Entrepreneurial education in the biological sciences course at Campus VI-UNEB, Caetité-BA

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ABSTRACT

Entrepreneurial education is to develop the entrepreneurial spirit and encourage people to become central actors in the scenario of economic and social changes. This work aimed to analyze the learning instruments within the degree course in Biological Sciences-UNEB, Campus VI that provide students with the development of an entrepreneurial education. The results show that the course presents only one discipline with the methodology focused on entrepreneurial education, however activities that can be worked on to promote entrepreneurial activity in several disciplines were identified. As for the students, they all think entrepreneurial education is important for the Biological Sciences course and some already have experience with entrepreneurship from the family environment. In this context, the Degree in Biological Sciences has some important activities and projects for entrepreneurial education and it is clear that students think that entrepreneurial education is important for the course and for their future professional performance.

Keywords: Education, Biological Sciences, Labor market.

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INTRODUCTION

The job market, with the advancement of technology, has been undergoing a major change in terms of the requirements needed for professionals in the various areas of activity. In this context, professionals must be up-to-date and trained with skills to enter the market. According to Dolabela (2011), entrepreneurial education makes it possible to develop the entrepreneurial spirit, and encourages people to become central actors in the scenario of economic and social changes.

Entrepreneurial Education focuses on the development of students' entrepreneurial capacity, as a tool to support the development of innovative activities.

Historically, the teaching of entrepreneurship was born in the United States, in business schools and spread to several countries (LOPES, 2010). In Brazil, the teaching of entrepreneurship began to be explored in Business Administration courses in the 80s, by the School of Business Administration of the Getúlio Vargas Foundation, in São Paulo (OLIVEIRA et al., 2016).

Entrepreneurship as a field of academic research has been studied by several areas of the humanities and social sciences, such as economics, psychology, sociology and administration (ZAMPIER AND TAKAHASHI, 2011).

Entrepreneurial education is of paramount importance for the training of undergraduates of all courses, as it contributes to students having new perspectives on the development of educational instruments, new companies and consequently new jobs.

The Degree in Biological Sciences is one of the courses that provides several opportunities in the job market, however some of these require the professional to have entrepreneurial skills. We have as an example the work as speakers and consultants, which differs from the professional who has passed the exam, because they are constantly looking for opportunities. In this context, it is a challenge for these institutions to include the teaching of entrepreneurship as part of all higher education courses offered, regardless of the area of knowledge (SEBRAE, 2018).

The inclusion of the theme of entrepreneurship in higher education has also caused confusion both due to educational issues related to curricula and teachers, as well as due to adherence to the values and demands of the labor market (SOUZA AND SARAIVA, 2010).

Entrepreneurial education is essential for undergraduate students in Biological Sciences to accumulate the necessary entrepreneurial skills so that, after completing the course, they can take advantage of the job opportunities that may arise. An example of this would be the creation of opportunities to undertake in your area, to explore the opportunities manifested by the market. And this makes the concepts of Entrepreneurial Education also different between areas. Therefore, the present work was based on the concept of Dolabela (2011), and the concept of entrepreneurial education is discussed by several authors such as Andrade and Torkamian (2001); Dolabela (2011); Lopes (2010); Zampier and Takahashi (2011); Oliveira et al., (2016); Sebrae (2018); and Amorim

(2018). Entrepreneurial education according to Dolabela (2011) is to develop the entrepreneurial spirit, and encourage people to become central actors in the scenario of economic and social changes.

Educational institutions, as well as universities, are spaces of multiple learning that allow the articulation of scientific knowledge with the generation of products for society, through the pillars of research and extension. In this way, it is an important place for discussion of Entrepreneurial Education, but in Brazil they are not yet references in this theme. And that's why students have been looking for universities less and less when they want to train on entrepreneurship. However, institutions such as MIT (Massachusetts Institute of Technology) is recognized as an institution with a strong entrepreneurial culture and this has brought fantastic results to the academic population and to the country as a whole (SOUZA, 2017). Studies have identified that in 2014 more than 30 thousand companies were founded by former students of this institution and generated a GDP (Gross Domestic Product) higher than that of Brazil in Endeavor (2015).

In addition, as a teaching degree course, it is necessary for future teachers to enable an entrepreneurial education in basic education, as recommended by the LDB (2017). According to the Law of Guidelines and Bases of Education - LDB (FEDERAL SENATE, 2017), basic education aims to develop the student, ensure him the common training indispensable for the exercise of citizenship and provide him with the means to progress in work and in further studies. It also mentions in its article 27 that the curricular contents of basic education will also observe guidelines, among which the orientation to work is mentioned.

In this context, the present study sought to identify the entrepreneurial education in the undergraduate course of the Degree in Biological Sciences of the State University of Bahia through the analysis of the entrepreneurial profile of the students, to identify training learning instruments within the degree course that can provide students with the development of entrepreneurial characteristics and an innovative creative behavior.

Thus, the general objective of this study is to analyze the learning instruments within the degree course in Biological Sciences (UNEB - *Campus VI) that provide students with the development of an entrepreneurial education, and as specific objectives: to identify the course documents (syllabus, disciplines, internships and projects) and to describe which instruments on entrepreneurial education exist within the Biological Sciences course; and to identify the perception of the students in the Biological Sciences course. students of the course on entrepreneurial education.*

ENTREPRENEURIAL EDUCATION

Entrepreneurial Education is a possible proposal to train entrepreneurial individuals, capable of facing difficulties and overcoming the great challenges of the economy, of a globalized and competitive world.

The changes in the world economic scenario influence the labor market, which has been demanding professionals with particularity and capacity that were not necessary before. Therefore, the importance of entrepreneurial education in the curriculum of the various courses in higher institutions is noted. Entrepreneurial Education enables the formation of a subject who knows his potentialities and weaknesses, his skills and competences, capable of creating, standing out and facing the social and economic reality, that is, who can face and create different ways to guarantee his subsistence (DOLABELA, 2003).

According to Tavares et al., (2013), entrepreneurial education equips the student to make their choices and contribute to the strengthening of their life project. It is the preparation of young people to participate in the construction of social development. Also according to this author, this education develops skills and competencies in young people, strengthening their freedom, in order to decide about their own future.

Entrepreneurial training, which is already considered a priority in many countries, has been gaining importance even in Brazil, where schools and universities are increasingly concerned with the creation of specific entrepreneurship courses and subjects (AMORIM, 2018).

The challenge of entrepreneurial education is to overcome domesticating education, which is hegemonic within educational institutions, which in some cases consolidates an environment that is infertile for the development of creative, innovative, and entrepreneurial subjects (LOPES, 2017).

> Entrepreneurial Education is the process that aims at the development of the human being in the context of the identification and use of opportunities and their subsequent transformation into reality, which contributes to the generation of financial, social and cultural values for society (ANDRADE AND TORKAMIAN, 2001, p.301).

Entrepreneurial education in educational institutions can change the lives of many young people, developing skills and abilities that can generate a source of income and reduce school dropout, as they no longer have to choose between work and studies.

ENTREPRENEURSHIP AND ENTREPRENEURIAL EDUCATION

The field of entrepreneurship can be defined as one that studies entrepreneurs, examines their activities, characteristics, social and economic effects, and the support methods used to facilitate the expression of entrepreneurial activity, (FILION, 1999).

As stated by Tavares et al., (2013), the expression entrepreneurship is best known for characterizing the activity of an innovative person who perceives opportunities in the market, in order to launch a new business, develop products and services. And so Zampier and Takahashi (2011) reinforce the idea that entrepreneurs are commonly identified, especially in relation to characteristics of innovation and recognition of opportunities.

And to understand entrepreneurship in this sense, it is important to understand how entrepreneurs develop their skills. For this, it is also necessary to understand how the entrepreneurial learning process occurs, since the literature has already given and proven sufficient evidence of this interrelationship (ZAMPIER AND TAKAHASHI, 2011).

For Dornelas (2001), Entrepreneurship is the involvement of people and processes that, together, lead to the transformation of ideas and opportunities. And the perfect implementation of these opportunities leads to the creation of successful businesses. Therefore, it can be said that "to undertake is to find your light among so many others, and most importantly, to make it remain shining" (AZEVEDO, 2013).

First of all, entrepreneurship involves the process of creating something new, of value. Second, it requires the devotion, the commitment of time, and the effort necessary to grow the company. And third, that calculated risks are taken and critical decisions made; it takes boldness and courage despite failures and mistakes (DORNELAS, 2001).

METHODOLOGY

OBJECT OF STUDY

This study was carried out with the analysis of course documents and interviews with students in the 9th semester of biology. This course is located at *Campus* VI of the State University of Bahia (UNEB), in Caetité.

> The Teaching Degree Course in Biological Sciences at UNEB, *Campus* VI, Caetité, had its implementation and operation authorized by CONSU/UNEB Resolution No. 288/2004, published in the Official State Gazette on July 23, 2004 and began to operate regularly in 2005.2. The Recognition of the Course was approved at the 699th Session of the Full Council, on March 12, 2013 with a workload of 3,355 hours, 40 annual vacancies, regular offer, face-to-face modality, lasting 08 (eight) semesters (morning) (PORTAL DA UNEB, 2018).

CHARACTERIZATIONS OF THE RESEARCH

A case study was carried out characterized by qualitative and quantitative analysis on Entrepreneurial Education in the Biological Sciences course at UNEB – *Campus* VI. This study was carried out through the analysis of course documents and interviews with students in the 9th semester of biology.

For Yin (2015), a case study investigates a contemporary phenomenon in its real-world context, especially when the boundaries between the phenomena and the context may not be clearly evident. For Trivinos (1987), some authors understand qualitative research as a "generic expression". This means, on the one hand, that it includes research activities that may have specific characteristics.

This research is descriptive, as it describes the point of view of the students of the 9th semester of biology. According to Traldi and Dias (2011), descriptive research seeks to describe a certain phenomenon or a population. This is also a documentary research, because for the elaboration of the work, the course syllabus, sagres, and curriculum were analyzed. This research was also structured with a case study that, according to Gil (2010), is a research modality widely used in the biomedical and social sciences, which consists of a deep and exhaustive study of one or a few objects.

METHODOLOGICAL PROCEDURES

The documents related to the Biological Sciences course were analyzed, including a table of disciplines, syllabus, internships, research and extension projects available on the UNEB website (https://portal.uneb.br/caetite/cursos/biologia/?post_id=3418) and on the UNEB academic portal (http://www.portalacademico.uneb.br/PortalSagres/Acesso.aspx). In these documents, the instruments on entrepreneurial education that exist within the Biological Sciences course were analyzed. In the research, teaching and extension projects, available in the SIP (Integrated Planning System) (https://www.sip.uneb.br/projeto/list) it was identified which ones included entrepreneurship or some derived word in the title. All consultations were carried out on the aforementioned pages until October 2018.

To classify the activities mentioned in the course syllabus, the table by Rocha and Freitas (2014) was used to compare the methodologies that may include Entrepreneurial Education (Table 1).

Table 1 - Main methodologies for Entrepreneurial Education extracted from Rocha and Freiras (2014).

N°	Key methodologies	Description
1	Business Plan Competition	Develop communication, persuasion and strategy skills. Develop the ability to observe, perceive and apply improvements in the quality standard of the plans presented. Encourage the opening of companies through the winning plans.
2	Incubators	Provide the student with space to motivate and create the new company, developing multiple skills, such as leadership, organizational skills, decision-making and understanding the stages of the life cycle of companies. Encourage the strengthening of the network with financiers, suppliers and customers
3	Suggested readings	Provide the student with theory and concepts about Entrepreneurship. Raise awareness of the entrepreneurial act
4	Company games and simulations	Develop the ability to create business strategies, solve problems, work and make decisions under pressure. Learning from your own mistakes. Develop risk tolerance, analytical thinking, intra and intergroup communication.
5	Movies and videos	Develop the ability of critical and analytical thinking, associating the assisted context with theoretical knowledge. Stimulate group discussion and debate of ideas.
6	Product Creation	Develop creativity skills, persistence, innovation and a sense of evaluation.
7	Individual practical assignments	Construction of the ability to apply individual theoretical knowledge, stimulating self-learning. Stimulate the ability to work and self-realization.
8	Individual theoretical work	Construction of the ability to generate individualized knowledge, stimulating self-learning. Induce the process of self-learning.
9	Individualized service	Develop the ability to communicate, interpret, take initiative and solve problems. To bring the student closer to the real daily life lived in small businesses.
10	Application of essay tests	Test students' theoretical knowledge and written communication skills.
11	Company Creation	Transpose the information from the business plan and structure the necessary contexts for formalization. Understand various stages of the company's evolution. Develop the ability to organize and plan operations.
12	Seminars and lectures with entrepreneurs	Transfer knowledge of the experiences lived by entrepreneurs from the perception and creation of the product, opening the business, successes and failures that occurred in the entrepreneurial trajectory.
13	Brainstorming	Building the ability to conceive ideas, prospect opportunities, recognizing them as entrepreneurial opportunities. Stimulate intuitive reasoning to create new combinations of services or products, transforming them into innovations.
14	Focus groups	Develop the ability to test new ideas. Develop the ability to evaluate changes and prospect them as a source of opportunities.
15	Practical group work	Building the ability to act in a team. Develop the ability to plan, divide and execute tasks in groups, to pass and receive constructive criticism. Expand the integration between knowing and doing.

16	Theoretical group work	Building the ability to learn collectively. Develop the ability to research, dialogue, integrate and build knowledge, seek solutions and make value judgments in the realization of the written document.

The existence of methodologies that promote entrepreneurial education based on the study by Leite et al., (2009) was identified and analyzed. For this, the activities were analyzed and classified as to whether or not they existed in the Biological Sciences Degree course.

Questionnaires with open and closed questions were also applied to students in the 9th semester of the course (APPENDIX 2). The questionnaire was prepared based on the principles of entrepreneurial education, with thirteen questions, eight open and five closed.

All data were collected on October 5, 2018, through questionnaires applied to thirteen students of the course. Subsequently, the data obtained were tabulated and analyzed.

RESULTS AND DISCUSSION

ENTREPRENEURIAL EDUCATION IN THE DEGREE COURSE IN BIOLOGICAL SCIENCES

Course disciplines that favor Entrepreneurial Education

The Degree in Biological Sciences at the State University of Bahia - (UNEB) *Campus* VI, has an extensive curriculum with fifty-two disciplines, six of which are optional (APPENDIX 1), totaling a workload of 3,475 hours. Among these disciplines, no specific discipline on entrepreneurship was identified in the Biological Sciences course. In addition, the mention of the word entrepreneur, entrepreneurship or any derived word was also not identified in any discipline.

28 types of teaching and evaluation activities were identified (Figure 1) in the course syllabus. 10 of the 16 main methodologies cited by Entrepreneurial Education scholars and organized by Rocha and Freitas (2014) were identified (Table 2). The 28 activities were included in the 10 methodologies, because in some syllabi they often did not have details about the activities and, in addition, many activities were included in the broader terminologies used by Rocha and Freitas (2014).

Figure 1- Activities identified in the syllabus of the disciplines of the Degree in Biological Sciences - UNEB: *Campus* VI.

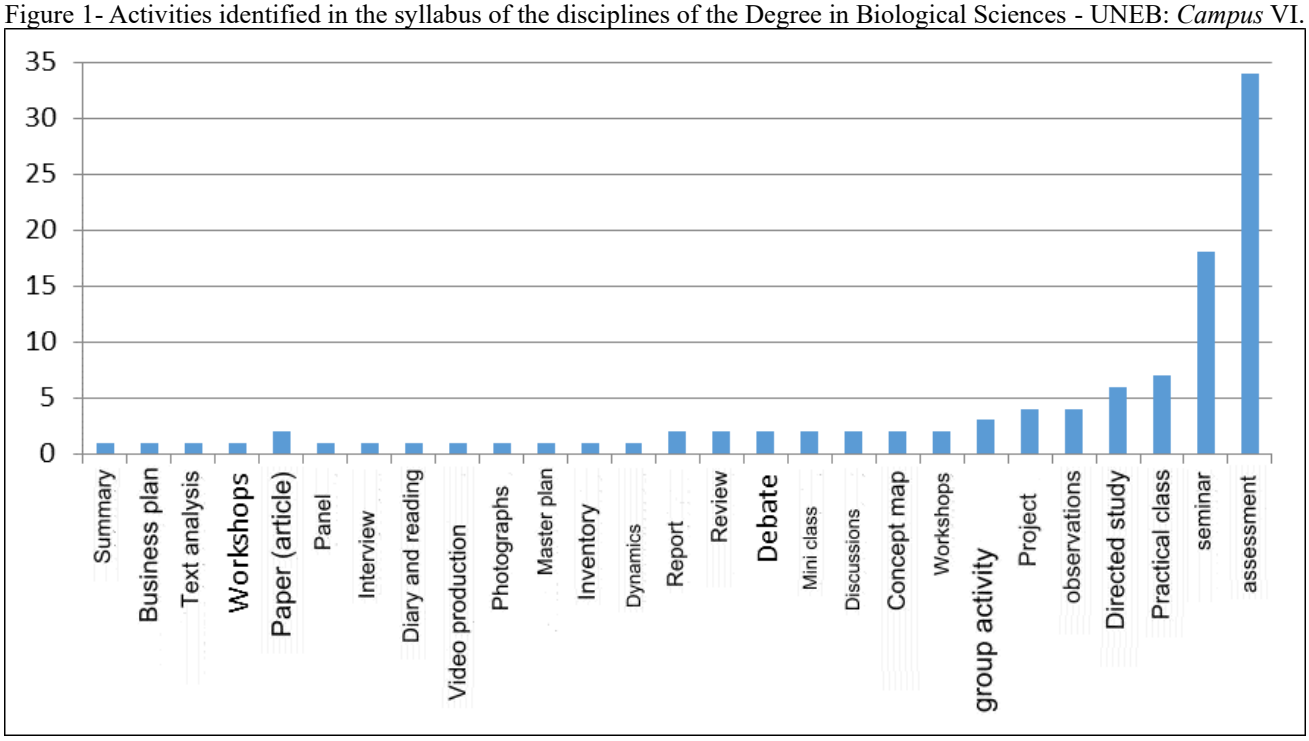

Table 2 - Activities that favor Entrepreneurial Education in the syllabus of the disciplines of the Degree in Biological Sciences - UNEB: *Campus* VI compared to the table made by Rocha and Freitas (2014).

N°	Main methodologies cited by Rocha and Freiras (2014)	Activity identified in the Biological Sciences course (UNEB-Campus VI)
1	Business Plan Competition	Business Plan
2	Incubators	Not identified
3	Suggested readings	Paper, Text analysis.
4	Company games and simulations	Not identified
5	Movies and videos	Video Production
6	Product Creation	Not identified
7	Individual practical assignments	Master plan, group activity, Workshops, seminar, Practical class, observations, Directed study, Mini class, Dynamics, Inventory, Photographs, Diary and reading and Interview, Panel.
8	Individual theoretical work	Group Activity, Concept Map, Project, Inventory.
9	Individualized service	Not identified
10	Application of essay tests	Review, Report, evaluation.
11	Company Creation	Not identified
12	Seminars and lectures with entrepreneurs	Not identified
13	Brainstorming	Not identified

14	Focus groups	Debate, Discussions, Workshops.
15	Practical group work	Master plan, group activity, workshops, seminar, practical class, observations, Directed study, Mini class, Dynamics, Inventory, Photographs, Interview, Panel.
16	Theoretical group work	Group Activity, Concept Map, Project, Inventory.

The methodologies of Incubators, Business Games and Simulations, Product Creation, Individualized Service, Company Creation, Seminars and Lectures with Entrepreneurs and Brainstorming were not identified in the menus. However, it is worth noting that the six activities that were not identified may be carried out by the professors responsible for the disciplines, but are not explained in the syllabus. Therefore, a more in-depth study with the professors of the course would be necessary.

The methodology that had the highest occurrence among the disciplines was individual and group practical and theoretical work. However, some activities were repeated between these four methodologies, because it was not explicit in the course plan whether they were individual or group. Figure 1 shows that only three disciplines mention group activities in their syllabus. The disciplines were General Ecology, Pedagogical Practice IV, and Cellular and Molecular Biology.

Group activities favor the creation of important skills for the professional future. The group activity seeks to develop responsible collective work skills and verbalization skills, so that students learn to express themselves and defend their points of view (LIBÂNEO, 2013).

Practical classes (4), directed studies were also mentioned in four disciplines, Cellular and Molecular Biology, Biophysics, Biostatistics, and Plant Physiology. These methodologies favor the application of the theoretical content studied, which can enable Entrepreneurial education as long as they take into account the student's training for their future professional performance.

The methodology of observations and projects was cited by four disciplines, Research Project II, Paleontology, Pedagogical Practice and Supervised Internship I and II.

There are some activities that were identified only in one discipline, such as: the discipline "Reading and Text Production Laboratory" used the Reading Diary as an evaluation; Video and photo production in "Laboratory of Reading and Image Production"; the paper in "Research Project I"; Inventory in "Biology of Chordates"; and workshop on "Comparative Animal Physiology". These activities can favor entrepreneurial education through the development of students' skills, abilities, and creativity. This can be a means of discovering talents and later improving to become a source of income, such as the use of photography in marketing.

Application of essay tests was mentioned and included the activities of review, report and evaluation. This methodology is important because we live in a literate society, in which writing is

one of the main instruments of communication. It was identified in the disciplines of Supervised Internship II, Paleontology, Education and Playfulness, Bioethics, Comparative Animal Physiology, Entomology, General Ecology, Plant Physiology, Microbiology, Chordate Biology, Fungal Biology, Biostatistics, Genetics and Evolution, Plant Systematics, Invertebrate Biology I and II, Venomous Animals, Libras, Pedagogical Practice III, Plant Anatomy and Organography, Developmental Biology, Genetics, Environmental Education, Pedagogical Practice II, Plant Biology I, Biology of Protoctists, Biochemistry, Phylogenetic Systematics, Biophysics, Afro-Brazilian and Indigenous Culture, Reading and Text Production Laboratory, Epistemology of Sciences, Cellular and Molecular Biology, Physics Topics, and Fundamentals of Chemistry.

Discussion group was mentioned in the disciplines Pedagogical Practice III, Pedagogical Practice and Supervised Internship I, and Comparative Animal Physiology, with the activities of Debate, Discussions, and Workshops.

Films and videos were mentioned in the discipline Laboratory of Reading and Production of Images with the activity of video production. These audiovisual activities help in the development of students in their skills.

The methodology of Business Plan Competition was identified in the Biotechnology discipline. In this discipline, the preparation of a business plan is used as an evaluation methodology, which is the simplest and best structured way to evaluate whether an activity of production and sale of goods or services is economically viable, to the point of satisfying your desire as an entrepreneur and becoming a small, medium or large entrepreneur (MOREIRA, 2017).

The methodology of Reading suggestion was identified, however, it was not possible to verify if they were readings that can promote the student's training in the concepts of Entrepreneurship. To identify this aspect, it would be necessary to analyze the articles and texts used in each discipline. This is because, according to the concept of Rocha and Freiras (2014), this methodology will promote Entrepreneurial education if the content of these reading materials promotes the student's training in the concepts of Entrepreneurship.

However, any methodology can be worked on to achieve the objectives of Entrepreneurial Education, as long as they take into account its principles. Different methodologies and resources can be found in the literature to help teachers promote Entrepreneurial Education (GIOVANELA et al., 2010; BOYLES, 2012; EUMUTI et al., 2012).

All evaluation activities should favor the intellectual, social and moral development of students, and aim to diagnose how the school and teachers are contributing to this (LIBÂNEO, 2013). In the labor market, professionals are evaluated in terms of qualification and their technical and human skills, and therefore schools and universities must be prepared to train students for their

future professional performance (MURAD, 2017). The European Commission report (2012) cited by Lopes (2017) states that,

> The main objective of entrepreneurial education is to develop entrepreneurial skills.
> 1-Stimulate attitudes and skills such as initiative, creativity, risk-taking, independence, self-confidence, planning and achieving goals, among others, which are basic to the entrepreneurial mentality or behavior.
> 2- To expand students' awareness of career possibilities as self-employed (self-employment) and entrepreneur.
> 3- Use practical methodologies in which students engage in projects or activities outside the limits of the educational institution, linking them with the local community or the business world.
> 4- Develop basic business skills, knowledge about how to open and develop commercial or social activities and equip students.

The job market usually evaluates creativity, attitude, relationship, respect and proactivity. However, with the traditional methodology, the student is a passive subject, where the teacher explains in an expository class and the student listens. However, the market evaluates attitude, skill and competence in professionals, so it is necessary to think of learning strategies that favor these skills, such as active learning.

In active learning, students have the opportunity to engage in activities that require more than listening, performing actions aimed at developing their skills (MATTOSOGLIO AND SOSTER, 2017). The new methodology brings students a better education for the professional future, as it develops their skills and competence that enables the student to stop being a passive subject and become active and reflective.

RESEARCH AND EXTENSION PROJECTS THAT FAVOR ENTREPRENEURIAL EDUCATION

144 research, teaching and extension projects were identified on *Campus* VI registered in the SIP (Integrated Planning System) system. Of these projects, only the one entitled "Entrepreneurial Biologist: an action inside and outside the classroom" mentions a word in the title derived from entrepreneurship. This project is registered with the institution with the following code DCHVI-3.

In addition, the presence of activities that favor entrepreneurial education in the course was also analyzed according to table 3, based on the study by Leite et al., (2009). Of the five activities listed in table 3, two were not identified in the course. No workshops for business games and business incubator programs were identified. According to Lacruz (2004), business games represent a dynamic educational technique developed to provide players with a remarkable and playful learning experience as a bridge between academia, past experiences and the business environment. Business incubators are a space in which a set of instruments and policies is made available to the business units installed in them that aim to assist their development (RAUPP AND BEUREN, 2009).

Table 3 - Activities identified in the Biological Sciences course at UNEB - *Campus* VI that promotes Entrepreneurial Education based on Leite et al., 2009.

ACTIVITY	There is no	Exists
Junior Company		X
Scientific Initiation, teaching and extension with themes on Entrepreneurial education (cites entrepreneurship)		X
Business Incubator Program	XX	
Workshops (business games)	XX	
Lectures on entrepreneurship		X

The three activities identified were the presence of Junior Enterprise, Extension Projects on Entrepreneurship and Lecture on Entrepreneurship. These three activities are carried out by the Singulatha Junior Enterprise team, which is located on *Campus* VI of UNEB and is linked to the collegiate of the Biological Sciences Course. This company promotes entrepreneurial training actions for students and has an extension project registered with the institution "Entrepreneurial biologist: an action inside and outside the classroom".

> It is possible, with the methodology used by universities, to increase students' awareness of entrepreneurship, providing the tools to identify and value their opportunities and qualities, and, fundamentally, to be able to encourage students to believe in their potential, to dream big and to make dreams come true (LEITE, 2009, p.8).

The Junior Enterprise of Biology – Singulatha is a non-profit company developed within the university (UNEB – *Campus* VI) by undergraduate students and professors where they develop projects and receive training for social life and the job market. As Pimentel (2008, p.115) states,

> Junior Enterprise is a non-profit civil association, constituted and managed exclusively by undergraduate students from colleges or universities, in which it is inserted, provides services and develops projects for companies, entities and society in general in its areas of activity, always under the supervision of professors.

According to Ziliotto and Berti (2012), the Junior Enterprise offers students the possibility of occupying organizational functions similar to those they will dedicate themselves to in their professional future. In addition, there is an exchange of knowledge with the companies to which they provide services.

It is of fundamental importance that there is a relationship between the university and junior companies, as this is a space to develop skills and competencies for participants and the academic community. The Junior Enterprise of Biology - Singulatha over these five years of existence has been developing within *Campus* VI projects, events and training courses for students and employees.

Over these five years, EJ offered students three projects, four lectures, and thirteen courses. One of the first works developed was the project "Management plan and medicinal plants in the

surroundings of the Alto sertão wind farm", where the students of the Biological Sciences course, administrators of the EJ, with the supervision of professors, carried out a management plan. This work contributed to the students obtaining a greater knowledge about endangered species and also the technique of handling medicinal plants. According to Silva (2017), the consulting projects are prepared in partnership with the advising professors, which enables contact with professionals who already have experience in the area. It also contributes to students obtaining experiences for the job market, as they will experience in practice how to carry out a management plan. A social project "All for the AEDS aegypti" was also developed, where detailed information about this transmitter was worked on.

Subsequently, projects were developed with a focus on the environmental area, which had as its theme "Environmental management of UNEB - *Campus* VI", where aspects such as energy efficiency, water efficiency, and solid waste were worked on. This project contributed to the development of students, instigated them to think critically about environmental problems and was also a professional consulting experience.

The EJ also promoted lectures thus helping students to acquire greater knowledge about the area of activity of a professional Biologist, through lectures entitled "Professional performance of the Biologist in consulting", "Lecture with Junior Enterprise of Administration of Guanambi-UNEB Campus XII", "Lecture of the Entrepreneurial Biologist Project", and "Day of the biologist (CRBIO speaker)".

In addition, Singulatha has been training junior entrepreneurs with courses in "Environmental management consulting and consulting in the analysis of plant diversity (flora)" and thus enabling students to develop work for other companies in the region. According to Silva and Cavalcante (2017), junior consultants learn strategies related to corporate sustainability, in addition to developing the teaching/learning, extension, research and professional improvement side.

Courses such as "Administrative routines", "How to budget a project", "Personal marketing", "Introduction to environmental management", "Professional experiences of former students of the biological sciences course", "Innovation management: a brief introduction", "Analysis of administrative staff competencies", and "Consulting for the preparation of CAR/CEFIR" were also offered.

These courses are of paramount importance, because to become an excellent professional or a successful entrepreneur, it is necessary to develop knowledge, skills, competence and innovation, to know how to behave in a work environment, and with appropriate clothing.

The EJ also offered the following courses to the students of *Campus* VI: "How to carry out consultancy with birds", "Importance of the quality of soil health for the environment", "Bat ecology: from conservation to the job market", "Introduction to the use of GPS" giving them the opportunity

to obtain qualification for the curriculum, in addition to the knowledge acquired to later use as a tool to enter the job market.

> The biology junior enterprise contributed to the students' professional lives, with skills developed when they participated in it, such as public speaking, entrepreneurial training, solving environmental problems and group work, professional experience, enriching the curriculum, and acquiring new knowledge (SILVA, 2017, p.32).

THE STUDENTS' PERCEPTION OF THE COURSE

Most of the interviewees answered that entrepreneurial education is "Developing the entrepreneurial spirit, encouraging people to become central authors in the scenario of economic and social changes". Only 8% answered that it is an act or effect of managing and another 8% said it is a study of the reciprocal relations between man and his moral, social, and economic environment. We can observe that a large part of the public answered the correct statement, this shows that most know what an entrepreneurial education is.

The issue cited by the majority is right, because as stated by Tavares et al., (2013), entrepreneurial education refers to equipping the student to make their choices and contribute to the strengthening of their life project, it constitutes the preparation of young people to participate in the construction of social development.

Upon finishing graduation, 53% say they intend to pass a civil service exam, 15% do a master's degree, 15% want to open a company and the other 15% work in a company. Half of those questioned intend to be a civil servant, this makes us reflect, that people do not want to take risks, they want something that gives stability, even knowing that they can go further. This, according to Dolabela (2011), is the "employee syndrome", the sufferer needs someone to create a job for him.

Regarding graduation, when asked if they had any discipline or activity that worked with entrepreneurial education, 92% said yes and 8% informed no. All those who reported that they learned about entrepreneurial education in their undergraduate studies mentioned the Biotechnology discipline. In fact, this discipline has a methodology aimed at entrepreneurial education according to the course syllabus, as mentioned above in the previous topic of this study. Silva et al., (2017), state that although the growth of entrepreneurship courses in higher education is good news, the offers are still timid in terms of the number of disciplines on the subject, which are, in most cases, elective. This was also what happened in the Biological Sciences Degree course studied. The Biotechnology discipline is an optional course for the course.

When asked if they think entrepreneurial education is important for the Biological Sciences course, they all answered yes. In fact, it is important, as Dolabela (2011) states: "The learning of entrepreneurial content is fundamental in all courses in all areas of knowledge". When asked if they

have already carried out any entrepreneurial action, 23% say they have already started a company, 15% have been a reseller, 7% are a consultant for a brand, 58% have marked as others.

> It is not possible to attribute the cause of mortality to a single factor, but rather to a combination of factors in four major areas: the situation of the entrepreneur before opening, business planning, training in business management, and the management of the business itself (DATASEBRAE, 2018).

The reseller is usually called a sales consultant who demonstrates and explains the products individually and has a profit margin in direct sales and a score that will be the basis for calculating the bonuses (PATROCÍNIO, 2018).

Most of those questioned, 78%, have someone in the family who is an entrepreneur such as "aunt, sister-in-law, father, cousin, sister and husband", and only 23% do not. According to Dornelas (2008), the heir entrepreneur learns the art of entrepreneurship with family examples and usually follows in their footsteps.

Most of the interviewees think that it is possible to teach entrepreneurial education as a teacher of basic education. Only 8% do not think it is possible. According to Silva (2015), teachers will be able to encourage their students to dream about the future without necessarily interfering with the objectives, that is, projecting the adult's dream onto the child or adolescent. But it is possible to verify that the public did not have this contact with entrepreneurial education in basic education, as 92% report not having had contact in basic education with entrepreneurial education, only 8% had this contact. In basic education there is a resistance from teachers to work with entrepreneurial education, because it needs a differentiated methodology, but it is important to use methods to develop the entrepreneurial spirit in children from an early age so that they can be an excellent professional.

Regarding the elements that are not part of entrepreneurial education, 46% answered that it is studying technical concepts without a professional application. 8% say it is to stimulate attitudes and skills such as initiative, creativity, and independence. The other 46% think that it is none of the alternatives. It can be seen that the opinion of the respondents is well divided in relation to the principles of entrepreneurial education.

Most respondents say they do not have a dream, only 15% reported that they do. Those who reported having the dream mentioned the following: "to be fulfilled in the goals I have, striving to follow the goal I planned in the time I stipulated to achieve each goal"; "Owning my own property, I still don't know how"; "Good financial stability, such as: studying and being approved in a public exam"; "Set up a local "home café" for snacks, with 20 thousand reais"; "Grow professionally with my own business with effort and dedication..."; " Pass a public exam, such as: study hard"; "Own a home, such as: studying to pass a public exam"; "To have a master's degree and work in the job

market with good remuneration, such as: dedicating myself, seeking more and more to qualify myself to act in the best way". We can observe several dreams here, and an entrepreneur is an individual who seeks to put his dream into practice, because "the dream can bring the origin and organize a life project, synergistically articulating desires, worldviews, values, and skills" (Silva, 2015, p.32). It can be seen through the answers that some students seek financial instability with a public exam and others intend to continue their studies and specialize.

When asked if they have participated in any project on entrepreneurial education that had any contribution in their professional life, most said no, only 23% participated in "Singulatha". They informed that the participation took place through the realization of projects and discussion on the subject, which instigated the entrepreneurial spirit and gave a notion of how to carry out a consultancy". When asked if they had already participated in any project carried out by the junior company, it was well divided where 46% say they have participated in one of the projects "Environmental management", or "Technique of methods of capturing birds", and 54% did not participate. The importance of a Junior Enterprise in entrepreneurial education is perceived, as there is "development of important skills and competencies for the professional future of students" (SILVA AND CAVALCANTE, 2017, p.67).

CONCLUSION

We conclude that this work was fundamental to know if there is entrepreneurial education in the undergraduate course in biological sciences and also the students' perception on the subject. It was possible to perceive the lack that the course has, of disciplines focused on entrepreneurial education and it is clear that students think that entrepreneurial education is important for the course. These results demonstrate the importance of entrepreneurial education to instigate the entrepreneurial spirit in students, through activities aimed at the development of skills and competencies, which will later be necessary for them to enter the job market, which is very competitive and it is necessary to have a differential to stand out. Because most students when completing the course do not get a job in the area or with good remuneration. In this context, it is important that undergraduate courses develop important activities to enable students for their professional performance.

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