

International Journal of Human Sciences Research

ENTREPRENEURIAL EDUCATION IN SECONDARY SCHOOLS: THE IMPACT OF AWARDS

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Acceptance date: 25/09/2024

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Abstract: The article explores the impact of entrepreneurial education in secondary school, highlighting how innovation and entrepreneurship awards help develop students' socio-emotional and technical skills. The BNCC values entrepreneurship as an essential skill for training citizens capable of facing the challenges of the job market. The study also analyzes the relationship between the BNCC and ENTRECOMP: Competence Reference Framework for Entrepreneurship, showing how these guidelines complement each other in the development of skills such as creativity, leadership and problem-solving. From my teaching practice in the Entrepreneurship and Innovation curriculum component - Inovanaça - at Colégio Nacional, I was able to illustrate how entrepreneurial activities prepare students to be agents of change. Awards such as those from Google, Ideias de Futuro and Sebrae are presented as catalysts that encourage creativity, teamwork and resilience. Student testimonies reinforce that the competitions allow them to put into practice the knowledge acquired in the classroom, mentioning gains in self-knowledge, resilience and self-esteem. Entrepreneurial education is perceived as a powerful tool for forming critical and innovative citizens. The conclusion suggests integrating prizes and competitions into the school curriculum, enhancing students' all-round development.

INTRODUCTION

Entrepreneurial education represents a fundamental pillar in the development of essential skills in the 21st century. This branch of education seeks to cultivate an entrepreneurial spirit in students, preparing them to face the challenges of the job market and also to be agents of change in society (Lopes & Teixeira, 2010). From this perspective, the BNCC (Brasil, 2017a, p. 466) envisages training students to develop “an entrepreneurial, ethical and responsible attitude to move into the world of work and society in general”. It is undeniable to associate this proposal with the importance of socio-emotional skills¹, which are crucial not only for entrepreneurs, but also for students' personal and professional development (BISQUERRA, 2003). In proposing “A New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness”, the European Commission reinforces “digital competence, entrepreneurial competence, critical thinking, problem-solving and learning to learn” (Dias-Trindade, Moreira and Jardim, 2020, p. 06) among the skills needed at the beginning of this century. By fostering these skills, we will not only be cultivating innovative future professionals, but also citizens who are aware and prepared to contribute positively to society (Lopes, 2010). Instrumentalized by the aforementioned authors, we believe it is essential that educational institutions, from the most basic levels to higher education, effectively integrate entrepreneurial education into their curricula. This will not only prepare students for a dynamic and ever-changing job market, but will also enable them to be creators of their own opportunities.

1. A set of skills that enable a person to deal calmly with their emotions and, consequently, with others in adverse situations. Skills such as empathy, collaboration, problem-solving, among others, are essential in the process of human existence and in the development and performance of the entrepreneur in the competitive market and in social life (Bisquerra, 2003, 2006).

This understanding echoes the study by Káthia Mehirie and Eliana R. Pereira (2006) when they reflect on the creation and crystallization of the dialectic of teaching and learning, in which affectivity is the guiding thread of pedagogical practice, a coadjutant in the development of socio-emotional skills. The meanings that the teachers give to their pedagogical practices are permeated by reflective practice, in a “dialectical movement of construction and deconstruction of becoming a teacher” (p. 01). In this transit, the activity of creating senses and meanings is fundamental for students to reorganize their daily lives, transforming them. In this way, both, to paraphrase the authors, can change everyday life into a curriculum, broadening the possibilities for them, each in their own way, to take ownership of their lives and become subjects of their own history. From this perspective, we understand that entrepreneurial education, by taking socio-emotional skills into account, can significantly transform the educational landscape, in its intertwining with the participants in school life, enabling teaching that is geared towards students’ life projects. From this panorama, we cut out the issue of participation in awards related to entrepreneurship and innovation, in the context of Entrepreneurial Education in Secondary Schools, and its impacts on the stimulation of socio-emotional competences for analysis in this article.

Despite the criticism of awards in the world of entrepreneurial work as a neoliberal subjectivation machine, which creates rites and institutions to legitimize its own symbolic effectiveness (Castro & Fabris, 2020), the participation of students in awards based on the development of student projects in high school² has encouraged the improvement of socio-emotional skills. The competitions stimulate creativity, cooperation, the ability

to solve problems together and implement innovative solutions, as mentioned by the students. At the same time, they allow us teachers to assess the impact of the competitions on the personal development and professional development of the participants, in terms of empathy, collaboration and self-knowledge, which are fundamental values for life in society. However, we recognize that competitions and prizes themselves are not the great evil of a ‘neoliberal mentality creating a “neosubject” (Dardot and Laval, 2016) modulated for production and consumption, as Castro & Fabris (2020) point out unilaterally. Nor, much less, is it the solution to entrepreneurship. By transposing Mehirie & Pereira’s (2006) understanding to entrepreneurial education, we recognize that the profile outlined by Dardot and Laval (2016) may even run into “crystallized” pedagogical practices - repetition of teaching - professional apathy, non-reflective and critical practices. However, we can identify teaching practices, and consequently student practices, based on affective-reflective sharing that use strategies to achieve another end, within certain systems. This is the path we are following. Our aim is to highlight how participation in awards acts as a catalyst for the formation of future entrepreneurs who are not only innovators, but also agents of social change and influencers in their communities and work environment. Awards complement formal education by offering practical experiences that are essential for holistic learning, and here we will report specific examples and testimonies from students who point out the benefits of these experiences for their personal and professional growth. In addition, the article incorporates my own experiences as a teacher and mentor in entrepreneurship awards, reporting on the benefits and challenges associated with

2. I’m referring to empirical observation in my practice as a teacher of Inovação - Entrepreneurship and Innovation, at Colégio Nacional, in Uberlândia/MG, and student testimonies.

mentoring students in entrepreneurship competitions. We seek to illustrate the impacts observed, highlighting the need for a more robust integration of these activities into the educational system and suggesting proposals for schools and other educational institutions on how to effectively integrate entrepreneurial activities and awards into the school curriculum, maximizing the benefits for students.

ENTREPRENEURIAL EDUCATION: BETWEEN CONTRIBUTIONS AND CRITICISM

Although entrepreneurship has been a subject for centuries, it was only in the 1980s that it became the subject of study in almost all areas of knowledge in most countries. In all its aspects, entrepreneurship now features prominently in the economic policies of both developed and developing countries. The subject is currently of great importance in the face of global economic challenges and many governments have adopted entrepreneurship as a key strategy for economic development (Cooney, 2024). Accumulating knowledge is no longer the main social objective. It is to learn, as entrepreneurs do in reality: by doing, making mistakes and learning (Chagas, 2000). In this sense, Brazil is a country with great entrepreneurial potential, as its people are characterized by dreams, creativity, flexibility and innovation. According to SEBRAE, 52 million Brazilians are already engaged in some form of business, in other words, two out of every five Brazilians, and the percentage of young people aged between 18 and 24 already represents 22% of this total (Sebrae, 2023). We are currently considered to be the country with the 5th largest number of entrepreneurs in the world, according to a report by the Global Entrepreneurship Monitor (GEM) (Bosma et al, 2020/2021).

The same survey also indicates a drop to 48.9% in the number of initial entrepreneurs who started a business in 2020 in search of a source of income. This rate represents the number of necessity entrepreneurs and is related to business creation motivated by a lack of other employment options, while opportunity entrepreneurship refers to business creation motivated by market opportunities and the desire to exploit these opportunities. Within this latter framework, the creative profile organizes, plans and analyzes the market, as well as accepting new ideas from other people and other sources such as customers, in addition to adopting methods for generating new ideas, among others (Hisrich; Peter; Shepherd, 2018).

Despite the different understandings and, consequently, conceptualizations of entrepreneurship, from its etymology to contemporary approaches, the growing importance of this topic in the global educational and economic context is evident. Many authors such as: Myles Mace (1911-2000), Richard Cantillon (approx. 1680-1734), John Stuart Mill (1806-1873), Frank Knight (1885-1972), Israel Meyer Kirzner (1930-), David McClelland (1917-1998), Louis Jacques Filion (1942-) Sara D. Sarasvathy (1959-), among others, have turned their studies to entrepreneurship, creating different strands of thought. The historical and theoretical contention of entrepreneurship connects with its practical application in schools, through entrepreneurial education and the formation of citizens from different strands, as well as their judgment. It is common to criticize entrepreneurial education - in a dogmatic way - as formatting docile and uncritical students for the job market. We return to Meihiric & Pereira (2006) to point out that teachers attribute meanings to their pedagogical practices. They can be 'crystallized', keeping the teacher as the holder of knowledge, or

they can be transformed into an organizer of knowledge, teaching the future entrepreneur how to learn, in an active process of self-learning, of discovery with no right answers (Lavieri, 2010). For these reasons, in addition to traditional, meritocratic approaches, prizes and awards in entrepreneurial education promote experiential learning focused on socio-emotional skills such as collaboration, critical thinking and complex problem solving (Cooney, 2024).

AWARDS AND PRIZES IN ENTREPRENEURIAL EDUCATION

Prizes and awards “motivate both those who win them and those who lose them and are still willing to compete in new and future editions”; they manage to “encourage and set examples of conduct that are educational, and can be enjoyable and even fun within the social community in which they are applied” (Vogt, 2014, editorial). In this vein, we have the statement of the high school student³ :

My participation in and preparation for the entrepreneurship competitions and the awards were extremely important for my **process of self-knowledge and the development of my skills. Creativity, teamwork and responsibility are aspects that have been greatly enhanced.** Today, I am certain that I want to study business administration and I believe that both the competitions and the awards were crucial to this decision. They also **improved me as a person, as I learned to deal with victories and losses, broken expectations and unexpected situations,** in such a way that I feel more prepared and confident to leave the school environment and enter the job market (M.E.C. Interview by e-mail, May 14, 24). (**My emphasis**).

In addition, these educational competitions promote a dynamic learning environment

where students can turn dreams into ideas -protagonists of their choices in the different dimensions of life- and consequently carry out concrete actions with the potential to change their surroundings. The following student responses confirm this:

I remember my first contact with awards very fondly, **when I discovered my passion for astronomy and through the Olympics I realized that something I enjoyed doing could give me a lot back. Over the years, with a lot of effort, I have won and lost many awards, and each time it was a different feeling.** I believe that the awards add a lot to my life, because I feel more motivated academically. I feel that my efforts are being reciprocated, I can show my parents that all the investment they put into me with a lot of effort is paying off and **I can work and explore skills that I didn't even know I had** (B.P.F. E-mail interview, May 14, 2024). (**My emphasis**).

I've always wanted to work in science. Ever since I was very little, I imagined myself creating rockets and mixing things up and being a scientist. **As I got older, I distanced myself from this idea: although I still wanted and dreamed of working in this area, I had the feeling that it was more of an imagined dream than something to be realized.** So I decided to pursue a more down-to-earth career, which in this case is engineering. The interaction with the innovative environment that I had with Professor Leonardo, especially in the 1st and 2nd year of high school, made me realize that a scientific career has very high potential, especially when you look at the applications that are of interest to startups and innovative projects. After learning about the importance of these things, my horizon was opened up to a career in science, which I now have no doubts about pursuing. In addition, **innovation inspires me to understand that there are no limits to human creativity, which for me is the**

3. The answers mentioned in this article are representative of a group investigated, which included 20% of the participants in the awards, in an e-mail survey carried out at Colégio Nacional in Uberlândia/MG. Throughout the article we have inserted the initials of the students' names in their responses.

main reason why I want to study and learn about the world. (E.M.M. E-mail interview, May 18, 2024). (My emphasis).

The answers given by the students above, when asked about the contribution of their participation in awards, showed that they had discovered professional career options that they hadn't imagined before. In this way, they highlighted the motivational aspect, despite its interruption when the project didn't win, namely the acceptance of frustrations as part of learning, because you don't always win. The students also pointed out the process of self-knowledge, the development of often unknown skills, the enhancement of creativity, the exercise of teamwork and responsibility.

ENTREPRENEURSHIP AWARDS

Entrepreneurship awards in the educational environment are essential for motivating, recognizing and encouraging students' entrepreneurial skills through projects. They function as a practical tool for learning and developing essential skills such as creativity, initiative, resilience and leadership, used in the Inovanaça - Entrepreneurship and Innovation curriculum component at Colégio Nacional in Uberlândia. Participation in awards is part of the subject, as they offer students the opportunity to apply theoretical knowledge in practical scenarios, facing challenges that simulate the dynamic business world. This is corroborated by student G.B.B.'s response:

[...] for me, as a student and above all as a person, taking part in the inovanaça project - and through it in competitions - was fundamental to my growth. Coming into contact with the possibility of solving a real problem (and often one that is even our own) gives us a perspective that we would hardly have in "real life". After taking part in the program, I began to see challenges as business opportunities. And this mentality is contagious! My whole family started to think like that too. **Traffic, queues, career (and**

college) choices all became "something to be solved". I think that, in addition, the competitions showed me that I was always reinventing myself. Every criticism, every detail pointed out, every change to be made helped me to get out of the box and go beyond what I thought I was capable of. Finally, I understand that winning these awards was, is and will be a differentiator for me in the future, not only in terms of my CV, but also in terms of proactivity, leadership and public speaking (and dealing with stress too!). Since it's not easy to stand in front of 100 students and renowned entrepreneurs to sell your idea. In short, Inovanaça was fundamental and one of the best parts of my high school years (G.B.B. Email interview, May 14, 2024). (My emphasis).

By taking part in competitions and awards, students are encouraged not only to plan and organize resources, but also to develop creativity, leadership and a proactive attitude towards challenges, to be more responsible, agents of change and innovation in the job market. But also, and above all, to get to know themselves and improve their self-esteem, as the following students mention,

Four years ago, I joined one of the best schools in my hometown, and I can say with conviction that the entrepreneurship classes and the awards I received were fundamental to my professional training. These experiences allowed me to develop essential skills that are highly valued in today's job market. When I was still a teenager, at the age of 17, I was offered an internship during an innovation olympiad, a milestone that also had a decisive influence on my career choice as a computer scientist. I deeply value all the knowledge I acquired at school. **The lessons learned about teamwork, proactivity and empathy not only shaped my professional skills, but also had a significant impact on my self-esteem and self-knowledge** (M.O.N. Email interview, dated 14.05.2024). (My emphasis)

For me, having a project and taking part

in competitions has made me evolve as a person in many ways. Firstly, with the project, I learned to be more responsible, since there were many tasks that, regardless of my will, I had to carry out, because no one would do it for me, since then I believe I have created a greater sense of responsibility (I.G.S. E-mail interview, May 19, 2024 (**my emphasis**)).

The students mentioned are referring to important awards for promoting educational entrepreneurship, aimed at Brazilian students and among which they have participated, with Sebrae standing out as a reference in this sector. Table 1 below provides information:

Sebrae offers various awards that encourage young people to develop entrepreneurial skills through practical challenges, which simulate the real business environment, preparing them not only for the job market, but also to be agents of social change, as mentioned above. Ideias de Futuro⁴, whose mission is to “significantly impact public education by promoting entrepreneurship, technology and innovation in the school environment” (Ideias de Futuro, 2024), creates and carries out the “Liga Jovem Challenge” with Sebrae. Also in partnership with Google, it has promoted creativity and technological innovation through programs such as “Startup in School” and “Change the Game”. These initiatives encourage students to apply their science and technology skills to create solutions that positively impact society, using the potential of technology to solve complex global problems. NASA also contributes to this atmosphere of innovation through the “Hackathon Space Apps Challenger”, a global event that challenges anyone, but especially students, to use open data to create innovative solutions to real-world problems, fostering a deep interest in science and international collaboration.

4. Ideas for the Future. Accessed on 04.06.2024

5. European Union office acting for the Directorate-General for Employment, Social Affairs and Inclusion. It has dedicated itself to “preparing reference frameworks that contribute to the development of competences of different kinds, which are fundamental to building a different idea of citizenship for the digital society of the 21st century” (Dias-Trindade et al, 2020, p. 6).

In addition, Ricardo Miranda University organizes the Collegiate Entrepreneurship Cup, a competition that challenges students to develop and implement business ideas, creating a platform for young entrepreneurs to demonstrate their skills in a competitive and educational environment.

These organizations and initiatives are crucial to an educational ecosystem by valuing and stimulating the entrepreneurial capacity of students, equipping them with the necessary tools to innovate and lead in a world increasingly focused on sustainable and technologically advanced solutions. The role of these entities, especially Sebrae, is instrumental in stimulating the development of skills that transcend traditional school knowledge, as they encourage students to apply their learning in practical and impactful contexts, as already shown in the responses from the students mentioned above.

ENTRECOMP: COMPETENCE REFERENCE FRAMEWORK FOR ENTREPRENEURSHIP

The Entrepreneurship Competencies Framework “ENTRECOMP” developed by the *Joint Research Centre of the European Union*⁵, provides a detailed study on the key entrepreneurial competencies to be fostered in Europe, outlining critical skills and behaviors to drive innovation and economic growth. This study is crucial in the educational context, as the competencies listed in the EntreComp Conceptual Model, found in the report, provide a basis for integrating entrepreneurial education effectively into school curricula. Such a model is intended to establish a bridge between the worlds of education and work with regard to entrepreneurship as a competence” (Dias-Trindade *et al*, 2020,

Prize	Description	Organization	Teaching Series
Sebrae Young Entrepreneur Challenge ¹	A competition that challenges students to develop and manage virtual businesses, promoting management and entrepreneurial skills.	Sebrae	Secondary, Technical and Higher Education
Sebrae Entrepreneurial Education Award ²	It recognizes and rewards educational institutions that promote entrepreneurship in their educational practices.	Sebrae	Professionals involved in formal education
Startup in School ³	It encourages the creation of startups in the school environment, with technical support and mentoring.	Future Ideas and Google	High School
Youth League Challenge - Sebrae ⁴	A competition that encourages students to develop innovative and sustainable solutions.	Future Ideas and Sebrae	Primary, Secondary, Technical and Higher Education
Collegiate Entrepreneurship Cup ⁵	Competition that promotes entrepreneurship among students through innovative project competitions.	URM - Ricardo Miranda University	High School
Space Apps Challenger Hackathon ⁶	Global event that challenges students to develop solutions to real problems using open NASA data.	NASA and local partners	Free
Change the Game ⁷	An award that focuses on innovation and the development of games and applications with a social impact.	Future Ideas and Google	Primary and secondary education

Table 01 - Educational Entrepreneurship Awards

Entrepreneurial Competence	Development through Entrepreneur Awards
Identifying opportunities	Competitions encourage students to identify and explore real and theoretical business opportunities, promoting a practical and critical view of the market.
Creativity	Awards encourage creation and innovation, challenging students to think 'outside the box' to develop unique and innovative solutions.
Vision	It helps develop a strategic vision by encouraging students to plan and execute projects with clear, long-term objectives.
Valuing ideas	Students learn to evaluate the potential of their ideas in practice, considering their viability and social, cultural and economic impact.
Ethical and sustainable thinking	Competitions focus on sustainability and ethics, pushing students to consider the environmental and social impact of their initiatives.
Self-awareness and self-efficacy	Awards boost confidence and perception of one's own abilities, as external recognition validates the students' effort and talent.
Motivation and perseverance	The competitive nature and prestige associated with the awards motivate students to persist and overcome challenges in developing their projects.
Mobilizing resources	Students learn to manage and mobilize resources effectively, from the search for sponsorship to the efficient use of available materials and technologies.
Financial and economic literacy	Awards provide a platform for students to learn and apply principles of finance and economics when managing project budgets.
Mobilize third parties	Competitions teach leadership and communication skills, which are essential for inspiring and recruiting others to your ideas and projects.
Taking the initiative	Awards encourage students to be proactive, initiating and leading projects that require independent planning and execution.

1. Young Entrepreneur Challenge. Accessed on: 04.06.2024
2. Sebrae Entrepreneurial Education Award. Accessed on: 04.06.2024
3. In Startup in School - Home - Startup in School (ideiasdefuturo.com). Accessed on: 26.05.2024.
4. Youth League Challenge. Accessed on 04.06.2024
5. In: Collegiate Entrepreneurship Cup. Accessed on 27.05.2024.
6. In NASA Space Apps Challenge. Accessed on 27.05.2024.
7. At Home - Change the Game (play.google). Accessed on 27.05.2024.

Planning and management	Participation in awards develops organizational skills, requiring detailed planning and effective management of time and tasks.
Dealing with uncertainty, ambiguity and risk	Competitions prepare students to deal with uncertainty and risk, a fundamental aspect of entrepreneurship.
Working with others	Awards promote teamwork, where students must collaborate effectively to achieve common goals.
Learning from experience	Through the awards, students experience both success and failure, learning from each result to improve in future initiatives.

Table 2 - Entrepreneurial skills in the Entrepreneurship Awards

p. 13). This integration is reflected in the development of the general competences of basic education as established by the National Common Curricular Base -BNCC- which stresses the importance of skills such as creativity, initiative, and problem-solving ability. Traditional education does not usually aim to develop these skills necessary for entrepreneurship and the formation of a citizen prepared for today's society. The contribution of entrepreneurship to education corresponds to the way entrepreneurs think, since "[...] they tend to think in unconventional ways, challenge existing assumptions and be flexible and adaptable in solving problems" (Kirby, 2005, p. 07). In this context, entrepreneurship education awards for high school students act as catalysts for these skills, not only recognizing technical competencies, but also promoting socio-emotional competencies through practical challenges similar to the real business world. I see empirically, through my experience as an Entrepreneurship and Innovation teacher, the contribution of the awards in enriching learning and preparing students to be adaptable and innovative professionals, essential for an ever-evolving global market.

The student's perception follows suit:

With regard to awards resulting from Olympics and/or curricular activities at the school, I believe that they are extremely important for the students, as they often increase our engagement, motivation and productivity as a team. **The awards make the activities more competitive among**

the students, who mostly see them as recognition of good performance (P. V. S. G. Interview by e-mail, on May 13, 2024). **(My emphasis)**

It is not only in the testimony of student P.V.S.GN and others mentioned above that awards contribute to the development of competencies. In this sense, in table 2 below, based on the report "ENTRECOMP: Competence Framework for Entrepreneurship" (Margherita Bacigalupo et al, 2016), we list the main entrepreneurial competences and their development, considering the participation of secondary school students in awards.

In this table we can see how the entrepreneurship awards, by encouraging creativity, initiative, self-awareness, self-efficacy, problem-solving, among others, not only recognize technical skills but also cultivate the socio-emotional skills necessary for the holistic development of students. In it, we see youth protagonism in action and how participation in these awards encourages students to take on roles of leadership and responsibility, pushing them to develop their skills while solving real problems. This active engagement not only recognizes their technical skills, but also strengthens socio-emotional aspects such as self-awareness and resilience, which are fundamental for their integral growth and for acting as protagonists, agents of change in their communities. Therefore, as Rose Mary Almeida Lopes and Maria América de Almeida Teixeira (2010, p. 44) consider, "protagonism implies getting

constructively involved with life, school, community and society, through authentic and autonomous participation, with the development of self-confidence and self-determination, at a time when the student's identity is still being formed”.

This practical approach provides a direct application of the concepts learned in the classroom, allowing students to experience the reality of entrepreneurship through competitions that mimic real challenges in the business world. By taking part in these awards, students are challenged to step out of their comfort zones, apply interdisciplinary knowledge and work collaboratively - all fundamental aspects for their personal and professional growth. In this way, they not only complement formal education, but add essential knowledge for holistic learning by developing and improving crucial skills for their future lives. By fostering these skills, we are educating conscientious citizens who are prepared to make a positive contribution to society.

RELATIONSHIP BETWEEN THE BNCC AND ENTREPRENEURIAL COMPETENCES

The competences offered by the report “ENTRECOMP: Competence Reference Framework for Entrepreneurship” can be integrated with the general competences of basic education defined by the BNCC, revealing a fundamental synergy between the personal and professional development of students and the demands of a globalized job market. The BNCC, which guides the school curriculum in Brazil, establishes a series of competences aimed at preparing students to face complex challenges, solve problems, work collaboratively and act responsibly and ethically in different social and professional contexts. By promoting these skills in the context of entrepreneurship awards, students

have the opportunity to apply the knowledge they have acquired in practice, facing real challenges that simulate the dynamism and complexity of the business and social world. This not only enriches their learning, but also strengthens their capacity for innovation, their autonomy and their ability to work in teams. Thus, “a discipline can lend itself to identifying opportunities for using knowledge, solving problems creatively, involving active learning modes, requiring initiative, discovery and experimentation as means of personal development” (Gibb, 2008, p. 115). Chart 02 - BNCC and Entrepreneurial Competences makes it possible to understand this connection between the competences in the BNCC and those identified by ENTRECOMP, as follows:

This relationship is strategic for enhancing the impact of entrepreneurial education on students' all-round development. For example, the BNCC competence that encourages the critical and creative use of digital technologies finds a direct parallel in the ENTRECOMP competence to deal with digital competence and innovate. Similarly, encouraging critical and scientific thinking, a BNCC competence, is complemented by ENTRECOMP's ability to think critically and solve problems, preparing students not only to better understand the world around them, but also to transform it. Therefore, when we consider the table that relates the BNCC competences to those of ENTRECOMP, we see entrepreneurial education not as an addition to the curriculum. Rather, it is an essential dimension that connects students with contemporary skills development needs, offering them a solid foundation for personal and professional success. This interweaving of skills shows how education can be a powerful tool for preparing young people capable of leading and innovating in a global context.

General Competencies for Basic Education (BNCC)	Association with ENTRECOMP competencies
1. Knowledge of the physical, social, cultural and digital world	Identifying opportunities, valuing ideas
2. Scientific, critical and creative thinking	Creativity, Learning to learn, Ethical and sustainable thinking
3. Cultural repertoire	Valuing ideas, Mobilizing third parties
4. Communication	Working with others, Mobilizing third parties
5. Digital culture	Digital competence, Learning to learn
6. Work and life project	Taking the initiative, Planning and managing
7. Argumentation based on facts and data	Critical thinking and problem solving
8. Self-knowledge and self-care	Self-awareness and self-efficacy
9. Empathy and cooperation	Working with others, Dealing with uncertainty, ambiguity and risk
10. Responsibility and citizenship	Ethical and sustainable thinking, Taking the initiative

Chart 2 - BNCC and Entrepreneurial Competences

INOVAÇÃO - ENTREPRENEURSHIP AND INNOVATION AT THE NATIONAL COLLEGE

My experience with the curricular component Inovação - Entrepreneurship and Innovation⁶ exemplifies the integration of the competences outlined by ENTRECOMP and the BNCC in the context of entrepreneurial education. Through the practical activities of identifying problems, developing solutions and building prototypes, the classes promote the critical and creative use of digital technologies, as well as critical and scientific thinking. This methodology allows students to understand the content and actively act to transform their surroundings, reflecting the essence of what the BNCC and ENTRECOMP seek to foster: the preparation of young people to lead and innovate, balancing theory with practical applications that are vital for success in a dynamic global scenario.

Inovação is a methodology implemented at Colégio Nacional in Uberlândia to teach Entrepreneurship and Innovation, which has been running for four consecutive years. The program is designed to turn ideas into prototypes created by the students, in a way

that transcends the school environment and benefits the community and local organizations. Classes are divided into four main learning paths: Self-Awareness, Problem Identification, Solution Development and Prototype Construction, allowing students to apply theory and practice to their projects. During the course, students begin with self-knowledge activities to explore their tastes, desires and potential careers, using tools such as *ikigai* to guide their reflections. The meaning of the Japanese word *ikigai* is “reason for living”, “object of pleasure for living” or “driving force for living”. According to the Japanese, everyone has an *ikigai*, but discovering which one *you* have involves a deep search for yourself (Mogi, 2018).

Based on their knowledge of their own skills and abilities, and an initial definition of the path they want to take and where they want to go with their actions, the students begin to identify and research real problems they want to solve. This process is supported by classes intertwined with theory and practice, in which the students present *pitches*⁷ of their projects to different audiences for constructive *feedback*. The

6. For more information see: Adolescent Entrepreneurs: Inovação (linkedin.com), published on 16.Jan.2023, where I detail the methodology and execution of the Entrepreneurship and Innovation curricular component, Inovação, at Colégio Nacional, in Uberlândia.

7. A brief presentation of your product or brand. It is intended to sell the idea to partners, customers or investors.

methodology culminates in the construction of prototypes, which are tested and refined on the basis of the *feedback* received. The aim at this point is to teach students the importance of adaptability and continuous learning through practical experiences. This approach improves their entrepreneurial skills, prepares them to face contemporary challenges, make ethical decisions and contribute positively to society by developing innovative and relevant solutions for their community. It was through practicing this methodology at Colégio Nacional in Uberlândia that students felt motivated and committed to developing prototypes that impacted everyday life with its demands and specificities. The results of our pedagogical practice can also be seen in the awards the students have won over the years in renowned competitions, such as those organized by Ideias de Futuro, NASA, Google and Sebrae. These recognitions serve as testimony to the effective alignment of Inovanaça's curriculum with the real demands of the market and the needs of the community, equipping students with valuable and practical skills for the future, as shown in table 03.

The awards achieved, highlighted in table 03, directly reflect the positive impact and effectiveness of the Inovanaça methodology in entrepreneurial education. The success of students in national and international competitions, such as the awards received from NASA, Google and Sebrae, demonstrates how the practical integration of the curriculum with real challenges promotes meaningful learning and prepares students to be agents of change, in line with contemporary demands for skills and competencies. We believe that the praxis of entrepreneurial education, experimentation and practical problem-solving, changes the way an educational institution learns and teaches, in order to form an integral individual and, at the same time, foster an entrepreneurial spirit.

FINAL CONSIDERATIONS

The direct connection between the practical skills developed through Inovanaça and broader educational frameworks underlines the importance of an engaging and transformative educational approach. Through this approach, students at Colégio Nacional in Uberlândia are encouraged to develop and apply critical skills such as creativity, innovation, and planning in real projects that interact with the community and the market. By comparing the entrepreneurial competences in the ENTRECOMP report with those related to basic education in the BNCC, we can see the synergy between them, reinforcing the need to create solid learning for students' all-round development. Thus, one of the results of entrepreneurial education is to prepare them for the job market, enabling them to become proactive and conscious agents of change within society. In this context, the awards serve as vital catalysts, promoting the recognition of technical skills and the development of socio-emotional competencies such as creativity, resilience and collaboration.

From the tables developed and the analysis carried out, it was possible to see that entrepreneurial education awards are more than just recognitions; they are platforms that challenge students to apply their knowledge to practical scenarios and experience the entrepreneurial process first-hand. These competitions stimulate innovation and foster a dynamic learning environment where young people can test and refine their ideas, learn from the process and adapt to the needs of the project. Such exposure is indispensable for cultivating dreams and their fulfillment, an entrepreneurial mindset and preparing students for the complexities of the real world. The integration of ENTRECOMP competencies with the BNCC guidelines through the entrepreneurial education

Year	Prize	Brief Description	Entity
2020	Featured school Startup in School	Recognition of excellence in startup initiatives in the school environment.	Google
2020	Startup in School Outstanding Teacher	Awards for outstanding teachers in promoting startup projects in schools.	Google
2020	Mentor awarded Hackathon Space Apps Challenger	Mentor of global finalist students in this space technology hackathon.	NASA
2020	Start SFB - Student Entrepreneurship	Award for squads of outstanding students in entrepreneurship.	Farias Brito System
2021	Top 10 teachers Change The Game	Top 10 teachers recognized for their contributions to technology education.	Google
2021	Bett Educar Transforming Teacher	Recognition as a semi-finalist for innovative practices in education.	Bett Educar
2021	Sebrae Entrepreneurial Education Award	Silver medal recognizing commitment to entrepreneurial education.	Sebrae MG
2021	S Factor AGITA Sebrae	Mentor of the 2nd best entrepreneurial project.	Sebrae Uberlândia/MG
2022	Rubem Alves Award	Recognition as an outstanding teacher in entrepreneurial education.	National College
2022	Sebrae Young Entrepreneur Challenge	Supervisor of a finalist group in the young entrepreneurs challenge.	Sebrae MG
2023	Youth League Challenge- Brazil Stage	Semi-finalist as a teacher in a national youth entrepreneurship competition.	Sebrae Brazil
2023	Young Entrepreneur Challenge	Outstanding teacher CHAMPION MG in the Private Schools category.	Sebrae MG
2023	Collegiate Entrepreneurship Cup	Advisor to TOP 10 finalist group in school entrepreneurship competition.	URM
2023	Startup in School - 10th Anniversary Edition	Advisor to groups that won 1st and 3rd place in a school startup competition.	Ideas for the future

Table 03 - Inovanaça Awards

awards also reflects an educational approach in line with contemporary needs. This is evidenced by the awards run by entities such as Ideias de Futuro, Sebrae, Google and NASA, which not only assess the technical skills of the participants, but also encourage a holistic approach, considering the social and community impact of the projects. These initiatives highlight the potential of the awards to expand students' horizons, allowing them to explore new areas and apply their learning in contexts that transcend the school environment.

We understand the importance of educational institutions recognizing such programs and awards and integrating them effectively into their curricula and teaching strategies. Entrepreneurial education is an essential component of modern education, capable of equipping students with the necessary tools to navigate and thrive in a globalized and rapidly changing environment. In doing so, schools enrich students' educational experience and fulfill their formative functions, i.e. they contribute significantly to the development of future leaders capable of tackling global challenges with innovation and an entrepreneurial spirit.

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