methods, and activities that support the creation of the knowledge, skills, and experiences that enable students to initiate and participate in value creation processes" (Moberg et al., 2012, p. 13). This perspective is based on the understanding that "entrepreneurship involves acting on opportunities and ideas and turning them into financial, cultural, and/or social value for others" (Moberg et al., 2012, p. 13).

Therefore, learning and value creation are two central aspects of EE, as corroborated by the proposal in Lackéus (2015), entitled "Learning for value creation". According to this perspective, if a pedagogical intervention allows students to learn to create value for other people, it constitutes entrepreneurship education. The author suggests the development of entrepreneurial skills itself results in value creation/creates value, regardless of whether any other value has been achieved. Moberg et al. (2014) points out that EE, therefore, is not only about creating new businesses, but also about fostering an entrepreneurial mindset and skills among students that can be applied in various real-life contexts.

Importantly, there is a need to combine both non-cognitive and cognitive factors in the development of entrepreneurial skills. Non-cognitive factors, such as perseverance, self-efficacy, and social skills, require a more active teaching and learning approach, such as "learning by doing". On the other hand, cognitive factors are easier to teach and assess (Venkataraman, 1997; Shane & Venkataraman, 2000; McAdams & Pals, 2006; Lavieri, 2010; Lackéus, 2015). Furthermore, Lopes (2010) suggests that EE can have different meanings and outcomes at different levels of education, such as primary, secondary, and higher education, as the students broaden their range of knowledge, behavior and skills. In this research, the focus was on Entrepreneurship Education in High Schools.

Irrespective of the educational level, the European Commission (EC) posits that the core competency of "sense of initiative and entrepreneurship" is one of the eight key skills every citizen should possess (Bacigalupo et al., 2016; Moberg et al., 2014). Therefore, the EC recommends the core competency "entrepreneurship" be included in curricula at all levels of the European education system, ensuring that all students in secondary education have

at least one practical experience of EE (Johansen & Schanke, 2014). To achieve this, it is imperative that the education system focuses on developing entrepreneurial skills in the early years of education, as highlighted by Moberg et al. (2014). However, when attempting to integrate entrepreneurship into education, resource and time constraints, teacher resistance, assessment challenges, and cost implications have been identified as some of the obstacles (Lackéus, 2015).

Fayolle (2013) emphasizes the importance of incorporating established concepts from the entrepreneurship literature to foster an entrepreneurial mindset and thinking. Effectuation theory (Sarasvathy, 2001) offers insights into how entrepreneurs (i) identify opportunities from existing resources, (ii) make investment decisions based on what they are willing to lose, (iii) take advantage of contingencies, and (iv) establish strategic relationships with stakeholders, and adopt bricolage—that is they make things happen by applying combinations of available resources to new problems and opportunities and offer alternative views on how entrepreneurs think, make decisions, behave and act entrepreneurially. Understanding these perspectives can aid in developing entrepreneurial skills and learning. These skills encompass critical thinking, creativity, initiative, problem-solving, risk assessment, decision-making, and constructive management of emotions, which are interdependent and crucial for transforming ideas into action that creates value for society. Therefore, individuals who possess these skills can analyze and comprehend their contexts and take actions that generate value for society by solving problems or proposing solutions (Tapia & Ferreira, 2011).

The EJF adopts the teach "for" entrepreneurship, approach, in seeking to combine theory and practice to provide students with the necessary knowledge and skills to undertake entrepreneurial activities (Kyrö, 2005; Lackéus, 2015). This approach emphasizes the development of a sense of initiative, which is considered a transversal competence that must be improved throughout the student's academic trajectory. According to the OECD (2015), turning ideas into action demands creativity, risk-taking, and a sense of opportunity, among other attitudes that contribute to both social and business activity. By developing these skills and attitudes, students can mobilize them when necessary and apply them in a wide variety of contexts and situations.

3. The Empreende Jovem Fluminense (EJF) Program

In building the pedagogical design for the *Empreende Jovem Fluminense* (EJF) program it was decided to adopt the skills base and guidelines for EE recommended by the International Student Assessment Program (PISA), where the creation of value for society, community, school, or individuals is fundamental (Lackéus, 2015). The program is organized into domains, which are specific areas of knowledge, and each domain involves a set of procedures that describe what students need to learn to solve problems related to the domain. The aim being to prepare students with the necessary knowledge and skills to undertake entrepreneurial activities and mobilize them when necessary, with a focus on developing a sense of initiative that includes creativity, risk-taking, and a sense of opportunity.

With this in mind, the problems are also contextualized and, therefore, it is necessary to explain the context (individual, social, occupational, international/local, etc.) pertaining to the problems. To solve the problems, students need to have a previously defined repertoire of contents, established based on each domain. Thus, the procedures, contexts and contents of a domain culminate in the development of a set of skills to be developed by the students.

Given these assumptions, the following disciplines were defined: Entrepreneurial Skills (60h), the Digital Market (45h), Business Modeling (30h), Project Feasibility (45h) and a Final Course Project (60h), totaling 240 class hours. The disciplines are offered one at a time, in the order presented above, and the EJF lasts for two semesters. The outline of the EJF curriculum is presented in Table 1.

Table 1. Curricular outline of the Empreende Jovem Fluminense program

Acquire and Apply knowledge of:	Key Concepts	Learning Objectives	Skills
Entrepreneurial Skills Employ concepts in problem solving and/or decision making, interpreting data and	Entrepreneurship	Understand what entrepreneurship is; identify the different types of entrepreneurship; discern the different motivations for undertaking entrepreneurial activities; perceive the characteristics of the individual entrepreneur; learn the importance of entrepreneurial activity for society and the individual; understand the context of entrepreneurship in Brazil; awaken an interest for entrepreneurship.	Take the initiative; deal with risk.
identifying opportunities in order to generate value.	Innovation	Define innovation; identify the types of innovation; understand value creation; carry out market research; conduct market analysis; diagnose business opportunities; learn the steps of design thinking; apply design thinking in value creation; focus efforts on value creation.	Be able to innovate; learn from mistakes
	Communication	Understand the communication process; know the roles involved in the communication process; identify the different forms of communication; learn the importance of communication in the organizational context; communicate a value proposition.	Know how to communicate
	Creativity	Define creativity; learn different creativity techniques; apply different creativity techniques.	Be able to think creatively
Digital Market Explore possibilities in the digital market and develop an appropriate	The digital market in Brazil	Understand the relevance of the digital market for business and learn the main tools and opportunities.	Develop the analytical capacity to identify opportunities in the digital market
marketing strategy for the virtual environment	Digital tools and new businesses	Learn how to use different tools while engaged in business (communication; transactions; payment, among others); know the different uses of social networks and their application for creating business; understand planning in social media; focus on planning and management in social media.	Be able to use the studied digital tools
Business modeling Formulate a value proposition and plan	Business modeling	Understand the importance of planning; understand what a business model is; consider sustainable entrepreneurship in the development of a business model; learn the importance of business modeling;	Be able to plan
how it will be delivered to the market	The CANVAS Method	Understand the CANVAS method; learn to apply the CANVAS method; focus on preparing a feasible business model.	Be able to develop a value proposition; make judgments.
Project feasibility: Use the assumptions established for the business to begin	Basic notions of finance	Understand the basic concepts and the importance of financial management for the success of business/projects.	Be able to apply basic financial concepts in projects and in other contexts
studying its economic and financial feasibility.	Financial projections	Recognize the main methods dealt with in the current literature regarding the pricing, sales projections, costs and expenditure.	Being able to set prices based on market position and cost structure and to estimate business figures (sales, costs, expenses, etc.)
	Conducting a feasibility study	Learn with the use of spreadsheets and know the investigation standards and presentation of financial results.	Be able to clearly present the feasibility of your business (orally and in writing) to potential investors.
Final Course Project: Develop/Demonstrate a set of skills capable	The validation process	Understand the function and relevance of the business plan validation process; understand the build-measure-learn cycle; understand the different ways the validation process can be applied.	Be able to establish and test assumptions.
of validating their business proposals	Methodologies for carrying out validations	Learn the business/start-up experimentation method; conduct interviews with interested partied; prototype a product/service.	Be able to test your ideas and proposals. Be able to explore alternatives.
	Project	Understand what a project is; present a project; identify opportunities to adjust a project.	Be able to plan.

Source: Empreende Jovem Fluminense Program Pedagogical Project, Department of Entrepreneurship and Management, UFF (2017).

The curricular framework designed for the EJF program is aligned with the skills framework recommended by the Brazilian NCCB. Table 2 presents the skills to be developed by the EJF program that are aligned with the skills approved and ratified by the NCCB.

Table 2. NCCB x EJF skills

NCCB Skills	EJF Skills
Knowledge	Be able to apply basic financial concepts in their projects and in other contexts.
Creative, critical and scientific thinking	Be able to innovate, be able to think creatively, be able to create a value proposition.
Aesthetic sense and cultural repertoire	Not applicable.
Communication	Know how to communicate.
Digital culture	Develop the analytical capacity to identify opportunities in the digital market, be able to use
	the studied digital tools.
Self-management	Be able to plan.
Argumentation	Make judgments, be able to develop a value proposition.
Self-awareness and Self-care	Not applicable
Empathy and Cooperation	Know how to communicate.
Autonomy	Act on initiative, deal with risk, learn from mistakes.

Source: Prepared by the authors.

The NCCB's entrepreneurship training itinerary places a strong emphasis on expanding students' ability to draw upon knowledge from various fields to undertake personal and/or productive projects that align with their life goals. This requires the development of autonomy, focus, and determination to plan and achieve personal objectives, or create ventures (MEC, 2017). In line with these objectives, the EJF program's proposed skill development aligns with the skills outlined in the NCCB's entrepreneurship objectives.

The EJF developed specific, customized teaching materials for the students, designed using language and examples that are relevant and appropriate to their context. In this regard, a book was created for each discipline, forming the *Empreende Jovem Fluminense Collection*, consisting of five volumes. These materials were designed to facilitate the teaching and learning process, helping students to better understand the content and apply it effectively.

The collection was curated by experienced faculty members from the Department of Entrepreneurship and Management, in collaboration with guest authors who possess a deep understanding of entrepreneurship education. To ensure visual consistency across all the support materials, a specific visual identity was developed for the EJF, a key element of which, incorporated throughout the collection, is *Griô*, a young black man representing the predominant profile of students in Brazilian public schools.

The content development process employed instructional design techniques. Instructional design is a resource for planning and developing educational solutions, such as courses, teaching materials, and disciplines. It aims to ensure systematic and coherent learning, providing an overview of the learning process to ensure its effectiveness (Oliveira, Csik, & Marques, 2015). The EJF used the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) as its instructional model. The ADDIE model is a structured approach that includes several activities and outcomes at each stage, with each stage supporting and informing the following stages in an integrated way.

During the first stage (Analysis), the team diagnosed the situation, identified the needs, and contextualized the educational solution. In the second stage (Design), the team established the objectives, contents, and logical structure of the course. During the third stage (Development), the team defined the activities, resources, curriculum, and necessary teaching materials. The fourth stage (Implementation) involved the actual execution of the educational solution, which required the provision of all necessary elements and infrastructure. Finally, the fifth stage (Evaluation) was a constant throughout the development and implementation of the solution, being aimed at ensuring the continuous improvement of the educational solution. To achieve this, the team drew upon instructional design literature from scholars such as Allen (2006), Branch (2009), Brown and Green (2016), and Gedeon (2022).

In addition to the printed instructional materials, video lessons were produced for each of the topics addressed in each of the books. The video lessons produced by the EJF teachers are between 2 and 5 minutes long and tailored to the students' educational and social contexts. The purpose of the video lessons is to provide support material that the student can use at any time and as often as necessary to reinforce their learning.

The EJF adopts a blended learning approach that combines face-to-face instruction with distance learning. To facilitate the distance component, EJF utilizes Facebook, a platform that is popular among young people and offers features similar to a virtual learning environment. These features include the ability to conduct large and small group discussions, share files and videos, conduct polls, manage calendars, participate in chats, and attend live classes.

The three-hour long, face-to-face classes were held every two weeks at the Department of Entrepreneurship and Management of the *Universidade Federal Fluminense* (UFF) in Niterói (Rio de Janeiro). The UFF provided a well-equipped auditorium with benches, chairs, computers, projectors, blackboards, notebooks, and WiFi access for the students. The classes were taught by faculty members of the Department of Entrepreneurship and Management, who employed contextualized teaching methods to enhance the teaching-learning process.

To support the face-to-face classes, undergraduate students were recruited to assist the teachers from the Department of Entrepreneurship and Management. They were trained to act as monitors during online activities with the EJF students. During the face-to-face classes, the undergraduate assistants provided the teachers with logistical support and helped organize the activities. They also facilitated communication and collaboration among the high school students during the online activities. The teachers closely supervised the online activities and the teaching-learning relationship between the undergraduate and high school students. This allowed them to monitor the progress and development of the EJF activities and plan and implement improvements as necessary.

To achieve its objectives and in alignment with the entrepreneurial education approach embraced by the EJF, which aimed to foster the cognitive skills and knowledge required for an entrepreneurial mindset (Moberg, 2014), experiential methods were also employed. These methods provide opportunities for students to engage in hands-on activities that encourage them to think critically, seek solutions and alternatives to overcome challenges, and learn from the experience and the process.

The EJF adopted a formative assessment approach, which involves continuous assessment over time to evaluate the student's ability to apply the acquired skills to solve problems (Bennett, 2011; Elwood, 2006; Boud & Molloy, 2013; Lee et al., 2020). The focus was not on the amount of knowledge acquired, but on the practical application of the skills in real-life situations. Accordingly, the EJF emphasized problem analysis within the context of the students' reality, the proposal of solutions, interventions, and planning situations based on theoretical models. Additionally, written reflections on the aspects studied and participation in simulation activities were also evaluated as part of the formative assessment process.

Additionally, the EJF established partnerships with other institutions. Firstly, a cooperation agreement was made between the Fluminense Federal University, proponent of the *Empreende Jovem Fluminense* (EJF) Program and the Department of Education of the state of Rio de Janeiro (SEEDUC). The aim being to combine efforts to carry out an Entrepreneurial Education Project for Young People in Regular High School. SEEDUC indicated schools located in socioeconomically disadvantaged communities as a target audience. The EJF was publicized in these schools so that young people from regular secondary education could volunteer to participate in the program.

Another important partnership was established with a non-governmental organization (NGO) that assists children and adolescents facing social risks in São Gonçalo, the city where the schools and students involved in this research live and study. This NGO provided logistical support for the EJF, including transportation for the students to attend the face-to-face classes at the university and offered parallel support such as monitoring and psychological assistance to the students. The NGO also supported school managers and parents of the students. The UFF provided the space for the face-to-face classes, teachers, online monitors, teaching materials (handouts, exercises, video lessons), and snacks during the sessions.

4. Methodological Procedures

This paper presents the findings of a qualitative research aimed at identifying the contributions, as perceived by the individuals involved, of entrepreneurship education in socioeconomically disadvantaged contexts.

It is worth noting that the schools participating in the EJF did not have any partnerships with companies or organizations aimed at developing or preparing students for the job market. This decision was made to ensure the EJF students had not previously participated in any other entrepreneurship education program or program that promoted entrepreneurship. Chart 3 presents data from the three schools took part in the study.

Table 3. Participating schools

	Name of the school	N° enrolled
School 1	Colégio Estadual Capitão Oswaldo Ornellas	784
School 2	Colégio Estadual Nilo Peçanha	1,033
School 3	Colégio Estadual Dr. Rodolpho Siqueira	532

Source: http://idebescola.inep.gov.br/ideb/escola/dadosEscola/33090351

To encourage participation, the EJF was widely disseminated in the three schools, with presentations, including talks with a local entrepreneur. Afterward, students that voluntarily applied for the program were asked to write an essay identifying their expectations. The content of these essays was not used for selection purposes. A draw was held among the candidates who completed the process, and 20 compositions were drawn at each school, making a total of 60 students participating in the EJF.

The essays revealed the students who were interested in participating in the EJF were seeking new experiences, the chance to take a course at a prestigious institution like the UFF, and to gain additional training for their curriculum. Several students noted that the lecture with the entrepreneur demonstrated that it is possible to achieve one's goals and make dreams come true with hard work and dedication. The profile of the students who completed the EJF is presented in Table 4.

Table 4. Profiles of the students that completed the EJF

	Sex		Total	
	Female	Male		
School 1	09	05	14	
School 2	10	08	18	
School 3	08	08	16	
Total	27	21	48	

Source: Prepared by the authors.

Of the 60 students who began the EJF, 48 completed the program, representing an 80% success rate. Of those, 56% were female and 44% were male. Additionally, an age-grade distortion was identified among 25% of those students, with 12 being enrolled in high school despite being aged between 18 and 20. This fact did not undermine the research results. The students' reasons for dropping out included early pregnancy and the need to work to contribute to the family income.

This study used a case study approach to gain a deeper understanding of the impact of the EJF, considering the subjects directly and indirectly involved, namely the students, parents/guardians, directors, coordinators, teachers from the participating schools, university staff who helped with the program, and professionals from the partner NGO. The aim was to gather a broad range of information about the program, address any questions or concerns and instruct further actions (Chizzotti, 2006). The case study approach is commonly used in social and economic research and involves using a range of techniques to collect data on the subject under investigation (Yin, 2003). In this case, semi-structured interviews were used, both individually and in focus groups, to gather data. While the questions were organized around the main themes of the study, the participants were encouraged to speak freely about the topic being analyzed (Gerhardt & Silveira, 2009). The data collected through these interviews provided valuable insights into the impact of the EJF program.

During the first stage of the research, focus groups were held. The perceptions of the participants (distributed as shown in Table 5) were sought regarding the contributions of the EJF to behavioral issues, school performance and entrepreneurial skills of students in their daily actions.

Table 5. Participants in the focus groups

	Position	Professional background	Age
School 1	Educational counselor	Pedagogy, specialized in education	66
	Pedagogical coordinator	Language and literature	43
School 2	Principal	Specialized in development and learning	60
	Pedagogical training supervisor	Physical education	55
School 3	Principal	Literature and an MBA in entrepreneurial management	46
	Educational counselor	Pedagogy and MBA in entrepreneurial management	52
NGO	Principal	Social worker	50
	Technical coordinator	Social worker	38
	Psychologist	Psychology	37
	Administrative assistant	Administration	32
UFF/EJF	Teacher	Computer science	56
	Teacher	Administration	49
	Teacher	Administration	35
EJF	Students	48 students distributed in 8 focus groups	-

Source: Prepared by the authors.

The second phase of the research involved conducting individual interviews with the parents/guardians of the students who participated in the EJF. The same interview script was used as in the focus groups, as the objective was to gather their perceptions about whether or not there were behavioral changes, improvements in school performance, and the use of entrepreneurial skills by students in their daily lives after completing the Program.

The data collected during the interviews with the subjects was then transcribed and categorized in preparation to be submitted to content analysis. This method involves analyzing qualitative data by systematically and objectively describing the content of messages. It is mainly used to describe and illustrate a reality that cannot be quantified, in order to identify indicators that permit inferences to be made regarding the analyzed reality. Bardin (1977) outlines a three-stage process for conducting content analysis: pre-analysis; exploration of the material and treatment of the results; and inferences and interpretation, during which the analyst can propose inferences and advance interpretations regarding the objectives, the theoretical grounding or unexpected discoveries.

During the pre-analysis stage, the analyst chooses a corpus, which is a set of documents that will be subjected to analytical procedures. This process involves selecting documents that adhere to four rules: (i) Exhaustiveness, by which all documents related to the topic must be considered; (ii) Representativeness, which allows for analysis to be carried out through sampling; (iii) Homogeneity, which requires that all documents deal with the same topic, were obtained using the same technique, and were performed by the same person; and finally (iv) Relevance, which states that documents must be suitable as a source of information.

Once the corpus has been established, the second stage of content analysis involves an in-depth exploration of the material to enable the categorization of themes. Categorization involves differentiating and classifying the elements of a given set, which can then be regrouped according to previously defined criteria. In this study, we used the semantic criterion to categorize the data. The main thematic categories were defined, and the findings related to each category were grouped and validated, highlighting the excerpts from the interviews. The resulting categories from the content analysis are presented in Table 6.

Table 6. Categories resulting from the analysis

Category	Findings	Focus group
Students' motivations to	New opportunities	School Principals
participate in Empreende	Effectively communicate the program's goals	NGO Directors
Jovem Fluminense (EJF)	Professionalism in executing the EJF – fulfilling what was agreed	Students
Entrepreneurial skills,	Act on initiative (problem solving/take action)	School Principals
abilities and attitudes	Communication	NGO members
developed	Organization	Parents/Guardians
-	Self-confidence; Self-efficacy; Self-awareness; Self-knowledge; Social confidence	Teachers
	(ASTEE)	Students
	Team work	
Change in student	Self-control	School Principals
behavior	Seeing the purpose of actions (studying, working)	NGO Directors
	Improve performance in school	Parents/Guardians
	• •	Teachers

Source: Prepared by the authors.

5. Findings

The perceptions of the subjects who participated in the EJF and in this research are analyzed in the light of the analytical categories shown in Chart 6.

The principals and coordinators from the participating schools described how the EJF impacted their students' academic and everyday lives and their development.

The school managers believe EE helps young people become more aware of their role in society and in determining their own lives, broadening their vision of the future and preparing them better to face challenges. They also recognize that EE broadens the range of opportunities discerned and encourages students to take advantage of them, thus ratifying the knowledge and attitudes that need to be developed in EE initiatives (Moberg et al., 2014). These perceptions align with the EntreComp, which defines entrepreneurship as a transversal competence applicable to personal development, active participation in society, (re)entry in the labor market as a self-employed worker or on behalf of another, and the development of initiatives and enterprises (cultural, social or commercial) (Bacigalupo et al., 2016). Table 7 presents some comments from the school principals, coordinators and teachers that reveal their perceptions regarding the contribution of EE to the students who participated in the EJF.

Table 7. Comments from the school managers regarding the contribution of EE for the students

Category	Findings	Comments from school leaders
Entrepreneurial	Acting on initiative	"At school, I see the students are very excited about the EJF. Now, they want to arrange a meeting
skills, abilities and	(problem	with me so together we can come up with solutions to some of the school's problems".
attitudes developed	solving/take action)	"I think the fact they have started planning something, thinking about solutions to problems, is a
		step forward, because, before, they only came to my office to complain - for example, 'the air
		conditioning is not working'. Now, if they see the air conditioning isn't working they come up
		with a proposal, like 'my father works with air conditioning, can he come and clean it? Because I
		think that just cleaning it will make it work again."
	Self-confidence/	"Today, students who were shy are standing out in school project presentations."
	Self-efficacy	
	Self-knowledge	"When they started to take care of their own classroom, donating paint for the walls that they
	(Sense of	realized they had got dirty. They began to recognize they were responsible for the scratched and
	responsibility)	broken chairs and walls. The rooms became cleaner and the furniture better cared for."
	Self-awareness	"The mother of a student said her daughter is now learning to organize herself, that before she was very disorganized."
	Social confidence	"They are more interested. They want to talk to the teachers, coordinators, school management."
	(ASTEE)	They're more engaged, they seek educational guidance. Some speak on behalf of the class.
	(MOTEL)	They're taking a more of a lead on things. Positive leadership."
	Communication	"I'm seeing students who are more centered, more self-assured. Some have even become leaders
	Communication	in some processes."
	Organization	"That with the EJF, they are expanding their vision of the future, they are progressing in their
	Organization	studies. They are more dedicated, because they weren't dedicated before. At least, here at school.
		We notice they are becoming more mature in their attitudes too."
Change in student	Self-control	"We have a student who caused a lot of problems and tested everyone's patience. But today, she
behavior	Sen control	has a different attitude."
Delia (101		"I think that the girls and boys who are participating in the EJF are more interested and calmer."
		"We had a very unruly student, but when I was talking to her the other day, she said: 'ah teacher,
		now I'm seeing life with different eyes, before I wanted to fight, attack, now I can hear better'.
		Another EJF student was undisciplined, messy and caused many problems, including illegal
		situations that were caught on school cameras. His behavior has changed quite a bit. Now he's
		super calm."
		"We have a student who constantly received warnings because of indiscipline, lack of respect for
		the teachers, and was apathetic in the classroom. Interesting how that turned out. Today, she
		makes suggestions, she wants to do things for the school, she just comes and does it."
	Seeing the purpose	"The students here live in a violent area. We have a student, for example, who seemed to have
	of actions (studying,	every reason to give up, she was a hostage to violence and didn't see much point in school. The
	working)	
	working)	EJF helped to improve her view of the school, to have a sense of purpose. She decided to stay on
		at school and get on with her life. She even started making some sweets and selling them on social media."
		"I think that the mainly EJF helps the students mature. They begin to perceive a purpose studying,
		being at school. At this age, they want immediate results - they want to study today to earn money
Source: Prepared by		tomorrow. So, they begin to realize that life is a construction."

Source: Prepared by the authors.

In summary, the school managers perceived the EJF contributed to the range of competencies including acting on initiative, communication, organization, self-confidence, self-knowledge, and teamwork. Students attending the EJF were observed to take initiative in problem-solving, show improved behavior and focus in the classroom, and develop greater self-control and better behavior towards others. This improvement was particularly evident in students who were previously considered impulsive, indicating a positive impact of the EJF on social confidence.

The changes in the behavior of young people who participated in the EJF are linked to the development of non-cognitive skills. However, there is no consensus on the contribution of EE to school performance. According to some teachers, the students' average grades remained unchanged, while others observed that the organizational skills acquired during the EJF positively impacted their performance in other subjects, which may contribute to better academic results.

All the interviewees agreed that female students were more impacted by the program/EE, possibly due to their interest in becoming independent earlier. The reports suggest that EE provides insights into how entrepreneurs think and act, leading to an awakening of autonomous behavior, initiative, leadership, and protagonism. The interviewees agree that one of the main contributions of EE is to stimulate a process of behavioral change within the individual, so that a form of investment in personal development occurs starting from within the individual.

Thus, the EJF seems to have contributed to the development of competences at the Base level of the EntreComp and the Brazilian National Common Curricular Base (NCCB) entrepreneurship itinerary, such as communication, argumentation, empathy and cooperation (MEC, 2017). As highlighted by Fayolle, Gailly and Lassas-Clerc (2006), broadly speaking, EE can be defined as any pedagogical process of developing entrepreneurial skills and attitudes, and involves the development of certain personal qualities, not just the creation of new business. Similarly, Chen et al. (2013), also points out that EE cultivates entrepreneurial awareness, thinking and skills through educational methods.

The responses obtained from the students participating in the EJF suggest they have acquired a comprehensive understanding of entrepreneurship beyond just opening a business. According to most responses, entrepreneurship includes a range of skills and attitudes that can be applied to deal with opportunities. Students believe that entrepreneurial behavior involves the ability to handle problems, which requires analyzing the problem, considering the context, planning, seeking solutions, and taking action to implement the planned solutions.

Table 8. Comments from the students indicating the contribution of EE

Category	Findings	Comments from the students
Entrepreneurial	Acting on initiative (problem	"With the EJF, our attitude changed, we started to take the initiative. Going after the things
skills, abilities and	solving/take action)	we want, rather than waiting. I started seeking my teachers and school management not
attitudes		only to complain, but to help."
developed		"We started to think more, before doing things."
		"We learn to search for information, to know more about what we want. And it changes our personal life too"
		"I am being more creative about solving my problems, I am putting more effort into my schoolwork."
		"I think the EJF is helping me, because I'm feeling less shy when it comes to presentations."
	Self-confidence/Self-efficacy	"We learned that we can also have more attitude, we can get closer to the teachers, ask what is going on. Before, we were embarrassed about speaking."
		"I learned to separate the days, the moments of my life to do everything right. I learned to organize myself. That's the word."
		"The EJF helped me with a lot of things. But, mainly, with organization, organizing my time better."
	Self-knowledge	"Nowadays, when teachers give us a group activity, there is more motivation, because we
	Self-awareness Communication	have the chance to discuss things, to talk - and in the end an idea appears, and it's a good thing. Before, I didn't like working in teams."
	Organization	"I never liked working in a group. But now, because of the EJF, I am making a lot more
	Teamwork	effort to learn to work in groups, in harmony with the people. You can even hear your colleagues."
Change in student	Self-control	"The EJF helped me deal better with people."
behavior	Seeing the purpose of actions (studying, working)	"With EJF, you take the things you learn in class and use them in your everyday life, home, and school."
	, , , , , , , , , , , , , , , , , , ,	"You also learn to deal with personal and professional life, and also about dealing with
		people. It's not just a school thing. It's all together. The classes are useful for life too."
		"I think it is helping us to picture a future, to decide what kind of profession we want, the market, these things."
	Improved school	"I always struggled with math. But I got better. I already studied. But with the EJF, I
	performance	learned to try harder, to take responsibility for myself. Then I followed those rules. And I improved my grades."

Source: Prepared by the authors.

The students' feedback reflects the importance of the connection with the teachers and professionals involved in the EJF, which highlights the 'Connectivity with Education' dimension, one of the five analytical areas in the ASTEE tool used to assess EE. This area emphasizes the significance of positive relationships with peers and teachers for students to perceive their education as purposeful and useful. The connectivity with education dimension impacts various variables such as student health, dropout rates, academic performance, and socioeconomic status. It should be noted that the teaching approach adopted in the EJF aims to develop the cognitive skills and knowledge required for an entrepreneurial personality (Moberg, 2014).

The students also reported they had developed various skills, competencies, and attitudes during the program. They mentioned feeling more creative, organized, and initiative-driven, with improved communication skills and greater willingness to work in teams. Like the school managers, they also identified a greater engagement in school activities, such as commenting during classes and proposing solutions for everyday situations. These findings align with the 'Entrepreneurial Mindset dimension in the ASTEE. Having an Entrepreneurial Mindset involves being focused on action and responsibility and understanding their role as active agents and creators of their future (Moberg et al., 2014). This mindset was also identified in the "Seeing the purpose of actions" category which highlights the participants' concern for the future and their career goals.

The reports of improvement in certain skills confirm the EJF's alignment with the EntreComp Progression Model-Base Level. At this level, students are supervised directly and discover their strengths, desires, interests, and qualities. They also learn to recognize different types of problems and needs and focus on solving them creatively by developing individual skills and attitudes. As they gain more autonomy, students explore different approaches to problems, focusing on diversity and developing social skills and attitudes.

The entrepreneurship training itinerary of the Brazilian National Common Curricular Base (NCCB) highlights the importance of students mobilizing knowledge from different areas to undertake personal or productive projects aligned with their life goals, with a focus on developing autonomy, focus, and determination to plan and achieve personal goals or create ventures (MEC, 2017). The students also perceived connectivity with their future careers, as seen in the "Seeing the purpose of actions" category, which shows that students found purpose in their schoolwork and recognized the practical value of their knowledge and skills in their present and future lives (Moberg et al., 2014). The competences and skills developed through entrepreneurial education suggest the students improve their organizational skills, engagement and willingness to study, as they seem to adopt a more critical form of analysis.

The students had different opinions about the impact of the program on their academic performance. Some attributed their improved grades to the organizational skills they developed by taking part in the EJF. According to Johansen and Schanke (2014), entrepreneurship programs that focus more on interpersonal skills may be more effective at improving academic performance. Whereas, programs that focus primarily on business development skills may not have the same impact.

The third stage of the focus group interviews involved the members of the NGO, a partner of the Universidade Federal Fluminense (UFF). The NGO was responsible for transporting students to the classes held every two weeks at UFF facilities. The purpose of this stage was to gather their perceptions regarding the contribution of EE. The results are presented in Table 9.

Table 9. Comments from the NGO members indicating the contribution of EE

Category	Findings	Comments from the NGO members
Entrepreneurial	Acting on	"I notice there was an improvement in initiative among the EJF students. We have reports from
skills, abilities and	initiative	the school itself, that they started to take the initiative more within the school."
attitudes developed	(problem solving/take	"Now, when we give them something, even though they may not be able to see it through to the end, they taking the steps. In the past, they didn't even make the effort."
	action)	"They're making progress in a lot of skills. They have theoretical knowledge and are learning to use it concretely. That is, they know how to make things happen. Now, they're at the attitude level, they make it happen."
	Self-knowledge Self-awareness	"Today they have a different attitude, they put themselves to work. Before, they avoided it taking part in any suggested activity."
	Communication	"They're more disciplined about studying, too."
	Organization Teamwork	"How they've developed! They're talking, communicating, expressing their ideas and opinions in a balanced way and waiting their turn, listening to others, too."
		"Clearly, they're learning to work in teams. They're building together, in the classroom and in the school as a whole."
Change in student behavior	Self-control	"We noticed that even during the trip from school to the UFF, every 15 days, the behavior of the youngsters changed. They are calmer, they're not aggressive when they talk to each other. They talk about their lives at school, the possibilities for the future. They listen to each other."
	Self-control Seeing the purpose of	"They don't all want to be entrepreneurs, but they are already thinking about a different future, things they didn't think about before. Even about professions that didn't even cross the mind before."
	actions (studying, working)	"In the coaching, offered by the NGO's psychologist, they discover themselves, find new interests, discuss what they like and what they can do. They are directing their lives with the help of the EJF, with what they learn in class, with the teachers, with colleagues, and by researching what interests them."
		"One very interesting thing is that the EJF is bringing the school closer to reality. They've started seeing school as valuable, to see the school as a nice place. Their big questions are: For what and how am I going to use this in real life? Why is this subject important? In a financial mathematics class, for example, they discover why it is important to have financial education, to know how to search for and use available resources. They see how to use the knowledge in practical terms, in real life. So, it seems that they are more willing to learn."

Source: Prepared by the authors.

The interviewees observed that the students who participated in the EJF became more proactive and engaged in school activities, organizing themselves and doing things together, indicating the development of creativity and teamwork skills. An activity involving collecting plastic bottles was mentioned during the interview, where students from the three schools participating in the EJF coordinated and publicized the campaign within their

schools. They even created competitions between classes to see who could collect the most bottles, showing that entrepreneurial skills related to creativity, initiative, and organization were developed. This example also corresponds to the 'Explore' competency in the base level of the EntreComp Progression Model, as the students showed autonomy and social skills to work with their peers.

In the final stage of interviews, individual interviews were conducted with the three UFF staff members responsible for creating and developing the EJF, as well as with three parents or guardians of EJF students. The teachers provided insights into the students' behavior during the face-to-face meetings held every two weeks and their participation in the classroom activities and on the online platform. The findings from these interviews are presented in Table 10, which shows the perceptions of UFF teachers regarding what the students that completed the EJF gained from the experience.

Table 10. Comments from the UFF teachers indicating the contribution of EE

Category	Findings	Comments from the UFF teachers
Entrepreneurial	Acting on initiative	"We have observed that, now, the students are more concerned with carrying out
skills, abilities and	(problem solving/take	activities, participating in the classroom activities. Everyone strives to do what is asked
attitudes developed	action)	of them. At the beginning of the EJF, this was not a concern."
	Self-confidence	"As the purpose of the EJF is clear to the students, they are satisfied and seek to become
	Self-efficacy	more involved in learning as much as they can, as they believe that the EJF involves real
	Self-knowledge	life. It's not just content for content's sake. It is content that can be used in their daily
	Self-awareness	lives."
	Communication	"Students report they are able to apply and teach other people the techniques, tools and
	Organization	management knowledge that help them with basic planning, organization and
	Teamwork	management."
		"I believe the EJF is stimulating for the students because they understand how to use the
		knowledge, how to apply it in their daily lives and also how to influence their own
		family."
		"One of the main difficulties we felt at the beginning was getting the students to work in
		teams. But they are learning and, now, part of their development involves dealing with
		situations that demand team discussions, team decision-making."
		"They are learning to manage people, to work with deadlines, to search for information,
		to research. Some already look for solutions for the projects they want to develop on
		their own, without asking the teacher or monitor. This is called proactivity. Every day
		they are becoming more proactive."
Change in student	Self-control	"The fact that the classes take place on the premises of UFF leads students to consider
behavior	Seeing the purpose of	the prospect of a career, of attending a university in the future. Which is not the case for
	actions (studying,	most students from schools located in socioeconomically disadvantaged contexts."
	working)	"I see many of them are already making plans for the next few years, what they can
		study that interests them in this university setting. Some say they want to study at the
		UFF, that they want to go to a university. Perhaps this is one of the greatest
		contributions of the EJF: producing future prospects."

Source: Prepared by the authors.

The interviewees comments show that the effectiveness and understanding of the content were improved by revising the methods used, especially when deficiencies in student learning were identified. They recognized that without adequate reflection and change, the intended effectiveness of the content would not be achieved. This attitude of reflecting on methods aligns with Fayolle's (2013) view that we need to reflect on our practices critically and take into account the participants' profile and educators' knowledge regarding the objectives, content, methods, and expected outcomes.

According to UFF teachers, the students' learning and development were based on the proposition and construction of activities, with the more practical classes that involved the students' own reality being more effective because the students were more motivated and consequently more engaged. The teachers also highlighted the importance of the way the online platform was used, with tasks to be completed and delivered before the next face-to-face meeting. This strategy motivated the students to access and read the material beforehand, which facilitated greater dynamism during face-to-face classes. As a result, students expanded their organization and planning skills, and acquired greater responsibility.

The UFF teachers believed that the EJF's primary benefit was providing students with tools to develop

management, organization, and planning skills. These tools are not only valuable for starting a business, but also for dealing with day-to-day issues. This perspective aligns with the objectives of the entrepreneurship itinerary of the NCCB, which aims to enhance the ability of students to apply knowledge from various areas to their personal or productive projects, fostering autonomy, focus, and determination (MEC, 2017).

According to the UFF teachers, teaching the EJF on the university premises was important as it exposed students to the university setting, which widened their prospects for the future and motivated them to consider pursuing different careers, not just entrepreneurship. This was particularly significant for low-income students, most of whom come from families with low levels of education and have limited prospects of attending higher education. Therefore, broadening their educational horizons through the EJF was a notable positive outcome.

Finally, three parents/guardians of EJF students were interviewed individually. They perceived a significant change in their children's behavior after attending the program, as previously their children had seemed to lack focus and motivation. The parents noticed that their children became more organized at home and with their school work, more engaged with personal issues, and had a clearer sense of direction regarding their future career aspirations, including attending college. Below, we highlight a statement from each of the parents/guardians:

"I found him much more focused, more organized. Before, he didn't even have time to sleep. Today, he wants to complete his school activities. He shows an interest in learning more. He is more studious and uses the internet better because of the research done for the EJF assignments."

"The experience was very important because it gave them the opportunity to develop their social skills, lose their shyness, learn to express themselves better. Knowing how to express yourself verbally is essential to place yourself in the job market."

"I noticed my daughter became more responsible, more mature. Participating in this EJF program offered by UFF was very important to help her become more interested in her studies, to start thinking about what she is going to do in the future, in her professional life. She realized that if she studies, is dedicated and organizes herself, she will be able to determine her own life."

The feedback from the parents/guardians affirms that entrepreneurship education is focused on fostering skills, abilities, attitudes, and personal qualities (Fayolle, Gailly, & Lassas-Clerc, 2006). Such skills include planning, organization, extroversion, which is related to effective communication, engagement in school and daily activities, self-awareness, and social confidence. Notably, the non-cognitive skills were the most significant for the parents/guardians, as well as for the other interviewees.

6. Concluding Remarks

During the course of this research aimed at identifying the benefits of entrepreneurship education in disadvantaged socioeconomic contexts, it was discovered that the blended learning approach adopted in the EJF, combining both in-person and online learning, did not result in increased student engagement. Instead, the students expressed a clear preference for face-to-face meetings and emphasized the significance of interacting directly with the EJF teachers and monitors, as this helped them better comprehend the course material.

The effectiveness of online delivery in the EJF needs to be considered in light of certain factors. Firstly, the socioeconomic context of the students, who reside in impoverished areas and may not have access adequate to the internet, could have negatively impacted the effectiveness of online delivery. Additionally, some students may have lacked the necessary discipline to read the materials made available on the platform. It is also possible that the students were not yet mature enough for distance learning, which demands greater autonomy and responsibility, especially at the beginning of the EJF.

In this research, a significant degree of conceptual divergence was found regarding entrepreneurship and entrepreneurship education, even though the subject is included in the basic education curriculum in Brazil. However, given the various approaches to the subject, the existence of different concepts and interpretations is understandable. Indeed, there is no consensus among scholars on the subject and the concept of entrepreneurship and the perspective of education for entrepreneurship have evolved over time and are the subject of ongoing debates

The most common approach to entrepreneurship is to view it as a process of creating value. Entrepreneurship education is seen as contributing to this creation of value, whether it is financial, cultural, or social, for individuals, groups, communities, or society as a whole. EE is widely seen as a mean to promote job creation, economic growth, and increased societal resilience, as well as encourage individual growth, school involvement, and equality (Lackéus, 2015; Fayolle, 2013; Fayolle, Gailly, & Lassas-Clerc, 2006).

The students who participated in the EJF tend to associate entrepreneurship with creating and managing a business, but they also recognize that entrepreneurship involves generating social value and personal growth (Moberg et al., 2014; Lackéus, 2015). By contrast, the school managers' perspective on entrepreneurship tends to see entrepreneurship and entrepreneurship education as processes of personal development, change, horizon expansion, and value generation for oneself and the surrounding environment. These perceptions align closely with the concept of value generation proposed by Lackéus (2015) and the promotion of an entrepreneurial mindset that provides students with the skills, knowledge, and behavior patterns to be entrepreneurs in their own lives, as asserted by Moberg et al. (2014).

It should be noted that the *Empreende Jovem Fluminense* (EJF) program followed the Brazilian National Common Curricular Base (NCCB) when selecting the entrepreneurial skills to be developed. The development of entrepreneurial skills requires combining non-cognitive factors, such as perseverance, self-efficacy, social skills, with cognitive factors, which are skills based on intellectual capacity. This itinerary combines non-cognitive factors such as perseverance, self-efficacy, and social skills with cognitive factors based on intellectual capacity. According to Lackéus (2015), cognitive skills are easy to teach and assess, but non-cognitive skills require more active teaching methods, such as "learning by doing" and are more challenging to assess.

The *Empreende Jovem Fluminense* (EJF) program was designed to allow the student to engage in practical entrepreneurial experiences that link theory and practice. However, the results were mixed as students struggled to keep up with some activities and were not mature enough to undertake certain entrepreneurial activities. Nonetheless, the results were better when the content reflected the students' daily lives and allowed them to work on projects around the school, resulting in more visible and concrete learning outcomes. This approach of combining theory and meaningful context-based practice in EE is aligned with Kolb's (1984) theory of experiential learning, where the subject is seen as being part of a natural and cultural environment, capable of learning through experience and being motivated by their own purpose—thus, learning takes place through what makes sense to the learner.

The research findings indicate that the *Empreende Jovem Fluminense* (EJF) Program contributes to the development of entrepreneurial skills in a broad sense, where individuals can create value for society through their initiatives, which go beyond the creation of a company. The research participants perceived a significant contribution from the EJF in this regard, as they believed that the program played a crucial role in fostering problem-solving skills and proposing solutions for everyday situations both inside and outside the school. As a result, the students showed greater initiative, creativity, communication, organization, self-confidence, self-knowledge, and teamwork skills. Therefore, it can be concluded that the EJF program was successful in developing these skills among the young people who attended the program.

Nonetheless, the contribution of entrepreneurship education, specifically the EJF program, to improving students' academic performance is still a matter of debate. Students who participated in the program reported that they changed their approach to organizing their studies, leading to greater engagement in school activities. For the teachers at the *Universidade Federal Fluminense* (UFF), the EJF's greatest contribution lies in providing access to techniques and tools that enable students to develop management, organization, and planning skills that are useful in everyday life. The classes being held on the UFF's campus also played a significant role in broadening the students' perception of their future possibilities. The contact with the university environment allowed them to see that continuing their studies at the university level is achievable, which is particularly important for students from socioeconomically disadvantaged backgrounds who rarely have such aspirations.

In conclusion, this study aimed to identify the contributions of entrepreneurship education in socioeconomically disadvantaged contexts, specifically through the *Empreende Jovem Fluminense* (EJF) program. The program's greatest contribution was found to be in the development of non-cognitive skills, which have a significant impact on academic performance and future outcomes in the job market. As Lackéus (2015) suggests, non-cognitive skills may even have a greater impact on academic performance and outcomes in the job market than cognitive ones. Therefore, it seems likely the EJF program will be of considerable importance in the professional development of the participating students.

References

Allen, W. C. (2006). Overview and Evolution of the ADDIE Training System. *Advances in Developing Human Resources*, 8(4), 430–441. https://doi.org/10.1177/1523422306292942

Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union; EUR 27939 EN.

- Bardin, L. (1977). Análise de Conteúdo. Lisboa: Edições 70.
- Bennett, R. (2011). Formative assessment: A Critical Review. *Assessment in Education: Principles, Policy & Practice*, 18(1), 5–25. https://doi.org/10.1080/0969594X.2010.513678
- Berglund, K., Hytti, U., & Verduijn, K. (2020). Unsettling Entrepreneurship Education. *Entrepreneurship Education and Pedagogy*, 3(3), 208–213. https://doi.org/10.1177/2515127420921480
- Berglund, K., & Johansson, A. W. (2007). Entrepreneurship, Discourses and Conscientization in Processes of Regional Development. *Entrepreneurship & Regional Development*, 19(6), 499–525. https://doi.org/10.1080/08985620701671833
- Boud, D., & Molloy, E. (2013). Rethinking Models of Feedback for Learning: The Challenge of Design.

 *Assessment and Evaluation in Higher Education, 38, 698–712. https://doi.org/10.1080/02602938.2012.691462
- Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. New York, NY: Springer. https://doi.org/10.1007/978-0-387-09506-6
- Brown, A., & Green, T. D. (2016). *The essentials of Instructional Design: Connecting Fundamental Principles with Process and Practice*. New York, NY: Routledge. https://doi.org/10.4324/9781315757438
- Chen, S., Hsiao, H., Chang, J., Chou, C., Chen, C., & Shen, C. (2013). Can the Entrepreneurship Course Improve the Entrepreneurial Intentions of Students? *International Entrepreneurship and Management Journal*, 11. https://doi.org/10.1007/s11365-013-0293-0
- Chizzotti, A. (2006). Pesquisa Qualitativa em Ciências Humanas e Sociais. Petrópolis, RJ: Vozes.
- Doan, K. H. (2022). The Differences in the Impact of Entrepreneurship Education on Entrepreneurial Knowledge: A Cross-Country Analysis. *Management & Marketing*, 17(1), 73–97. https://doi.org/10.2478/mmcks-2022-0005
- Elwood, J. (2006). Formative Assessment: Possibilities, Boundaries and Limitations. *Assessment in Education: Principles, Policy & Practice*, *13*(2), 215–232. https://doi.org/10.1080/09695940600708653
- Fayolle, A. (2013). Personal Views on the Future of Entrepreneurship Education. *Entrepreneurship and Regional Development: An International Journal*, 692–701. https://doi.org/10.1080/08985626.2013.821318
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the Impact of Entrepreneurship Education Programmes: A New Methodology. *Journal of Eur. Industrial Training*, 701–720. https://doi.org/10.1108/03090590610715022
- Fayolle, A., & Klandt, H. (2006). Issues and Newness in the Field of Entrepreneurship Education: New Lenses for New Practical and Academic Questions. In A. Fayolle (Ed.), *International Entrepreneurship Education: Issues and Newness* (chapter 1, pp. 1–17). Edward Elgar Publishing.
- Galindo-Martín, M. Á., Castaño-Martínez, M. S., & Méndez-Picazo, M. T. (2021). The Role of Entrepreneurship in Different Economic Phases. *Journal of Business Research*, 122, 171–179. https://doi.org/10.1016/j.jbusres.2020.08.050
- Garrido-Yserte, R., Crecente-Romero, F., & GalloRivera, M. T. (2020). The Relationship Between Capacities and Entrepreneurial Intention in Secondary School Students. *Economic Research-Ekonomska Istrazivanja*, 33(1), 2322–2341. https://doi.org/10.1080/1331677X.2019.1697328
- Gedeon, S. A. (2022). Empowering Students for Future Work and Productive Citizenry Through Entrepreneurship Education. *Public Affairs Quarterly*, 36(3), 197–210. https://doi.org/10.5406/21520542.36.3.03
- Gerhardt, T. E., & Silveira, D. T. (2009). Métodos de Pesquisa. Porto Alegre: UFRGS.
- Grivokostopoulou, F., Kovas, K., & Perikos, I. (2019). Examining the Impact of a Gamified Entrepreneurship Education Framework in Higher Education. *Sustainability*, 11(20), 1–17. https://doi.org/10.3390/su11205623
- Heuer, A., & Kolvereid, L. (2014). Education in Entrepreneurship and the Theory of Planned Behaviour. *European Journal of Training and Development*, 38(6), 506–523. https://doi.org/10.1108/EJTD-02-2013-0019
- Johansen, V., & Schanke, T. (2014). Entrepreneurship Projects and Pupil's Academic Performance: A Study of Norwegian Secondary Schools. *European Educ. Research Journal*, 13.

- https://doi.org/10.2304/eerj.2014.13.2.155
- Kolb, D. (1984). Experiential Learning. Englewood Cliffs, New Jersey: Prentice Hall.
- Lackéus, M. (2015). *Entrepreneurship in Education: What, Why, When, How.* Background Paper, OECD Publishing, Paris.
- Lavieri, C. (2010). Educação...empreendedora? In R. M. A. Lopes (Ed.), *Educação empreendedora: conceitos, modelos e práticas* (pp. 1–16). São Paulo: Elsevier.
- Lee, H., Chung, H. Q., Zhang, Y., Abedi, J., & Warschauer, M. (2020). The Effectiveness and Features of Formative Assessment in US K–12 Education: A Systematic Review. *Applied Measurement in Education*, 33(2), 124–140. https://doi.org/10.1080/08957347.2020.1732383
- Loi, M. et al. (2022). Entrepreneurship Education at the Crossroads: Challenging Taken-for-Granted Assumptions and Opening New Perspectives. *Jour. Manag. Inquiry*, *31*(2), 123–134. https://doi.org/10.1177/10564926211042222
- McAdams, D. P., & Pals, J. L. (2006). A New Big Five: Fundamental Principles for an Integrative Science of Personality. *American Psychologist*, 61(3), 204–217. https://doi.org/10.1037/0003-066X.61.3.204
- Ministério da Educação (MEC). (2017). Base Nacional Comum Curricular. Brasília, Brasil.
- Moberg, K. (2014). Assessing the Impact of Entrepreneurship Education from ABC to PhD. Denmark.
- Moberg, K., Vestergaard, L., Fayolle, A., Redford, D., Cooney, T., Singer, S., & Filip, D. (2014). *How to Assess and Evaluate the Influence of Entrepreneurship Education*. Dinamarca.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise Education: Influencing Students' Perceptions of Entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144. https://doi.org/10.1046/j.1540-6520.2003.00035.x
- Pimentel, A. (2007). A Teoria da Aprendizagem Experiencial como alicerce de estudos sobre desenvolvimento profissional. *Estudos de Psicologia*, 159–168. https://doi.org/10.1590/S1413-294X2007000200008
- Porfírio, J. A., Carrilho, T., Jardim, J., & Wittberg, V. (2022). Fostering Entrepreneurship Intentions: The Role of Entrepreneurship Education. *Journal of Small Business Strategy*, *32*(1), 1–10. https://doi.org/10.53703/001c.32489
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25(1), 217–226. https://doi.org/10.5465/amr.2000.2791611
- Schott, T., Kew, P., & Cheraghi, M. (2015). Future Potential A GEM Perspective on Youth Entrepreneurship 2015 (pp. 1–42).
- Tapia, A., & Ferreira, J. S. (2011). *Competências Empreendedoras* (IEFP Ed.). Lisboa: Instituto do Emprego e Formação Profissional, I.P.
- The World Bank. (2022). *Brazil Poverty and Equity Assessment: Looking Ahead of Two Crises*. Washington D.C.: World Bank. https://doi.org/10.1596/37657
- Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research. *Advances in Entrepreneurship, Firm Emergence and Growth*, *1*, 119–138.
- Winkel, D., Vanevenhoven, J., Drago, W. A., & Clements, C. (2013). The Structure and Scope of Entrepreneurship Programs in Higher Education Around the World. *Journal of Entrepreneurship Education*, 15–29.
- Yin, R. (2001). Estudo de Caso Planejamento e Métodos. Porto Alegre: Bookman.
- Zhang, Y., Duysters, G., & Cloodt, M. (2013). The Role of Entrepreneurship Education as a Predictor of University Students' Entrepreneurial Intention. *International Entrepreneurship and Management Journal*, 10, 623–641. https://doi.org/10.1007/s11365-012-0246-z

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