

International Journal of **Human Sciences Research**

ENTREPRENEURIAL EDUCATION AND INTERDISCIPLINARITY AS TOOLS TO SUPPORT PROFESSIONAL TRAINING

Adriano Carlos Moraes Rosa

Faculdade de Tecnologia de
Guaratinguetá (SP)

Allbert Velleniche de A. Almeida

Faculdade de Tecnologia de
Guaratinguetá (SP)

Bruno Donizette da Silva

Faculdade de Tecnologia de
Guaratinguetá (SP)

Camila Martinelli Rocha

Faculdade de Tecnologia de
Guaratinguetá (SP)

Vanessa Cristina Gatto

Faculdade de Tecnologia de
Guaratinguetá (SP)

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: This research presents a practice worked in a higher technology course in commercial management at a public college located in the State of São Paulo. The objective was to stimulate the exercise of entrepreneurship through the perception in relation to the possibilities of action. The practice allowed theories addressed in the content of the advertising and advertising discipline to be applied to solve problems, allowing the development of important perceptions such as the ability to simulate the structure and processes of an advertising agency and the construction of a model of business that delimited the market of action, persona adherent, monetization, teamwork, leadership and, mainly, to generate entrepreneurship, making the students, in a practical way, perceive their profession in a real way. Using bibliographical and documentary exploratory research and a case study, the activity was built thinking about solving problems and providing motivating activities, and thus, stimulating the development of transversal skills in students. Recognized by the students, the result was the realization of an experience within the professional context in which they will work based on a dynamic, multitasking and interactive behavior, behavior that currently defines the profile of the management student.

Keywords: Learning, entrepreneurship, training, interdisciplinarity.

INTRODUCTION

Interdisciplinarity is understood as a crossing point between disciplinary and interdisciplinary activities with different logics and is commonly based on the search for a balance between the analysis and synthesis of situations. However, there are many studies that point out that there is not a single term to define interdisciplinarity, thus, there are also many authors who present different

interpretations on the subject.

Entrepreneurship, the focus of this research, is explained by its main exponents, as a competence developed by a person when he is able to recognize problems and possibilities for better solutions, that is, to go beyond risks and invest better resources in creating something positive for the whole the society. The study of entrepreneurship brings a new way of thinking, reasoning, interacting, relating, managing and even teaching, therefore reassessing situations regarding the traditional formats of the labor market. Proposing in the classroom the possibility of making the student realize that this scenario is changing and that he must understand his surroundings in order to be able to differentiate himself, is fundamental for the construction of an entrepreneurial profile. Such a process will contribute to citizenship, criticism and the construction of public opinion, as well as the development of conflict resolution mechanisms based on respect for different opinions in multicultural contexts.

The practice of entrepreneurial education, then, takes place through the application of concepts worked on in entrepreneurship (broad, multidimensional vision with a focus on “knowing how to do”), reflective practice and an unpredictable environment (exactly like the market), always involving students in activities and simulations that approach the entrepreneur’s daily life, not forgetting that challenges must be faced with different perspectives in order to create opportunities.

Fostering entrepreneurship and entrepreneurial training in the face of interdisciplinary activities, the Centro Paula Souza or CPS, an autarchy of the Government of the State of São Paulo, linked to the Secretariat for Economic Development, present in several municipalities, managing Technical Schools (ETECs) and Technology Colleges (FATECs). It assumes the role of

researching, generating knowledge, acting and transforming the society in which it operates, using knowledge and exploring new educational possibilities.

Using exploratory, applied, bibliographical and documentary research supported by a case study, this article aimed to prove an interdisciplinary activity (employed in a Faculty of Technology of the CPS) as an effective technique for learning and understanding entrepreneurship. Regarding the results achieved, this practice proved to be an efficient living experience for future professionals in the field of management.

THEORETICAL REFERENCE

This research has its theoretical basis based on: Interdisciplinarity, Entrepreneurship, Entrepreneurial Training, Paula Sousa Center and CPS Colleges of Technology.

INTERDISCIPLINARITY AND ITS CHALLENGES

Jantsch and Bianchetti (2002) present interdisciplinarity as a crossing point between disciplinary and interdisciplinary activities with different logics and, in the search for balance between fractional analysis and simplifying synthesis.

However, for Rojas et al. (2014), there are several studies that point out that there is not a single term to define interdisciplinarity, as some authors have different interpretations. The important thing is to understand how the new attitude towards knowledge can contribute to the unity of thought. For that, it is also necessary to understand some terminological distinctions with five levels of meaning: Discipline is a specific set of knowledge with its own characteristics on the level of teaching, the formation of mechanisms, methods, subjects. And, according to the same authors (ROJAS *et al.*, 2014):

Multidisciplinary is the union

of diverse disciplines, devoid of apparent relationship between them (eg Music+Mathematics+History); Pluridisciplina is the juxtaposition of more or less neighboring disciplines in the fields of knowledge (eg Mathematics+Physics); Interdiscipline is the existing interaction between two or more disciplines, which can range from the simple communication of ideas to the mutual integration of the guiding concepts of epistemology, terminology, methodology, procedures, data and organization related to teaching and research. So, an interdisciplinary group is made up of people who received their training in different domains of knowledge (disciplines) with their own methods, concepts, data and terms. Transdisciplinary, on the other hand, is the result of a premise common to a set of disciplines (Ex.: Anthropology considered as the science of man and his works) (ROJAS, et al. 2014, p. 17).

In Brazil, Hilton Japiassu (1976) is considered one of the pioneers in the dissemination of these concepts that inspired reformulations, adaptations and several transformations in the areas of education and others in its surroundings.

Some challenges for interdisciplinarity were also described by De Oliveira and Moreira (2017) such as very specific and fragmented training of educators, low investments by the state in teacher training, especially in the areas of earth sciences and exact sciences; very closed curricula, elaborated without taking into account the local reality; Excessive workload allocated to the classroom, with no space for other citizenship-building activities.

ENTREPRENEURSHIP

Entrepreneurship can be understood as a skill developed by a person when he is able to recognize problems and possibilities for better solutions. Go beyond risks and better invest resources in creating something positive for all of society. Entrepreneurship can be a

business, a project or even a movement that generates real changes and impacts on people's daily lives (such as an activity in a classroom). The study of entrepreneurship is an explored topic due to the role it plays in the economy (SCHMIDT; BOHNENBERGER, 2009).

As for Hébert and Link (1989), studying entrepreneurship is transiting through theories in the areas of management, anthropology, sociology, psychology. The authors understand that in the conception of the definition are important and significant actions of the business environment, such as: risk management, actions to create a new or existing enterprise, coordination, arbitration, perception of change, allocation of resources, ownership and speculation. And, "being an entrepreneur" for Acs et al. (2018), is to be the one that makes it possible to increase productivity through the introduction and commercialization of technological innovations, thus generating growth in the economy. Developing and acting in your own business, although it is an option in times of economic crisis, does not mean being an entrepreneur.

Entrepreneurship, then, brings with it procedures for creating a new organization, carrying out the stages of discovery, evaluation and exploitation of technological opportunities, allowed as soon as knowledge materializes, since Leibenstein (1968) already recorded that entrepreneurship aims to connect, fill in the gaps, create and fill gaps in markets.

In the Theory of Economic Growth, entrepreneurship was not considered influential in an integral way, however, many economists believe that entrepreneurial capacity is vital for economic progress, as reported by Schumpeter (1997) publishing for the first time in 1911 and, later, by Fillion (1991) in their study. Schumpeter (1997), precursor of the theme, considers an entrepreneur to

be the individual who drives the economy through an innovative business activity. Fillion (1991) also understands that the entrepreneur in the economic system works as an engine, driving growth and development through actions, detecting business opportunities and creating ventures that are associated with innovations.

Other authors, such as Barro and Sala-i-Martin (2004), state that the study of economic growth is a science whose objective is to understand economic performance, making it possible to understand the positive and negative factors that impact the behavior of the economy.

And, for the authors (BARRO; SALA-I-MARTIN, 2004) many theories are focused on the accumulation of different types of capital (physical and human), technological progress, government policies and the evolution of innovation, however, they point out that despite these factors, entrepreneurship has elements within the economic field that are important and essential, in addition to having its own ecosystem and its own dynamics

Casson (1982) also carried out research with subjects who developed entrepreneurial activities and, as a result, these subjects had common characteristics such as having initiative and seeking opportunities, offering novelties to customers, being persistent, taking calculated risks, demanding quality in the business, having commitment, studying hard and always, setting goals, creating monitoring systems, among others.

Condordantes, Hébert and Link (1989) and Alves, Felgueira and Paiva (2018) in their studies point to entrepreneurship as one of the eight key competences for lifelong learning, as learning in this theme allows operationalizing this transversal competence in various contexts educational. For the authors (HEBERT; LINK, 1989; ALVES; FELGUEIRA; PAIVA, 2018) entrepreneurial training works in the

social, cultural, environmental and economic dimensions.

Figure 1 (below) presents the competencies of entrepreneurship in their conceptual areas: resources, operations and processes, based on the work of the authors:

Therefore, it is necessary to consider that the expression “to undertake” is no longer part of the business universe. The expression came to express a set of desired, expected, desired and even demanded attitudes in professional environments, productive of goods and services, for common and shared subsistence and progress. Being an Entrepreneur in various current concepts and practices means “having an attitude”, and this implies discovering yourself and wanting to be a protagonist.

ENTREPRENEURIAL TRAINING

And, so far, the entrepreneur has “yes” a fundamental role. In this context, it is relevant to understand the purpose of entrepreneurial education. The complexity of society means that the role of universities is based on developing professionals able to act in the face of social demands and challenges. The social changes that occur incessantly make organizations need to identify and develop tools that help adapt to the new scenario. Thus, these changes are transformed into challenges and opportunities. Considering the entrepreneur’s abilities and his need to acquire knowledge, it is essential that he participate in a dynamic learning process, identifying his needs to reach his goals (FILION, 1991).

Contributing to the theme, Martino and Marques (2015) talk about the dynamic relationship between knowledge and society with the contribution to participatory and innovative development with the capacity for dialogue and coexistence. The authors also describe the contribution to the formation of a critical citizen, as follows:

These processes will contribute to the formation of a critical citizen and the construction of an informed public opinion, as well as the development of conflict resolution mechanisms based on respect for different opinions in multicultural contexts, where knowledge about their own reality and about the relationship their environment ensures an equitable and sustainable development (MARTINO; MARQUES, 2015, p.10).

A reflection (so far) can be made on the balance between theory and practice. However, the purpose of this research transits between transmitting knowledge and skills, as well as the importance of generating skills. Gatto (2011) states that such a process (balancing theory and practice to generate skills) is to recognize the role of the school, companies, and the government that even with different objectives there are points of convergence either in adding value to goods and services, either in the continuity of scientific and technological development, or even, in the positive effects that this partnership can bring to the national economy and to the well-being of citizens. However, it is important to keep the focus on an education that aims at social development through critical, reflective thinking, in an entrepreneurial attitude, not only in the formation and creation of new companies (not discarding this characteristic as well), but remembering, the role of the entrepreneur in producing and introducing innovations, proposals and different ways of introducing practices, reorganizing resources and producing gains.

It is about the insertion of an active and positively active subject in society. And, with an educational planning with a vision for the concept of entrepreneurship of Schumpeter (1997), who in the work on economic development, explains that this concept occurs through the introduction of new ways of acting on resources with economic gains.

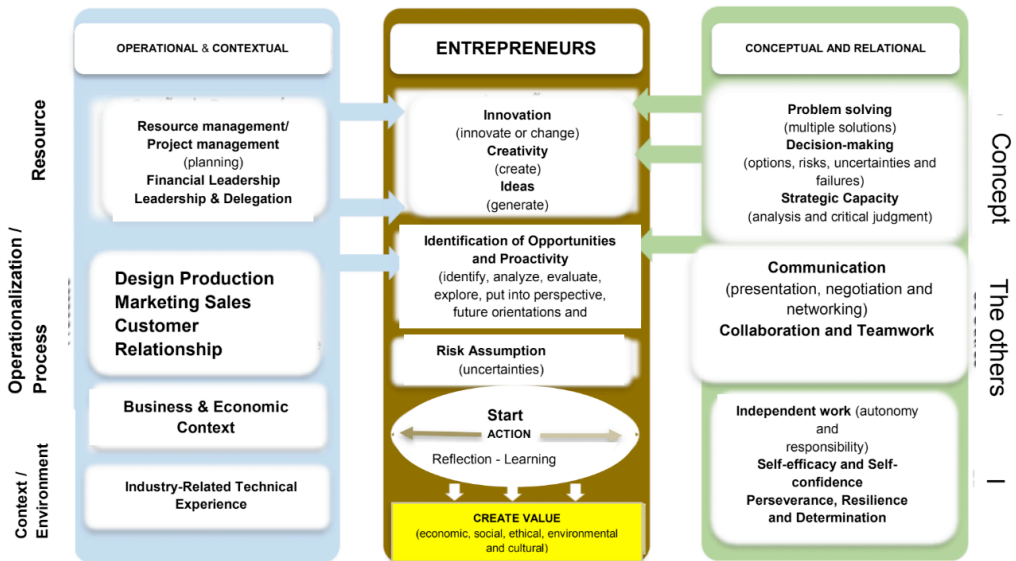


Figure 1 - Entrepreneurial Skills and Their Conceptual Areas

Source: Alves, Felgueira e Paiva (2018)

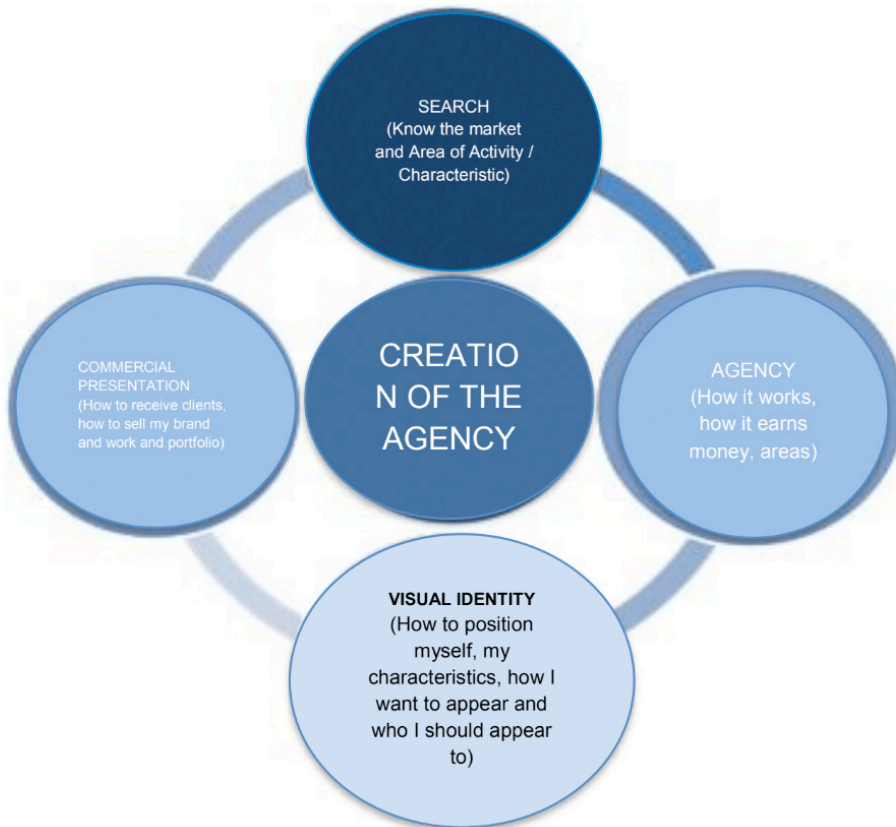


Figure 2 - Phase 1 (Creation of the Agency)

Source: Elaborated by the Authors

Custódio (2010) reinforces that training for entrepreneurship is the construction of knowledge and skills in preparation for starting a business. And, for Neck and Greene (2011), the practice of an entrepreneurial education is in the application of the concepts worked on in entrepreneurship, such as: a broad, multidimensional vision with a focus on “knowing how to do it”, a reflective practice and an unpredictable environment such as like the market, always involving students in activities and simulations that approach the entrepreneur’s day-to-day life, not forgetting that challenges must be faced with different perspectives in order to create opportunities.

THE PAULA SOUZA CENTER AND THE COLLEGES OF TECHNOLOGY (FATECS)

The Centro Paula Souza or CPS is an autarchy of the Government of the State of São Paulo, linked to the Secretariat for Economic Development, SDE, which is present in 369 (three hundred and sixty-nine) municipalities, currently managing 224 (two hundred and twenty-four) Schools Techniques or ETECs and 74 (seventy-four) Colleges of Technology or FATECs, with more than 322 (three hundred and twenty-two) thousand students in technical courses of medium level and higher technological courses. In addition to graduation, the CPS offers postgraduate, technological updating and extension courses. The institution is also recognized as an Institute of Science and Technology or ICT, a non-profit organization of public or private administrations, whose main objective is to create and encourage scientific and technological research. Recognition was given unanimously at a meeting of the Council of Research Institutions of the State of São Paulo (CONSIP), held on September 14, 2021 (CPS. SP, 2022).

The Technology Faculties or FATECs of

the CPS, serve more than 94 (ninety-four) thousand students enrolled in 86 (eighty-six) technological graduation courses, in several areas, such as Civil Construction, Mechanics, Informatics, Information Technology, Tourism, among others (CPS.SP, 2022). Guaratinguetá College of Technology, a higher technological education unit belonging to the CPS, maintained by the Government of the State of São Paulo, was created in 1994, and aims to promote public professional education, offering undergraduate courses in Technology, training Technologists within benchmarks of excellence, aiming to meet social demands and the world of work (FATECGUARATINGUETÁ, 2022).

All courses at the unit undergo updates to always conform to the requirements of the National Catalog of Higher Technology Courses, prepared by the Ministry of Education. It forms an average of 200 students per semester and offers 7 (seven) free higher education courses in the areas of: Systems Analysis and Development; Commercial management; Industrial Production Management; Information Technology Management; Business management; Financial Management and Logistics. All courses stand out for the practice of technological teaching aligned with humanism (FATECGUARATINGUETÁ, 2022).

To promote innovation and entrepreneurship, Inova, the CPS Technological Innovation Advisory (INOVA. CPS, 2022), has the mission of promoting (innovation) policies and coordinating actions aimed at developing partnerships with companies, with the public sector and science and technology institutions. Supporting the management of the CPS, its Superintendence and other Coordination and Advisory Services, Inova also develops actions to streamline teaching focused on research, technology and innovation, thus its mission is

to contribute to increasing the impact of the CPS on the social and economic development of the state of São Paulo.

Among several projects of the institution, the School of Innovators stands out, an extension course in entrepreneurship that aims to provide basic tools for Entrepreneurship and Innovation, providing a creative and digital environment for participants to train and develop their business models (INOVA. CPS, 2022).

METHODS AND TECHNIQUES

Mainly, Exploratory, Bibliographic and documental research was adopted, supported by Case Study, as explained in the following sections.

THE METHODS ADOPTED

For the elaboration of this article, research was carried out which, regarding its nature, was classified as applied (MARCONI; LAKATOS, 2017), a method assisted by the investigation of a problem (in this, the association between entrepreneurship, entrepreneurial training and interdisciplinarity). Regarding the applicability of scientific knowledge, the study is supported by bibliographical and documental research, which are carried out by complementing and/or summing between knowledge bases generally collected in books, articles and updated documents (GIL, 2022). By seeking to explore (describe) a problem, aiming to provide information for a more precise investigation and by describing something or something related to the topic, the research is also qualified as descriptive and exploratory research (CERVO; BERVIAN; DA SILVA, 2007; GIL, 2022).

Still concerning the methodology, the article presents a Case Study, a research method that uses (generally) qualitative data, collected from a real event, aiming at the explanation, exploration or description of

current phenomena inserted in a context (YIN, 2014). The Case presented in the following section is based on the interdisciplinary work of the authors, which deals with a specific and successful situation that took place on the premises of a consolidated institution of higher technological education in the state of São Paulo, Fatec Guaratinguetá.

PRACTICAL APPLICATION IN THE CLASSROOM

Based on the professional profile defined by the Technology in Commercial Management course at FATEC Guaratinguetá, it was applied to the class of the 5th semester (penultimate period and beginners of the 3rd and last year of the course), in the discipline of Advertising and Propaganda, the practice.

The proposal, which took place between the second half of 2021 and the first half of 2022, aimed to develop important insights, such as the ability to simulate the structure and processes of an Advertising and Propaganda Agency, which allows the construction of a model of business that delimits the market of action, adherent persona, monetization, teamwork, leadership and, mainly, generate an “entrepreneurial look”, making the students, in a practical way, perceive in the classroom the possibility of undertaking in a real way.

Another important feature proposed by the project was to encourage students to evaluate the new market behavior in defining strategies for promoting products, services and brands, which move from a traditional scenario, where TV is no longer one of the means of communication. More efficient, however, high-cost placement and the digital becomes a strategic tool for creative, interactive, mappable, high-impact and low-cost articulation and planning.

The theme worked (in an interdisciplinary way) was “Engagement and motivation of the local Academic Community, as a strategy

for converting candidates to the Entrance Examinations". The unit was placed as the people (students) and client (administrative and pedagogical staff) for the delimitation of important characteristics, for the development of a Strategic Publicity and Propaganda Campaign.

The practice was developed in two phases, in which in the first, the objective was to bring the students closer to the business, in this case, the construction of the advertising agency by the teams; in the second, with the agencies already created, the objective was to develop a strategic advertising plan that could meet the client and his specific needs.

RESULTS AND DISCUSSION

The practice was developed in 2 (two) phases. In the first phase, the objective was to bring the students closer to the business, in this case, the construction of the advertising agency by the teams. In the second phase, with the agencies already created, the objective was to develop a strategic advertising plan that could serve the client and his specific needs. Figure 2 explains the first phase:

As it was seen in figure 2, at this stage the classroom was divided into teams of 5 (five) students, the objective was for each team to create an Advertising and Propaganda Agency.

For the creation of these agencies, as an initial requirement, it was necessary to fulfill the RESEARCH item, which proposes to the teams the gathering of information with methodological rigor, about the market, niches, regionality, areas of the agency, customer profile, products developed, that is, it was necessary to understand the business.

To have a broad vision in the entrepreneurial context goes through a path of construction, detaching itself from common sense from a critical stance based on theories for intellectual autonomy. The complexity of the learning process demands a scientific

and inquiring look, and the research process contributes to this construction. Accordingly, Severino (2004) states that the construction of knowledge must be through systematic and effective technical-scientific procedures.

For Rosa and Trevisan (2016), every research process sustains values and cultural, social and ethical aspects and thus it is necessary to work with students from the beginning of their academic journey towards an education in science and technology, that is, a scientific literacy. After the research process, "knowing how to do" begins, that is, it is the application of theory, "putting into practice" the contents worked on in the course disciplines.

In the AGENCY item, the teams had to delimit the areas of the agency, describe the activities of each one, direct a team member to each one and justify the competences, so that each one was there. Mission, Vision and Values were defined for each of the agencies and forms of leadership employed by each of them.

The VISUAL IDENTITY item, brought the possibility of a slightly more concrete experience on the construction of a brand and its concept, the development of the visual identity manual and the entire stationery project of the Agency. Forms of communication with the use of Information and Communication Technologies (ICTs), with the development of the Agency's institutional website and the Social Networks that the company would adopt to start its positioning in the market.

THE AGENCY PRESENTATION was the last item of phase 1 and is carried out with a commercial presentation of the agencies. These presentations are supported by multimedia materials (videos, animations, slides, diagrams, graphics, etc.) produced by the students, printed matter and, mainly, by the creative and institutionalized articulation

of the teams. Figure 3 (below) shows the second phase.

As a problem, FATEC Guaratinguetá, as a customer, reports the following scenario: The educational institution, has mapped in its latest Vestibular campaigns (2020-2021), that the best means of disseminating information about open enrollment and convincing people to talk candidates are the students themselves. However, this effective and present participation in the institution was not perceived. Thus, the authors would like this to be perceived and propagated. An important factor that the agency must consider is that we do not have a high amount for spending on promotions.

In the ATTENDMENT item, the student assigned to this area had the opportunity to talk to the representative of the institution, who brought the need to the agency. At that moment, the student can act as a professional in the area and raise (by means of a delimited Briefing) in a team important information for the mapping of important information. Thus, after the item, the CREATIVE BRIEF was developed among the members of the agencies, an essential practice within an Advertising and Propaganda Agency for the delimitation of important requirements for the creation of the message and campaign. Thus, from that point on, it was possible to delimit the activities designated by areas in the PLANNING item, another essential area for programming and managing the entire campaign and connections between areas. With the defined planning and schedule of actions delimited with the 5WH Quality Management tool, it was possible to organize all the actions involved in the campaign and mainly guide the areas of CREATION, MEDIA and RESEARCH, delimited as a PRODUCTION item.

In item VALIDATION WITH THE CUSTOMER (5), the campaign is presented

for approval before being broadcast, notes and considerations made for the campaign for validity and broadcasting. Also, the items PLACING AND MAPPING were defined, which allowed the monitoring of the practice and behavior of the actions by the agencies, and this moment is very important to generate reports and allow a critical and analytical look in relation to the practice.

The student was challenged to build knowledge that allows him to look at the uncertainties and challenges of today's world with lucidity and with the possibility of presenting creative and responsible solutions. This proposal combines "individual doing" and "collective doing", and comes to consolidate professional attitudes comprised of readings, techniques and didactic-pedagogical interactions, as well as the demonstration of skills in making choices, decision-making and deepening of the worldview.

It was a proposal for the construction of projects about public and private institutions and their perspectives of creation, recreation and transformation of social reality. To promote an education that stimulates scientific curiosity and human development, and that is focused on the formation of sensitive, cultured, creative, enterprising, ethical, autonomous, critical and competent citizens and professionals. These will be able to systematize and disseminate knowledge that will contribute to the conscious formation of their social role and their commitment to citizenship.

POST-SURVEY APPLIED QUESTIONNAIRE

After carrying out the activities, with the objective of proving adherence and achievement of the goals with the students, a questionnaire was elaborated and applied addressing the importance in relation to: The Method, The Construction of Knowledge,

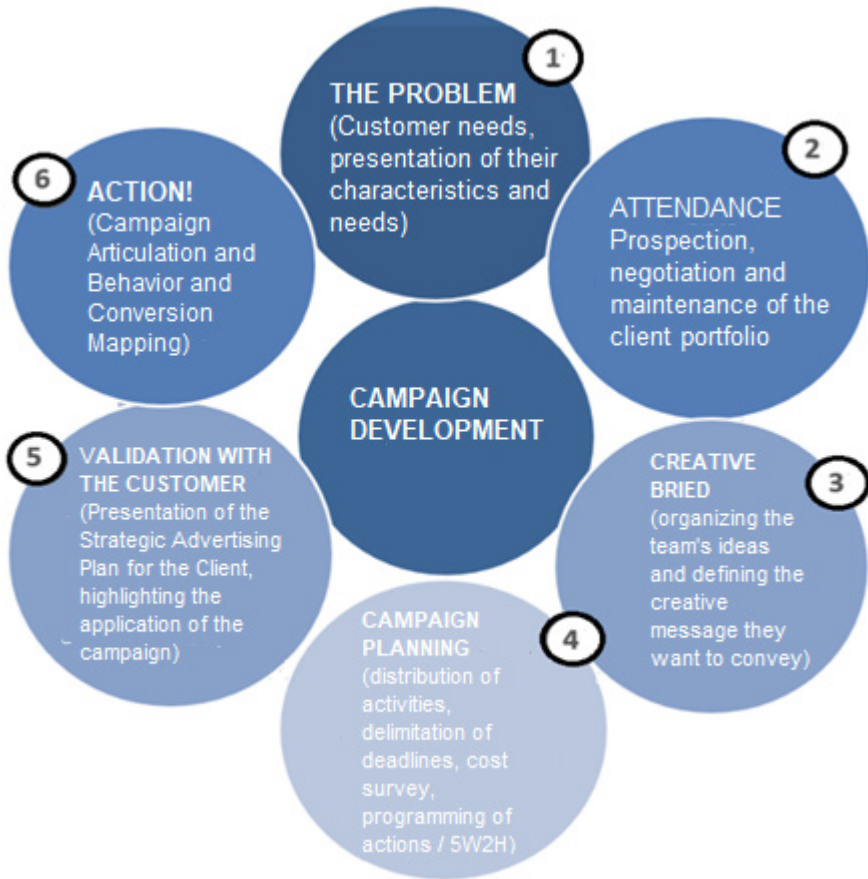
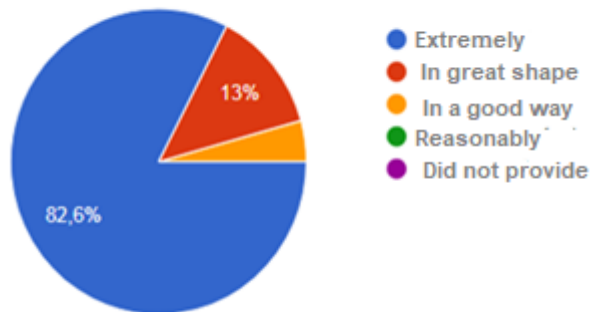


Figure 3 - Phase 2 (Low Cost Engagement and Motivation Campaign)

Source: Elaborated by the Authors

Did the method applied in the classroom for the development of the Publicity and Propaganda Plan provide an entrepreneurial look?



Graphic 1: Questionnaire Question 1 (The Method)

Source: Elaborated by the Authors

The Simulation for the Labor Market and; The Search for the New. The responses collected follow.

With the answers obtained, it is observed with Graph 1, that the purposes of both the teaching unit and the course object of study (encouraging entrepreneurship and innovation) were met. It must be noted that the teaching methodology used provides the student with protagonism in knowing and doing. This way, the methodology strengthened the concepts selected and worked on in the literature review of this article/research.

With Graph 2, when asked about the construction of knowledge, it is possible to state that entrepreneurial education provides a greater perception of opportunities considering important points to be practiced in the classroom such as: processes of analysis and construction of knowledge and comparisons, activities important in the development of business activities. The construction of knowledge was encouraged and strengthened.

Thus, the students understood the real importance of the simulation done and how it will be rewarding in the future, if prepared and completed with rigor and seriousness, as seen in Graph 3, below.

Bettis and Hitt (1995) stated that the role of the entrepreneur is to leverage the driving force of economies, being then considered as a fundamental instrument for competitive markets. And, teaching practices that foster entrepreneurial education are aimed at developing students to increase the number of enterprises, which in the long term results in an improvement for local development, brings theory closer to practice and brings students to a market reality.

Finally, as shown in Graph 4, innovation is present in the activity, when students recognize that the search for the new happened in a

dynamic and productive way:

FINAL CONSIDERATIONS

Starting from the base where theoretical learning is an essential part and foundation for the construction of a broad and concrete vision on a subject and even providing a broad vision and maturation in the acquisition of information and possible discussion on the thematic axis, are indisputable.

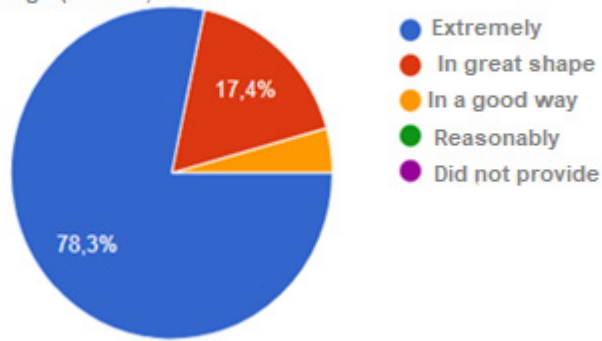
However, in the current Information Society, where quick access to information in a very objective, fast and dynamic way, leads to a shortening of the relationship between theory and practice. Where the practice begins to walk almost in parallel with the theoretical gain and methodologies such as PBL, for example, where these can become fragmented, so that these two aspects walk almost together.

Very interesting gains were observed with this joint fragmentation, because at each theoretical stage a practical fragment is expected to be applied. And in the end, these small results are connected, which generates a result with a much higher quality, since the fragmentation allowed moments of feedback and continuous improvement, for the revision of points and understanding in relation to the opportunities found.

The student's view with the data collected shows the involvement and excellent performance of the practice in the classroom, but opens the opportunity for more technical characteristics to be questioned in new studies. The low variability between the students' results, referring to evaluations at the end of the stages, is unique, which shows that the commitment and acquisition of knowledge are absorbed in an almost general and uniform way.

This reorganization of the teaching plan and the respective seam between new methodologies, which almost personalizes the

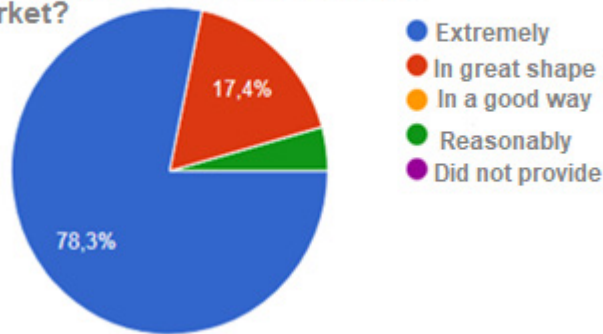
In the critical aspect, the project took you to moments of analysis and comparison for the construction of knowledge (an idea, a new proposal?)



Graph 2 - Questionnaire Question 2 (The Construction of Knowledge)

Source: Elaborated by the Authors

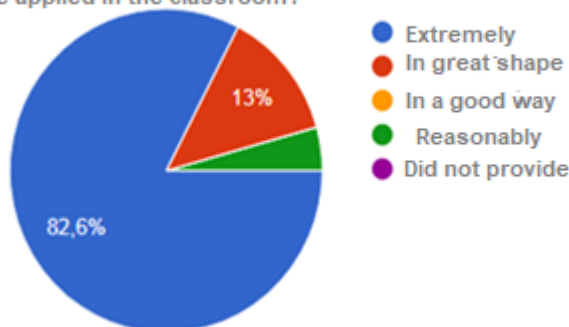
Do you believe that the method brought you closer to a real performance in the labor market?



Graph 3: Questionnaire Question 3 (Simulation for the Labor Market)

Source: Elaborated by the Authors

Did the type of dynamic used provide the search for the new? For information, complementary data and new references in addition to those applied in the classroom?



Graph 4: Questionnaire Question 4 (Search for the New)

Source: Elaborated by the Authors

work of a teacher, provides almost authorship of a new methodology. This scenario leads the teacher to calibrate moments and encourage not only the search for technical knowledge,

but favors the development of transversal skills and a job with greater adherence to what the current job market demands in terms of income.

REFERENCES

ACS, Z. J.; ESTRIN, S.; MICKIEWICZ, T.; SZERB, L. Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective. **Small Business Economic, Springer Nature Switzerland AG**, vol. 51, p.501–514, 2018. Disponível em: <<https://doi.org/10.1007/s11187-018-0013-9>>. Acesso em: 15/09/2022.

ALVES, C.; FELGUEIRA, T.; PAIVA, T. HEInnovate: uma ferramenta de autoavaliação das instituições de Ensino Superior. **Journal Instituições de Ensino Superior Politécnico e a Educação para o Empreendedorismo**, vol.1, p.101-118, 2018.

BARRO, R. J.; SALA-I-MARTIN, X. **Economic Growth**. 2. Ed. Cambridge (MA - EUA): MIT Press, 2004.

BETTIS, R. A.; HITT, M. A. The New Competitive Landscape. **Strategic Management Journal**, vol.16, p.7-19, 1995.

CPS.SP. Centro Paula Souza. **Sobre o Centro Paula Souza**. Disponível em: <<https://www.cps.sp.gov.br/sobre-o-centro-paula-souza/>>. Acesso em: 15/09/2022.

CASSON, M. **The Entrepreneur: an economic theory**. Totowa (NJ – EUA): Barnes & Noble Books, 1982.

CERVO, A. L.; BERVIAN, P. A.; DA SILVA, R. **Metodologia Científica**. 6ª. ed. São Paulo (SP): Pearson Prentice Hall, 2007.

GATTO, V. C. **Ciência e Tecnologia X Empreendedorismo: diálogos possíveis e necessários**. Tese (doutorado) Universidade Estadual Paulista, Faculdade de Engenharia de Guaratinguetá, UNESP, 2011.

CUSTÓDIO, A. R. F. O Empreendedorismo e a Importância da Realização do Plano de Negócios: um estudo de caso sobre casas populares moduladas. **FUCAPE Business School**. Programa De Pós-Graduação em Gestão Estratégica. Vila Velha (ES), 2010. Disponível em: <<http://www.fucape.br/>>. Acesso em: 16/09/2022.

DA ROSA, G.; TREVISAN, A. Filosofia da Tecnologia e Educação: conservação ou crítica inovadora da modernidade? **Revista Avaliação**, Campinas, Sorocaba, São Paulo, vol. 21, n.3, p.719-737, 2016. Disponível em: <<https://www.scielo.br/j/aval/a/zmwDCBPp34vcTJ9CJQYtm/?format=pdflang=pt>>. Acesso em: 10/09/2022.

DE OLIVEIRA, L. M.; MOREIRA, M. Da Disciplinaridade Para a Interdisciplinaridade: um caminho a ser percorrido pela academia. **Revista de Educação do Vale do São Francisco-REVASF**, vol. 7, n. 12, p. 38-59, 2017. Disponível em: <<http://periodicos2.univasf.edu.br/index.php/revasf/article/view/1006/666>>. Acesso em: 15/09/2022.

FATECGUARATINGUETÁ. A Fatec Guaratinguetá. **Histórico**. Disponível em: <http://www.fatecguaratingueta.edu.br/NPORTAL/?page_id=118>. Acesso em: 19/09/2022.

FILION, L. J. The Definition of Small Business as a Basic Element for Policy Making. In: **Small Business, Marketing and Society Conference**, USSR. The Institute of Sociology, USSR Academy of Science, Academy of Science of Georgia Anais, Tiblissi (Georgia - Russia), 1991.

GIL, A. **Como Elaborar Projetos de Pesquisa**. 7ª Ed. São Paulo (SP): Atlas. 2022.

HEBERT, R. F.; LINK, A. N. In search of the meaning of entrepreneurship. **Small Business Economics Springer Nature Switzerland AG**, vol. 1, p. 39–49, 1989. Disponível em: <<https://doi.org/10.1007/BF00389915>>. Acesso em: 20/09/2022.

INOVACPS. **Sobre a InovaCPS**. Disponível em: <<https://inova.cps.sp.gov.br/sobre-a-inovacps/>>. Acesso em: 11/09/2022.

JANTSCH, A. P.; BIANCHETTI, L. **Interdisciplinaridade: para além da filosofia do sujeito**. Petrópolis (RJ): Vozes, 2002.

JAPIASSU, H. **Interdisciplinaridade e Patologia do Saber**. Rio de Janeiro (RJ): Imago, 1976.

LEIBENSTEIN, H. Entrepreneur and Development. **The American Economic Review**, vol. 57, n. 2, p. 72-84, 1968.

MARCONI, M.; LAKATOS, E. **Fundamentos de Metodologia Científica**. 8ª. Ed. São Paulo (SP): Atlas, 2017.

MARTINO, L. M. S.; MARQUES, A. C. S. **Teorias da Comunicação: processos, desafios e limites**. Série Comunicação na Contemporaneidade. São Paulo (SP): Plêiade, 2015.

NECK, H. M.; GREENE, P. G. Entrepreneurship Education: known worlds and new frontiers. **Journal of Small Business Management**, vol. 49, n.1, p. 55-70, 2011.

ROJAS, J.; SANTANA FERREIRA, F. M. N.; HAMMES, C. C.; DO AMARAL, K.C. Interdisciplinaridade na Educação: desafios e perspectivas. **Revista Diálogos Interdisciplinares GEPFIP**, Aquidauana (MS), vol. 1, n. 1, p. 170-181, 2014.

SCHMIDT, S.; BOHNENBERGER, M. C. Perfil Empreendedor e Desempenho Organizacional. **Revista de Administração Contemporânea**, vol. 13, n. 3, art. 6, p. 450-467, 2009. Disponível em: <<http://www.spell.org.br/documentos/ver/1003/perfil-empresendedor-e-desempenho-organizacional/i/pt-br>>. Acesso em: 19/09/2022.

SCHUMPETER, J. **Teoria do Desenvolvimento Econômico: uma investigação sobre lucros, capital, crédito, juro e o ciclo econômico**. São Paulo (SP): Editora Nova Cultural, 1997.

SEVERINO, A. J. **Formação de Professores, Licenciatura e Escola Básica**. Dialogia, São Paulo, vol. 3, n. 13, p. 1-165, 2004.

YIN, R. K. **Estudo de Caso: planejamento e métodos**. 5ª. Ed. Porto Alegre (RS), Bookman, 2014.