

Entrepreneurship and innovation as pedagogical tools to control school evasion: teachers' strategic practices

ALCEMIR HORÁCIO ROSA¹

*Programa de Doutorado em ensino Tecnológico
Instituto Federal de Educação, Ciência e Tecnologia do Amazonas*

DANIEL NASCIMENTO E SILVA²

*Programa de Doutorado em ensino Tecnológico
Instituto Federal de Educação, Ciência e Tecnologia do Amazonas*

Abstract

The work brings an educational perspective on the use of the entrepreneurial and innovative act as a pedagogical tool to face school dropout. It is assumed that dropout is something present in educational institutions across the country, and that it is characterized as a current and serious problem. This investigation aimed to reveal how entrepreneurship and innovation can be used by teachers to minimize the impacts caused by school dropout. The work presents a theoretical framework on the topic of evasion, entrepreneurship and innovation; and teaching practices in this context. The scientific-technological method (NASCIMENTO-E-SILVA, 2019) made it possible to organize the work through basic steps: guiding question, data search, content organization and structuring of responses. An analysis was carried out on the problem, the experiences with tools to combat dropout and the contributions from which education can benefit by investing in a process permeated by such tools. An analysis was also carried out on the projects developed at the IFPI campus Parnaíba, through the coordination of Extension, investigating "if and how" entrepreneurship and innovation are part of the educational process of this institution. It was concluded that it is necessary and essential for teachers to consciously develop the use of tools - entrepreneurship and innovation - in their educational process, because, in fact, it is an effective way to face the problem of school dropout.

Keywords: Evasion; Entrepreneurship; Innovation; teacher practices.

¹ Doutorando em Ensino Tecnológico (IFAM), Mestrado em Educação Profissional e Tecnológica (IFCE) e graduado em pedagogia (ISEPRO). Instituto Federal de Educação, Ciência e Tecnologia do Amazonas. Curso de Doutorado em Ensino Tecnológico. Área de interesse e pesquisa: formação de professores, educação e ensino tecnológico. E-mail: alcemir.horacio@ifpi.edu.br; ORCID: <https://orcid.org/0000-0002-2359-5903>

² Pós-doutorado em Administração (UFSC), Doutorado em Engenharia de Produção (UFSC), Mestrado em Administração (UFSC) e Graduado em Administração (UFPA). Instituto Federal de Educação, Ciência e Tecnologia do Amazonas. Curso de Doutorado em Ensino Tecnológico. Área de interesse e pesquisa: formação de professores, educação e ensino tecnológico. E-mail: danielnss@gmail.com; ORCID: <https://orcid.org/0000-0001-9770-575X>

1 INTRODUCTION

School dropout is a problem that has intensified a lot in recent years, especially when we consider the reality of public schools (SILVA, 2011; OLIVEIRA, 2021; and NUNES, 2021). In view of this finding, the school cannot remain oblivious to this situation, as dropout harms both the student, who is out of his/her learning path, and the school (school) that invests financial, pedagogical and human resources in offering vacancies and that, by neglecting this problem, resources are wasted.

It is known that over the years proposals have emerged in different ways to reduce dropout, but that, however, there is no effective result, as the problem remains. Which leads us to the question of what teachers can do to combat dropout, thus constituting the problem of this work.

It is believed that teachers, through methodologies and practices, have the possibility of using tools to make education more meaningful and more interesting for the student, to the point that evasion is not an option. Thus, in this research it is proposed to use actions aimed at encouraging entrepreneurship and innovation in the school environment as a way of coping with dropout.

This topic is of fundamental importance for the knowledge about the contribution of entrepreneurship and innovation to the control of dropout in educational institutions. Because, when developing strategies to solve dropout problems, it is essential that teachers have the necessary information to make decisions that really bring results in their practices.

However, when thinking about an education based on the entrepreneurial and innovative spirit, it is essential to know its contribution, as well as to know what scholars think about this aspect, in addition to seeking to understand what experiences already exist in this sense. In addition to producing knowledge, this research sought to generate information and new perspectives for both the academic community and society in general; on the problem of dropout, leading the school community to reflect on possible intervention tools.

Therefore, the main objective of the research is to understand how entrepreneurship and innovation can, through the exercise of teachers, contribute to the school environment in order to minimize the impacts caused by dropout. As a strategy, the Federal Institute of Education, Science and Technology of Piauí (IFPI) – Parnaíba campus was used as an empirical research space. To achieve the proposed objective, a research was carried out on the use of entrepreneurship and innovation in the Extension projects of the studied institution. And for this, it was necessary to understand the phenomenon of dropout, the contributions of the entrepreneurial and innovative act to education and to identify and analyze the entrepreneurial

and innovative actions of teachers in the school environment of the IFPI campus Parnaíba.

2 METHODOLOGY

This work was carried out using the scientific-technological method developed by Nascimento-e-Silva (2019). The scientific-technological method allowed the work to achieve results through four basic steps: guiding question, data search, content organization and, finally, structuring the answers. The established objective was to reveal how the act of entrepreneurship and innovation can be used by teachers in minimizing the impacts caused by school dropout. And due to the need for a theoretical basis, current information produced by authors in the areas of education, more specifically school dropout, as well as authors who deal with topics on entrepreneurship and innovation were used. In this sense, the research developed is of a bibliographic nature, which according to Gil (2008) is a type of research developed through materials already prepared and available, consisting mainly of books and scientific articles.

Documentary research was also used, which, according to Gil (2008), is very similar to bibliographic research, but the difference is in the nature of the sources, since documental research uses materials that have not yet received analytical treatment, that is, still were not studied and are not included in materials prepared in available bibliographies, as was the case of the analysis of the records of the IFPI Extension coordination, Campus Parnaíba, in the year 2021.

3 UNDERSTANDING SCHOOL EVASION

School dropout has been provoking debates, discussions and research in the educational area. Above all, because in addition to constituting a serious problem for education and there is no efficient method of combating it; school dropout is a problem of a national nature, which is everywhere (QUEIROZ, 2011; SANTOS, 2019; and, XAVIER, PIRES and SERUFFO, 2019).

According to Meira (2015) and Nunes (2021) it is a phenomenon that is still far from being resolved and has been gaining prominence in recent years due to the concern with high rates of abandonment. Mainly, because it is observed that it is a problem that has been reaching the whole country, and practically at all levels of education. Dropout presents itself as a fragility of the Brazilian educational system, generating concern for all the elements involved with this reality such as managers, teachers, family and students; and this needs to be understood so that better ways can be found to face the problem.

In this sense, Silva (2011), Oliveira (2021) and Nunes (2021) highlight that school dropout in Brazil is a problem that has been worsening year by year and is present mainly in public schools. It is urgent that both governments and school institutions put into practice strategies that aim to combat this problem, because if it is not fought, both the school loses and the student also loses with this situation.

In a deeper look at the problem, it appears that the aspects that give continuity to the reality of school dropout can be both external to the institution (factors related to the student's personality, family, work and personal interests) and internal (factors related to student personality, family, work and personal interests) to the institution, teachers with inadequate didactics, learning difficulties, not following the school rhythm, lack of interest in subjects, among others) (SALES; CASTRO; DORE, 2013).

Whether by external or internal factors, what can in fact be understood is that the effects of dropout are real and occur and take effect within the school, through school dropout. It is in this sense that Bourdieu Passeron (1975), cited by Silva (2011, p. 5); states that in this relationship the weight of factors internal to the institution prevails, since in fact “the school is responsible for the success or failure of the students”.

Above all, we highlight the defense that some researchers make about the institution's responsibility for the permanence of the student. Such researchers express the idea that the school is responsible for the success or failure of students, “especially those belonging to the poorest categories of the population”, theoretically explaining the reproductive character of this institution understood as the Ideological State Apparatus (AIE) (BOURDIEU PASSERON, 1975 apud SILVA, 2011, p. 5).

Rumberger (2011) analyzes the school context and dropout, and within this approach the author highlights that the school has elements that can significantly contribute to student dropout: the composition of the teaching staff; structural features; school resources and policies and practices. Therefore, the school institution has great responsibility for the student's permanence in the classroom, first trying to solve the problems that can directly cause dropout, and then developing actions that contribute to the attractiveness of the teaching that is offered (SANTOS, 2019). ; and, XAVIER, PIRES and SERUFFO, 2019).

It is known that the school has the role of planning, organizing and offering education and, above all, is directly responsible for the school success of its students.

Therefore, it is up to the institution, with its social role, to assume the mission, together with its teachers, to seek strategies and propose solutions to face the problems related to education, especially in the case of school dropout.

Faced with this situation of increasing school dropout, institutions and teachers are led to take responsibility for themselves, seeking to develop means to stop the effects of this problem. In this, each institution fights evasion in the way that its administration believes to be the best. Certainly, one of the steps to face the problem is to improve the teaching/learning process, in order to make it even more active, attractive and interesting for the student to identify with this process and remain so. In this way, teaching practices can constitute a scenario for the development of significant strategies to help in this context.

3.1 The concept of school evasion

For a better understanding of this discussion, it is necessary to establish the concept of school dropout. In this sense, GÓMEZ and BELMONTE (2020), understand evasion as a social problem, caused by inequality of opportunities. For Dore and Lüscher (2011), dropout can be verified from some situations, such as when the student leaves the institution or the education system, or even when he decides to leave school. In the same vein, Silva (2013, p. 62) clarifies that “students who attended the Institution for some period of education [...]”. And in Johann's conception (2012, p. 65), dropout is a phenomenon characterized by the “abandonment of the course, breaking with the established legal bond”, not renewing the commitment or its manifestation of permanence in the educational establishment. This situation of evasion is seen as abandonment, with no intention of returning, as the non-renewal of enrollment breaks the existing bond between student and school. According to the authors Rumberger (2004), Gómez and Belmonte (2020), it is very difficult to conceptualize and explain school dropout, as there are many factors that influence its occurrence and, therefore, can be important in establishing the concept of dropout.

For the development of this work, school dropout was conceptualized as the situation in which the student regularly enrolled decides to abandon the course he attends, regardless of the reasons and whether or not the student enrolls in another institution; thus configuring the disruption of their training course and, consequently, the non-completion of the course.

4 ENTREPRENEURSHIP AND INNOVATION: TOOLS FOR TEACHERS

The educational institution object of this investigation was the Federal Institute of Education, Science and Technology of Piauí - IFPI, more specifically on its campus located in the city of Parnaíba. The IFPI is a public institution, of federal scope, which has a technological, human and material structure of excellence.

O Instituto Federal de Educação, Ciência e Tecnologia do Piauí é a principal instituição voltada para a educação profissional e tecnológica no estado. Contando, em 2017, com 20 campi, espalhados por todo o estado. E ofertando os mais variados cursos de formação profissional, adequando em cada região, a oferta de curso em compatibilidade do desenvolvimento da economia local e regional (ROSA, 2017, p. 1295-1296).

The Instituto Federal do Piauí, among other things, has been standing out in offering technical courses. Taking to each region of the state, the courses that best suit each reality. However, in the specific case of vocational technical secondary education, although there has been an increase in the number of vacancies in our country in recent years, what can be observed is that there has also been a significant evasion of these vacancies (SILVA; PELISSARI ; STEIMBACH, 2012; ROSA 2017; and, DIAS E BOSSI, 2021).

In this perspective, even though the IFPI is the main institution of vocational education in the state of Piauí and with all its educational attractiveness, it goes through the reality of school dropout. According to Silva (2013), Rosa (2017) and Dias and Bossi (2021) in general, the federal network is in a worrying situation, since according to studies, less than 40% of students in the network's technical courses manage to complete the course; still according to the author, the IFPI is among the three intuitions with the worst completion rates in the entire northeast region. The need for further investigations is evident, given a scenario of significant abandonment; develop tools that serve as strategies to face this problem. From this perspective, entrepreneurship and innovation emerge as pedagogical strategies in the use of innovative and attractive practices.

4.1 Empreendedorismo

The studies by Baggio (2014), Trindade and Parada (2020), Oliveira et al. (2019), Costa (2020) define entrepreneurship as the relationship of some aspects such as, for example, the initiative to create something new, the creative use of what is available, the transformation of the social environment in which one lives and, finally, accepting challenges.

For Drucker (1987, p. 36) entrepreneurship “is always in search of change, reacts to it and exploits it as an opportunity”.

The term entrepreneurship is still wrongly conceived by many in the strictly marketing sense, however, entrepreneurship goes far beyond the creation of new products and markets, because, according to Guimarães and Lima (2016, p 39) “due to lack of dedicated knowledge on the subject , many understand that this theme is used exclusively in the business space”. In this perspective, Baggio (2014) clarifies the true meaning of entrepreneurship:

O empreendedorismo pode ser compreendido como a arte de **fazer acontecer com criatividade e motivação**. Consiste **no prazer de realizar com**

sinergismo e inovação qualquer projeto pessoal ou organizacional, em desafio permanente às oportunidades e riscos. É assumir um comportamento proativo diante de questões que precisam ser resolvidas. O empreendedorismo é o despertar do indivíduo para o aproveitamento integral de suas potencialidades racionais e intuitivas. É a busca do auto-conhecimento em processo de aprendizado permanente, em atitude de abertura para novas experiências e novos paradigmas. (BAGGIO, 2014, p 26, grifo nosso).

According to Santos (2013) entrepreneurship is not limited to the corporate environment and when the term is addressed in education, there is the prospect of proactive learning and education with new approaches. And so the author defines that “the concept of entrepreneurship [...] demonstrates the need for students to have a proactive stance and also for their educators to show new approaches to old disciplines” (SANTOS, 2013, p. 44). However, the concept of entrepreneurship applied here it needs to have as a background a correct understanding of the term in its teaching-learning context. It has, therefore, a teleological “character, as an intentional act, aiming at the use of methodologies of active, innovative and transforming practices” (GUIMARÃES E LIMA, 2016, p. 46).

Lopes (2010, p. 4) understands that “all education aimed at social development can also be considered an education for the development of an entrepreneurial attitude”.

Therefore, the very concept of entrepreneurship that is applied in this research is that the act of entrepreneurship occurs through any project or action, whether of the system, institution, teachers or any of the other education servers, where education is involved. with the following aspects: creatively and proactively transforming the resources available in the school community into something different from what is already usual, finding opportunities that lead to a motivating education, engaging in the recreation of learning environments, seeking new ideas and opportunities that make training more meaningful and, above all, the discovery - in addition to what is available and daily - of opportunities in the institution that lead to a taste for the participation of the individuals present there, with creativity and motivation.

Thus, this work uses the perspective that entrepreneurship is a potential tool for education, in the sense of making it a source of creativity and motivation. It is believed, therefore, that undertaking in the educational sense is the development of the educational process through attitudes that aim to take advantage of the resources available in the educational environment that make the process attractive and, above all, motivating.

4.2 Inovação

Innovation can be understood as the implementation of a new or improved service (OECD, 2006). When people think of innovation, it usually comes to mind to create something new. From the perspective adopted in this research, the concept of innovation was directed towards the idea of improving the educational process through new or renewed curricular activities, that is, it is the creation of something new or the improvement of an existing process.

Uma inovação é a implementação de um **produto (bem ou serviço) novo ou significativamente melhorado**, ou um processo, ou um novo método de marketing, ou um novo método organizacionais nas práticas de negócios, na organização do local de trabalho ou nas relações externas (OCDE, 2006, p. 55, grifo nosso).

Therefore, from the perspectives presented above, it can be understood that institutions, as providers of educational services, have the possibility of offering a new or significantly improved educational process, bringing something new to education. And this means that a project or action can be considered innovative when it creates novelties in its teaching or at least changes the way it develops its educational process, thus seeking to make its education something meaningful and improved.

The perspective of using innovation as a tool to combat dropout is considered in this work with the objective of putting on the agenda a differentiated form of education, enriched by the new. Since we are facing modernity and technology, why not bring to the educational environment the innovation that the modern world offers? This is because a more meaningful and interesting education can serve as a tool to keep the student in the classroom. In this sense, Guimarães and Lima (2016) understand that, in addition to innovating, transforming and emancipating education, it must be understood as a way of adopting instruments available in the school itself, attributed to the function of providing positive conditions for education. so that it becomes a transformer and propitiator of cultural, political, social and economic emancipation, but, above all, the authors understand that innovation must “perform the didactic and content transposition that guides the didactic-pedagogical behavior” (GUIMARÃES E LIMA, 2016, p. 36). Santos (2013, p. 44) “melhorar o processo de aprendizagem”, states that the concept of innovation can be translated into education as a way to improve learning processes and, with that, benefit students with their culture.

Entrepreneurship and innovation are tools that can work in the educational field as a differential in the entire process from planning to the execution of actions; each of them has its means. However, when these tools are brought together to achieve a common goal, good results can be significantly intensified.

Drucker (2005) makes a relationship between entrepreneurship and innovation and states that it is through innovation that it is possible to explore changes and opportunities, which can be learned and practiced. In this sense, he states that “innovation is the specific instrument of entrepreneurs, the means by which they explore change as an opportunity for a different business. It may well be presented as a discipline, learned and practiced” (DRUCKER, 2005, p. 25).

According to Guimarães and Lima (2016, p. 42) it is a fact that those who innovate undertake” and this statement allows us to infer that every time the management of an institution acts with innovation in its educational processes, it is acting with an entrepreneurial attitude. For example, when the institution encourages its professors to develop actions that include entrepreneurship and innovation in their educational practices. In fact, the new must be sought and the formative processes must follow new paths. Teachers must constantly seek to involve students in an education that is meaningful, that is, an education that is increasingly interesting to the student, to the point that he wants to be in the classroom. But care must be taken, as the aforementioned authors warn that undertaking in the school space

“não é simplesmente o uso de um jargão a ser oficializado em discursos para ouvidos pouco atentos, mas a faculdade do professor em conceder à descoberta de novos percursos cognitivos, repactuando os acordos tácitos estabelecidos com seu grupo de alunos” (Guimarães e Lima, 2016, p. 46).

Entrepreneurship and innovation, when taken to the sense of an instrument of a creative education, with an educational process based on the novelties and current events of the contemporary world, one can imagine that they are the tools for the formation of an education committed to the new. Tools to deal with the problem of evasion.

These two tools can be very effective for teaching in the fight against dropout, however, using them properly requires certain commitments on the part of educators, as taking these concepts to the classroom requires a “holistic experience” from the educator. So that you can identify the main difficulties of students with regard to the components taught and assess how you can make teaching clearer and more dynamic” (SANTOS, 2013, p. 44).

From this perspective, it is understood that there is a need for institutions and teachers to develop strategies to make learning more meaningful in dealing with school dropout. And these strategies can involve both innovation and entrepreneurship.

4.3 Uma experiência de sucesso do uso da inovação e do empreendedorismo como ferramenta de enfrentamento da evasão escolar

Proof of the effectiveness of entrepreneurship and innovation, as management tools in the fight against dropout, is possible through the report of an experience described in the book: Innovative teaching and learning experiences, book organized by Edson Sadao Iizuka in 2015, which brings the story of a project developed by Professor Joana D'Arc Félix de Sousa, from Escola Técnica Estadual Prof. Carmelino Corrêa Júnior, created in 1958 and located in the city of Franca (SP), with the title "CURTEENDEDORISM: an economy as an alternative to combat poverty" (IIZUKA, 2021).

The experience report begins with the description of a problem: "desde 2009, a evasão escolar é um dos maiores problemas enfrentados pela nossa escola, principalmente no curso técnico em curtumes" - since 2009, truancy is one of the biggest problems faced by our school, especially in the technical course in tanneries (IIZUKA, 2021, p. 121). According to the book "Innovative Teaching and Learning Experiences", it is a project that was developed with students from 16 to 55 years of technical education, combining entrepreneurship and innovation with the objective of contributing to the reduction of school dropout, encouraging students to 'entrepreneurial spirit and raising students' self-esteem (IIZUKA, 2021).

The teacher responsible for the project introduced in her classes of the technical course, the development of "Curteendedorismo" (a word created by the teacher responsible for the development of the project with the intention of expressing the use of entrepreneurship in the technical course in animal leather. Therefore, the combination of initials of the course CURT + ENENDEDORISM). It involved raising students' awareness of the environment, damages, alternatives and new ways of working with animal leather and how students should arouse interest in the course, stimulating creativity, innovation and entrepreneurship.

Also according to the book cited, in addition to being awarded for its good results, the project resulted in "an innovative teaching and learning experience that expanded and consolidated the dialogue between different actors: management, coordination, teachers, students, individuals and families". Low-income community" (IIZUKA, 2021, p 124). And mainly, reduced school dropout, increased students' self-esteem, generated new job opportunities and income for newly graduated students.

reduziu a evasão escolar, aumentou a autoestima dos alunos, gerou novas oportunidades de emprego e renda para os estudantes recém-formados e, principalmente, consolidou-se com uma nova metodologia de ensino para o curso técnico em Curtimento (IIZUKA, 2021, p 125).

This experience report allows us to infer that innovation and entrepreneurship, if used strategically, can be great allies of education in facing evasion. In the treated experience, effective results were obtained, because in fact the evasion was reduced. It was possible to identify that the teaching practice can engage acts of entrepreneurship and innovation and, in fact, be a strategy against school dropout.

5 DISCUSSION OF ENTREPRENEURIAL AND INNOVATIVE PEDAGOGIC ACTIONS AT IFPI - CAMPUS PARNAÍBA

After understanding the role of entrepreneurship and innovation as teaching tools in the search for minimizing the effects of school dropout, it is necessary to analyze "if and how" the IFPI - Parnaíba campus, has used these tools in its extension projects.

This analysis was carried out through documentary research, through the Extension Coordination, which is the sector responsible for monitoring the planning and execution of Extension educational projects proposed by the institution's servers.

The analyzed projects were developed in 2021, at the IFPI - Parnaíba campus and were classified into three categories: entrepreneur, innovative and others, as described in Table 1 below:

- **Entrepreneur:** projects that seek to make education more meaningful and motivating for students through the development of creative and proactive actions; use the resources available in the school community in a different way than is already usual. That is, when the institution finds within itself an opportunity to bring something different to teaching, such as the recreation of learning environments and the search for new ideas.
- **Innovative:** projects that seek to build something new or improve what already exists in the institution, with a view to bringing something new to the educational process. Thus, a project is classified as innovative when it proposes something that is not yet part of the institution's daily life.
- **Others:** projects that apply to different purposes, having as main focus the social, cultural, etc., not directly related to teaching/learning.

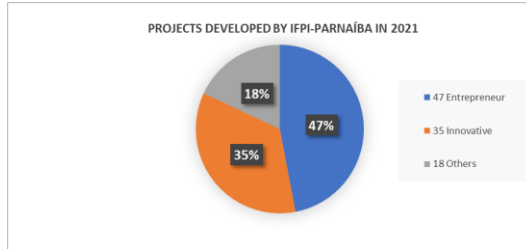
Table 1- Extension projects that were developed in 2021.

| IFPI - PARNAIBA EXTENSION PROJECTS DEVELOPED IN 2021 | | | | | |
|--|---|----------------------------|------|------|-----|
| | PROJECT IDENTIFICATION | VALIDITY | ENTR | INNO | OTH |
| 01 | EDUCATIONAL ROBOTICS, PREPARING ROBOT IN SCHOOL | 16/01/2021 A 22/09/2021 | | X | |
| 02 | OLYMPICS AT SCHOOL, TOWARDS OBI | 02/03/2021 A 31/08/2021 | X | | |
| 03 | 5th FTCC (CIVIL CONSTRUCTION TECHNOLOGY FAIR) | 01/04/2021 A 24/11/2021 | | X | |
| 04 | PARNAIBA SCHOOL GAMES: PREPARING FOR COMPETITIONS CONSIDERING PLAY AND CITIZENSHIP | 03/04/2021 A 02/10/2021 | | X | |
| 05 | "D" DAY OF BUILDINGS | 14/06/2021 A 14/06/2021 | X | | |
| 06 | LANGUAGE AND ITS VARIETIES IN INTERDISCIPLINARY TEACHING. | 20/06/2021 A 31/07/2021 | X | | |
| 07 | DEVELOPMENT OF TEAMWORK THROUGH ELECTRONIC GAMES. | 31/07/2021 A 20/12/2021 | X | | |
| 08 | I INCLUSIVE TEA (SPECIAL EDUCATION: KNOWLEDGE AND PRACTICES) | 01/08/2021 A 20/09/2021 | | | X |
| 09 | INTERCLASS PING PONG INTEGRATOR | 31/08/2021 A 08/12/2021 | | | X |
| 10 | EDUCATIONAL ROBOTICS AS A TEACHING TOOL | 01/11/2021 A 31/01/2022 | | X | |
| 11 | TEACHING CHEMISTRY AND PRODUCTION OF SOAP FROM DISPOSED OILS: EDUCATION FOR CITIZENSHIP | 01/11/2020 A 31/01/21 | X | | |
| 12 | ASTRONOMY AND COMMUNITY | 01/11/2021 A 28/02/2022 | | X | |
| 13 | THE CONSTITUTION IN SCHOOLS | 01/11/2021 A 10/11/2021 | X | | |
| 14 | III SARIFPI- A LOOK AT THE LITERATURE OF PIAUIENSE EXPRESSION | 01/11/2020 A 31/01/2022 | | X | |
| 15 | ARTISTIC DOING IN THE TEACHING-LEARNING PROCESS: THE FORMATION OF MUSICAL BANDS AT IFPI-PARNAÍBA | 01/11/2021 A 01/11/2021 | X | | |
| 16 | INTERNATIONAL DAY FOR NON-VIOLENCE AGAINST WOMEN - YEAR III: DISCUSSING TYPES OF VIOLENCE AGAINST WOMEN | 20/11/2021 A 27/11/2021 | | | X |
| 17 | CONTRIBUTIONS OF CONTINUING EDUCATION IN CHEMISTRY TEACHING | 04/12/2020 A 31/08/2021 | X | | |
| 18 | EDUCATIONAL ROBOTICS, PREPARING ROBOT IN SCHOOL | 16/01/2021 A 22/09/2021 | | X | |

Source: prepared by the authors.

In 2021, 17 extension projects were developed, 8 of which were entrepreneurs, 6 innovators and 3 projects classified in other categories. Therefore, answering the initial questions of this research, the IFPI – Campus Parnaíba, uses entrepreneurship and innovation in its educational process.

Graph 1 - Extension projects developed by IFPI-Parnaíba in 2021



Source: prepared by the authors.

Taking these data into account, it is believed that entrepreneurship and innovation, when placed as tools for the development of an institution's teaching, follow the path of an education permeated by "methodologies of active, innovative and transformative practices" (GUIMARÃES E LIMA, 2016, page 46). In addition, entrepreneurial and innovative actions have the potential to guide the provision of an education that keeps up with the world's news, that is proactive and that makes students feel up-to-date and fulfilled in their learning and that can be an effective tool in the face of reality of the dropout school (SANTOS, 2019; and, XAVIER, PIRES and SERUFFO, 2019).

The projects analyzed and presented through Table 1 and Graph 1 reflect the nature of the teaching developed by the teachers of the IFPI - Campus Parnaíba, making it possible, in view of the analysis, to identify that entrepreneurship and innovation, in fact, are part of the process of teaching and learning of the institution. And, if entrepreneurship (47%) and innovation (35%) were placed as a single category, as education tools, there is a total corresponding to 82% of institutional extension projects.

6 FINAL CONSIDERATIONS

This work was able to reveal through the scientific literature, how entrepreneurship and innovation can be used by teachers to reduce the impacts caused by school dropout. According to the information obtained through this research, it was possible to conclude that entrepreneurship and innovation can, in fact, be teaching tools in dealing with school dropout. This can be seen through the experience report presented in section 4.3, in which there was, on the part of a teacher, the intention to combat dropout through entrepreneurial and innovative actions, resulting in the effective reduction of

school dropout. In addition, it helped to understand that teachers have the potential to develop an education that undertakes and innovates, making the educational process something attractive for the student through new dynamic methodologies, of proactive teaching inside and outside the classroom, with all didactic possibilities.

Regarding the institution under analysis, the IFPI - Parnaíba campus, it was possible to identify, through the Extension projects developed in the year 2021, that the entrepreneurial and innovative spirit are linked to the teaching-learning process of this institution. The Campus Parnaíba Extension projects demonstrated that entrepreneurship and innovation together account for 82% of the projects.

It can, therefore, be concluded that the institutional management of both the IFPI - Parnaíba campus, as well as any other institutions that also suffer from the problem of school dropout, should encourage teachers to invest in the use of entrepreneurial and innovative actions as a way to combat school dropout, in offering a motivating and interesting education.

It was also concluded that the potential of these tools in the fight against dropout lies in the fact that they have the possibility to develop active methodologies and innovative actions, which lead the student to feel truly integrated in the educational act, thus making the educational process more dynamic, interesting and motivating.

The world is constantly changing and advancing, and education cannot ignore these changes and offer a retrograde teaching model. On the contrary, education today has the great challenge of keeping up with the world's advances and bringing to the classroom all the attractiveness that makes the student interested in staying there and developing as a learner. At this point, it is worth emphasizing the need for awareness on the part of teachers, institutional management and the school community about the importance of what it is to undertake and innovate for the educational process.

REFERÊNCIAS

- BAGGIO, A. F., Baggio, D. K. **Empreendedorismo: conceitos e definições**. Revista de Empreendedorismo, Inovação e Tecnologia, 1(1): 25-38, 2014 - ISSN 2359-3539. Disponível: <https://seer.imes.edu.br/index.php/revistas/article/view/612/522>. Acesso: 12 abr 2022.
- DIAS, Maiklele Roloff; BOSSI, Tatiele Jacques. Fatores Associados ao Fracasso Escolar no Ensino Médio: Análise de Teses/Dissertações. **Revista de Psicologia da IMED**, v. 13, n. 1, p. 194-211, 2021.
- DORE, R.; LÜSCHER, A. Z. **Permanência e evasão na educação técnica de nível médio em Minas Gerais**. Cadernos de Pesquisa, São Paulo, v. 41, n. 144, p. 772-789, set. 2011.
- DRUCKER, **Inovação e Espírito Empreendedor**, Editora Pioneira, São Paulo, 1987.
- DRUCKER, P.F. **Inovação e Espírito Empreendedor**. São Paulo: Entrepreneurship, 2005.
- GIL, Antonio Carlos. **Como elaborar projetos de pesquisa**. 4. ed. São Paulo: Atlas, 2008.

Alcemir Horácio Rosa, Daniel Nascimento e Silva– **Entrepreneurship and innovation as pedagogical tools to control school evasion: teachers' strategic practices**

- GUIMARÃES, J. C.; LIMA, M. A. M. **Empreendedorismo Educacional: Reflexões para um Ensino Docente Diferenciado**. Revista Pensamento Contemporâneo em Administração, v.10, n. 2, p. 34-49, 2016.
- IIZUKA, Edson Sadão. **Experiências inovadora de ensino e aprendizado - Prêmio FEI Inova Paula Souza: 1ª Edição 2014-2015**. São Paulo: Centro Universitário FEI, 2015.
- JOHANN, C. C. **Evasão escolar no Instituto Federal Sul-Rio-Grandense: um estudo de caso no campus Passo Fundo**. Dissertação (Mestrado em Educação) – Universidade de Passo Fundo, Passo Fundo, 2012.
- LOPES, Rose Mary A.(org). **Educação empreendedora: Conceitos e modelos**
- MEIRA, Cristiane Araújo. **A evasão escolar no ensino técnico profissionalizante: um estudo de caso no campus Cariacica do Instituto Federal do Espírito Santo**. Dissertação (Mestrado). Instituto Federal do Espírito Santo Vitoria, 2015. Disponível em: <http://portais4.ufes.br/posgrad/teses/tese_9068>. Acesso em: 20 fev, 2018.
- NASCIMENTO-E-SILVA, D. **Manual do método científico-tecnológico**. Florianópolis: DNS Editor. Organização: Maria Salete F. Aranha. Brasília: MEC/ SEESP, 2019.
- NUNES, Larissa Malaquias. **Educação EJA: desafios encontrados para permanência e conclusão dos estudos de alunos da educação de jovens e adultos**. 2021.
- OCDE. **Manual de Oslo: diretrizes para coleta e interpretação de dados sobre inovação**. 3. ed. Brasil: FINEP, 2006.
- OLIVEIRA, Leidemar Barros. **A Educação Técnica Profissional como estratégia da Secretaria de Educação (Seduc) para minimizar a evasão no ensino médio paraense**. Dissertação de Mestrado, Flacso Brasil. 2021. práticas. Rio de Janeiro: Elsevier, 2010.
- QUEIROZ, Lucileide Domingos. **Um estudo sobre a evasão escolar: para se pensar na inclusão escolar**. Associação Nacional de Pós-Graduação e Pesquisa em Educação (Anpad), v. 3, 2011.
- ROSA, Alcemir Horácio. **Formar para a vida ou para o mercado, “eis a questão”**: um olhar profundo sobre a formação profissional ofertada pelo instituto federal do piaui. IN:V encontro internacional trabalho e perspectiva de formação dos trabalhadores, Fortaleza, CE. 2017.
- RUMBERGER, R. W. Introduction. In: **DROPPING out: why students drop out of high school and what can be done about it**. Cambridge, Mass: Harvard University Press, 2011. p. 1-19.
- SALES, P. E. N.; CASTRO, T. L.; DORE, R. **Educação profissional e evasão escolar: estudo e resultado parcial de pesquisa sobre a rede federal de educação profissional e tecnológica de Minas Gerais**. In: COLÓQUIO INTERNACIONAL SOBRE EDUCAÇÃO PROFISSIONAL E EVASÃO ESCOLAR, 3., 2013, Belo Horizonte. Belo Horizonte: Rimepes, 2013.
- SANTOS, Lucinea dos. **A problemática da evasão dos alunos da EJA nas escolas públicas de Santo Amaro (BA) – Bananeiras/PB**. CEGPM Virtual. 2019.
- Santos, Maria Cristina dos. **Inovando a apresentação de trabalhos sobre TGA**, pág. 44. In: GARCIA, M.R.L. Inovação e empreendedorismo na educação. profissional – Experiências pedagógicas registradas. 1ª Edição. São Paulo – SP. 2013.
- SILVA, M. R.. **Causas e Consequências da evasão escolar na Escola Normal Estadual Professor Pedro Augusto de Almeida – Bananeiras/PB**. CEGPM Virtual. João Pessoa, 2011. Acesso em: 17 de ab de 2018.
- SILVA, M. R.; PELISSARI, L. B.; STEIMBACH, A. A.. **Juventude, escola e trabalho: permanência e abandono na educação profissional técnica de nível médio**. Educação e Pesquisa, São Paulo, Nov. 2012.
- SILVA, Tadeu Lucena. **Baixa taxa de conclusão dos cursos técnicos da Rede Federal EPT: uma proposta de intervenção**. Dissertação de mestrado. Universidade Federal de Juiz de Fora. Juiz de Fora: 2013.
- XAVIER, Maria Do Perpetuo Socorro Ramos; PIRES, Yomara Pinheiro; SERUFFO, Marcos Cesar Da Rocha. **Estudo sobre evasão e persistência escolar em EJA por intermédio de inteligência computacional**. Brazilian Journal of Development, v. 5, n. 10, p. 19908-19943, 2019.