

DOI: <https://doi.org/10.5007/1983-4535.2024.e100796>

ENTREPRENEURIAL UNIVERSITY: A STUDY AT THE FEDERAL UNIVERSITY OF FRONTEIRA SUL

UNIVERSIDADE EMPREENDEDORA: UM ESTUDO NA UNIVERSIDADE FEDERAL DA FRONTEIRA SUL

Rivaldo de Almeida Arruda, Graduado<https://orcid.org/0009-0009-6847-0870>

rivaldoarruda99@gmail.com

Universidade Federal de Santa Catarina | Programa de Pós-Graduação em Engenharia e Gestão do Conhecimento
Florianópolis | Santa Catarina | Brasil**Humberto Tonani Tosta, Doutor**<https://orcid.org/0000-0002-1608-6043>

humtosta@gmail.com

Universidade Federal da Fronteira Sul | Programa de Mestrado Profissional de Administração Pública
Chapecó | Santa Catarina | Brasil**Kelly Cristina Benetti Tonani Tosta, Doutora**<https://orcid.org/0000-0003-0531-5282>

kellytosta@uffs.edu.br

Universidade Federal da Fronteira Sul | Programa de Mestrado Profissional de Administração Pública
Chapecó | Santa Catarina | Brasil

Recebido em 26/junho/2024

Aprovado em 26/novembro/2024

Publicado em 15/janeiro/2025

Sistema de Avaliação: *Double Blind Review*

Esta obra está sob uma Licença Creative Commons Atribuição-Uso.

RESUMO

Objective: Mapping the actions promoting entrepreneurial education at the Federal University of Southern Frontier. **Theoretical Framework:** Entrepreneurial education initiatives, especially in Brazilian federal universities, need to be reviewed to bring not only regional economic development but also sustainable social development. **Method:** This article is characterized as a case study that employs a qualitative, descriptive, and exploratory approach, along with a literature review and field research. Data collection was carried out through semi-structured interviews conducted in February 2022. **Results:** A significant number of actions were observed, along with various accounts of the transformations that Entrepreneurial Education has brought about within and beyond UFFS, such as the impact of Empreende UFFS, which has already influenced more than 6,000 people. Additionally, the study identified involvement in the realm of education, with entrepreneurial education courses in 30% of UFFS undergraduate programs, eight research projects, and nine extension projects focused on Entrepreneurial Education. **Conclusions:** This signifies a scenario of cultural construction and transformation within the institution under study, as entrepreneurship becomes an agent of change and academic and social improvement at UFFS and in its operational region.

Palavra-Chave: Entrepreneurial Education. University Education. Public University. UFFS.

ABSTRACT

Objetivo: mapear as ações promotoras da educação empreendedora na Universidade Federal da Fronteira Sul. **Marco Teórico:** as ações de educação empreendedoras, principalmente nas universidades federais brasileiras, precisam ser revistas, para, além de trazer desenvolvimento econômico regional, trazer também o desenvolvimento social sustentável. **Método:** o presente artigo caracteriza-se como um estudo de caso que utiliza de uma abordagem qualitativa, descritiva e exploratória, junto a uma pesquisa bibliográfica e de campo. A coleta de dados se deu por meio de entrevistas semiestruturadas realizadas em fevereiro de 2022. **Resultados:** pôde-se observar um grande número de ações, além de diversos relatos sobre as transformações que a Educação Empreendedora tem causado dentro e fora da UFFS, como a atuação do Empreende UFFS, que já impactou mais de 6.000 pessoas. Foi identificado, também, a atuação no âmbito do ensino, com disciplinas em 30% dos cursos de graduação da UFFS, oito projetos de pesquisa e nove de extensão voltados à Educação Empreendedora. **Conclusões:** percebe-se, desta forma, um cenário de construção e transformação cultural na Instituição estudada, visto que o empreendedorismo passa a ser ator de mudança e de melhoria acadêmica e social na UFFS e em sua região de atuação.

Keyword: Educação Empreendedora. Ensino Superior. Universidade Pública. UFFS.

1 INTRODUCTION

In a context in which the knowledge generated by universities is recognized as a crucial element for sustainable regional economic development (Pugh et al., 2018), Entrepreneurial Education (EE) emerges as a central topic of debate in higher education institutions. However, regarding its role in Brazilian higher education, clarity regarding its theoretical and practical relevance often remains unclear (Franz et al., 2020).

Since the 1980s, university entrepreneurship has been the subject of discussion (Hay, 1981). Still, the role of universities in promoting entrepreneurship and innovation still lacks consensus (Pugh et al., 2018). The triple helix concept, although fundamental, does not cover all aspects necessary for universities to play an effective role in entrepreneurial training and regional development, especially in developing countries (Barrioluengoa & Benneworth, 2018; Franz et al., 2020).

Pavan (2021) emphasizes the importance of higher education institutions in promoting EE, highlighting their role in the formation of entrepreneurial attitudes. In the context of Brazilian federal universities, there is a call to revisit the role of EE, not only as a driver of regional economic development but also as a catalyst for sustainable social development. This is an issue that requires an in-depth and urgent discussion in higher education institutions (Franz et al., 2020).

Studies on EE must analyze the results and impacts of the actions carried out, investigating how they contribute to the development of skills and the encouragement of entrepreneurship. Furthermore, understanding how this process unfolds in Brazilian higher education institutions is fundamental, given their complex and multifaceted role in the topic (Pavan, 2021).

In recent years, there has been an increase in research exploring the relationship between entrepreneurship and universities, with significant contributions coming from developing countries (Tosta et al., 2021). This brought demands that were previously neglected and that challenged the Eurocentric view of entrepreneurship, making it a transversal theme at the university and boosting EE as an agent of social transformation (Tosta et al., 2021).

In this scenario, entrepreneurial universities have the potential to positively impact their regions not only economically, but also by addressing chronic social problems and improving

people's quality of life (Bikse et al., 2016; Klofsten, 2019; Pugh et al., 2018; Budyldina, 2018).

Given this context, this article seeks to answer the following question: what are the impacts of Entrepreneurial Education actions at the Federal University of Fronteira Sul (UFFS) and in its region of operation? Therefore, aims to "analyze the initiatives that promote entrepreneurial education at the Federal University of Fronteira Sul (UFFS)."

This article is structured as follows: in the first section, we present the introduction, including the theme, objective, and justification of the research; in the second section, we address the theoretical framework, discussing the concepts and relevant findings from the literature; in the third section, we describe the methodological procedures adopted; the fourth section presents and analyzes the research results; the fifth section discusses the results in light of the existing literature and the theoretical gap identified; Finally, the sixth section includes the final considerations of this study.

2 THEORETICAL FRAMEWORK

2.1 ENTREPRENEURIAL UNIVERSITY

An entrepreneurial university transcends the traditional pillars of teaching, research, and extension, incorporating entrepreneurship as its central mission (Klofsten, 2019; Pugh et al., 2018; Budyldina, 2018). According to Tosta (2021), although the concept of entrepreneurial education is debated, some common definitions emerge in various research. These definitions highlight that EE aims to shape individuals' attitudes, values, and intentions toward entrepreneurship, whether as a viable career path or as a means of contributing to the community. This requires the development of personal entrepreneurial skills, such as the ability to start a business, identify opportunities, and manage companies (Tosta, 2021).

An entrepreneurial university uses entrepreneurship as a means of boosting regional development (Bikse et al., 2016).

Therefore, a university is entrepreneurial when it adopts a holistic approach to ensure the implementation of all the activities mentioned above. As a result, any university that carries out entrepreneurial activities to improve regional or national economic performance is considered entrepreneurial (Bikse et al., 2016, p. 79).

However, becoming an entrepreneurial university is a multifaceted challenge. This depends on the willingness and ability of academics to interact with society, influenced by university management and available infrastructure (Klofsten, 2019). It is crucial to

understand that university entrepreneurship is not just limited to transferring knowledge from research to industry. It also involves the exchange of knowledge, where universities can learn from industry and the external environment (Klofsten, 2019).

2.2 IMPACT OF THE ENTREPRENEURIAL UNIVERSITY ON REGIONAL DEVELOPMENT

Budyldina (2018) highlights that the economic impact of higher education institutions is regional, where graduates often remain in the areas where they obtained their degrees. In addition to tangible commercial benefits, entrepreneurial universities have a significant impact on attracting human capital, fostering entrepreneurial spirit, creating informal networks, and emerging new ideas (Budyldina, 2018).

According to Pugh et al. (2018), entrepreneurship departments in universities perform several functions, from teaching to developing entrepreneurial skills. They also facilitate collaboration between students and executives, as well as incubation programs and the growth of new companies. This often overrides traditional university structures in favor of more flexible approaches driven by personal and professional relationships between staff and community members (Pugh et al., 2018).

The region develops and enriches itself through the activities of universities. In addition, local entrepreneurs collaborate with entrepreneurship professors to improve formal and informal education, offering support, guidance, lectures, testimonials, and case studies. Some activities follow a route exclusively formal or informal, while others combine both mechanisms (Pugh et al., 2018, p. 1849).

Hsu and Pivec (2021) examined the results of integrating sustainable development into entrepreneurial education in Austria and Taiwan. They observed that sustainable entrepreneurial education plays a crucial role in countries with limited natural resources and in continental countries, influencing the entrepreneurial mindset from conservation to environmental sustainability. The integration of sustainability into entrepreneurial education contributes to social and economic development.

Franz et al. (2020) emphasize that universities must meet regional business demands, without losing sight of their social responsibilities. Transforming an entrepreneurial university does not simply mean adopting a business approach, but rather understanding and reflecting the real needs of the region in which it operates.

2.3 UNIVERSITY ENTREPRENEURSHIP AND SOCIAL DEVELOPMENT

After reviewing the literature, it is clear that the role of Brazilian public universities is not limited to the capitalist aspect. Entrepreneurship and collaboration with companies must occur collaboratively, creating a relationship of mutual benefit (Franz et al., 2020). It is essential that the university, as the main actor in the triple helix, maintains control of this relationship to preserve its social role and prevent it from being dominated by the private sector (Thomas & Pugh, 2020).

An entrepreneurial university must seek regional development, both social and economic. When the university acts as a Research and Development (R&D) provider for the private sector, its social function cannot be neglected (Campillo et al., 2019). It is essential that the university clearly defines its social role and works together to train conscious individuals capable of driving economic and social changes in the region.

The difference between the role of EE in universities in developed and developing countries is evident. In developing nations, such as Brazil and Nigeria, universities play a fundamental role in social transformation and regional development, while in developed countries, the emphasis is on commercializing the knowledge generated in universities (Genç et al., 2020; Klofsten, 2019; Zobnina et al., 2019).

Therefore, for a university like UFFS, its entrepreneurial initiatives must be aligned with its social objectives. There must be a solid connection between these two objectives, and the university must lead the knowledge transfer process.

3 METHODOLOGY

3.1 RESEARCH APPROACH

This study adopts a qualitative approach when investigating actions related to entrepreneurial education at the Federal University of Fronteira Sul (UFFS). The research prioritizes the collection of descriptive and exploratory data, to understand a complex phenomenon (Godoy, 1995). The qualitative perspective does not aim to obtain numerical representation, but, instead, seeks to deepen the understanding of a social group (Gerhardt & Silveira, 2009), to elucidate and explain social dynamics (Godoy, 1995). The qualitative approach is appropriate due to the emphasis on understanding the construction and maintenance of entrepreneurial and innovative actions at UFFS. As outlined by Godoy

(1995), qualitative research uses the natural environment as its data source and employs the researcher as the main instrument.

Regarding its nature, this study is classified as descriptive and covers bibliographical and field research (Vergara, 1998). This study is descriptive, as it outlines the panorama of entrepreneurship and entrepreneurial education at UFFS, investigating the influences of existing actions on academic training and the regional impacts resulting from entrepreneurial education at UFFS.

Field research is characterized by collecting direct data from people. This approach seeks information about the phenomenon under study (Marconi & Lakatos, 2011). According to Gil (2010), field research aims at a deeper understanding and can be directed to a specific community, regardless of its geographic location, as long as it is related to human activities. Therefore, our research is categorized as field research, as it was conducted in the environment where the phenomenon under study occurs, including the identification of entrepreneurial actions and interviews with UFFS professors, to collect pertinent information.

Finally, this study is configured as a case study, as its objective is to understand a specific phenomenon that unfolds in a particular context. The case study method, as outlined by Gil (2010), is an empirical investigation that examines a contemporary phenomenon in its real-life context, even when the boundaries between the phenomenon under study and the context are not strictly defined (Gil, 2010). In the present case, the case study focuses on the Federal University of Fronteira Sul.

3.2 RESEARCH PARTICIPANTS AND DATA COLLECTION

The research involved identifying individuals and participants involved in entrepreneurial actions at UFFS. Participants were selected through convenience, considering availability and adherence to the criteria established for the research (Appolinário, 2012).

The selection of participants followed the following procedures:

1. Identification of institutional policies related to entrepreneurship at UFFS, followed by interviews with those responsible for these policies, to identify the main agents and entrepreneurial actions of the university.
2. Mapping of programs and projects that involve students, teachers, and employees at UFFS and are aligned with the institution's entrepreneurship policies.
3. Contact those responsible for the identified projects to schedule interviews.

Participant selection criteria included:

1. Actions must be initiated by UFFS management.
2. Actions led by teachers must be linked to the institution.
3. The action must be institutionalized and related to UFFS.

The study aims to analyze entrepreneurial actions at the university. Participant sampling was conducted using a convenience approach, considering availability and compliance with established criteria (Gil, 2010). The Dean of Undergraduate Studies (PROGRAD), the Dean of Research and Postgraduate Studies (PROPEPG), the Dean of Extension and Culture (PROEC), and the Agency for Internationalization and Technological Innovation (AGIITEC) of UFFS were contacted to identify the entrepreneurship and innovation initiatives promoted by the institution.

Simultaneously, research and extension actions led by professors and institutionalized by UFFS related to entrepreneurship and innovation were identified. Those responsible for these projects were contacted to schedule semi-structured interviews. The participant selection process involved three stages: preliminary selection, analysis, and final selection.

For the preliminary selection stage, research and extension projects and programs registered on the university's official website were identified.

The analysis stage included observation and selection of research and extension projects and programs that develop actions focused on entrepreneurship or entrepreneurial education. Additionally, courses related to the research themes were identified.

Finally, the final selection involved identifying the professors responsible for the programs, projects, and courses, making contact via email, and scheduling interviews. This resulted in interviews with 14 UFFS professors.

Data collection was carried out through semi-structured interviews conducted virtually through the Google Meet platform. The script was developed with the aim of surveying the actions developed by the interviewees, understand their views on the entrepreneurial education actions developed, and their results and impacts. According to Marconi and Lakatos (2011), to obtain satisfactory results in interviews, it is necessary to observe some rules:

1. Establishment of initial contact: The researcher contacted sectors of the University, representatives of projects related to research, and professors responsible for disciplines relevant to the topic by email. After this first contact, 45 actions that were not directly related to the research were excluded. After this stage, 28 actions remained that were investigated in this research. Question formulation: A formal structure was maintained to identify essential points for the work.
2. Response recording: The interviews were recorded on the Google Meet platform with the permission of the interviewees. 14 UFFS professors were interviewed, the Pro-Rector of Extension and Culture, the Coordinating Professor of EMPREENDE UFFS, and the Coordinating Professor of AGIITEC answered the questions by email. The interviews took place in February 2022.
3. Through this study, which was based on the analysis of the interviewees' contributions, we intend to contribute to the debate and practice of entrepreneurship in Brazilian universities. The interview scripts were developed based on the literature presented in Chapter 2 and adapted to the reality of UFFS.

3.4 DATA ANALYSIS

To analyze and interpret the data collected, the digital resources of the platform used to conduct the interviews were used. This facilitated data storage and kept the information accessible for consultation when necessary. Subsequently, the recordings were transcribed to create digital copies of the interviews, which were organized into themes according to the research objectives. The process totaled seven hours, twenty-eight minutes, and one second of interviews, converted into twenty-nine pages of transcriptions. Data analysis consisted of extracting meanings from the information collected (Gil, 2010).

Gibbs (2009) emphasizes that transcription is an interpretative process that requires precision and fidelity. It is necessary to pay attention to details to understand beyond the answers provided by participants. After transcribing the interviews, a content analysis was conducted, following a phenomenological reflection approach as proposed by Apolinário (2012).

In this sense, we sought to absorb as much information from the interviews as possible. First, the interviews were fully transcribed. Then, the transcriptions were read and, finally, the information collected was tabulated, grouping it logically and coherently to respond to the research objectives.

4 PRESENTATION OF RESULTS AND ANALYSIS

4.1 THE FEDERAL UNIVERSITY OF FRONTEIRA SUL (UFFS)

The Federal University of Fronteira Sul (UFFS), 2022 represents a public higher education institution, created through Law No. 12,029, dated September 15, 2009. The process of its constitution initially included five campuses: Chapecó (SC), Realeza and Laranjeiras do Sul (PR), Cerro Largo and Erechim (RS). Subsequently, the city of Passo Fundo also became the headquarters of a UFFS campus, a pioneer in Brazil in offering the first Medicine course through the Federal Government's medical school expansion program (Federal University of Fronteira Sul [UFFS], 2022).

In addition to its undergraduate degree offerings, UFFS provides opportunities for specialization (*lato sensu*), master's degrees, and doctorates (*stricto sensu*). Currently, the institution offers 34 specialization courses, 17 master's programs, and 3 interinstitutional doctorate programs, all led by a teaching staff made up of masters and doctors (UFFS, 2022).

Extension and research activities at UFFS converge with institutional guidelines constructed collaboratively, allowing the organization of the curriculum with a universal core. This curricular approach aims to ensure that all students receive citizenship, and interdisciplinary and professional training (Federal University of Fronteira Sul [UFFS], 2022).

The research is justified by the position of UFFS as an internalized university that plays a fundamental role in the social transformation and development of the region in which it is located. Therefore, it is crucial to document and understand how entrepreneurial education is being developed in this mesoregion.

4.2 ACTIONS IN TEACHING

According to the literature collected for this research, teaching entrepreneurship in the classroom is fundamental for establishing an entrepreneurial culture in the university environment (Campillo et al., 2019; Zobnina et al., 2019).

At UFFS, the offer of 14 subjects related to entrepreneurship was identified, and distributed across 11 undergraduate courses. Nevertheless, it is important to note that only 30% of undergraduate courses at UFFS incorporate subjects dedicated to entrepreneurship in their curricula. It is important to mention that there is no offer of Regular Curricular Components (CCRs) focused on entrepreneurship in undergraduate courses. Furthermore, the

only subject on entrepreneurship present in all bachelor's degrees is located on the Erechim campus and was recently implemented, starting in the 2022.1 semesters, in the Biological Sciences and Geography courses.

The importance of subjects that address the teaching of entrepreneurship was highlighted by the teachers interviewed. These disciplines were perceived as a crucial element in promoting an entrepreneurial culture within the university. One of the teachers highlighted that the teacher plays a fundamental role in establishing this culture, acting as a catalyst for entrepreneurial actions. Furthermore, the role of students was emphasized, who are equally essential for the success of these initiatives, as they must reflect, actively participate, and engage in the proposed activities.

Yet, a professor expressed concern about the excess of theory and the lack of a practical approach to teaching entrepreneurship at UFFS. She mentioned that transforming this teaching into a practical methodology requires decisions from the institution's management and the teachers involved, in addition to a change in the curricular approach.

Regarding student training, it is observed that only the Administration course at the Chapecó campus emphasizes entrepreneurship. This course has a specific training line in small businesses and cooperatives, aiming to restore the region's cooperative culture and promote entrepreneurship in micro and small companies. Furthermore, the course mentions in its general objective the training of professional administrators with analytical and entrepreneurial capacity, systemic vision, and commitment to regional development.

Regarding specific objectives, only a few courses, such as Administration at the Chapecó and Cerro Largo campuses, as well as Environmental and Sanitary Engineering at the Chapecó campus, mention entrepreneurship in their student training. These courses seek to apply methodologies that promote entrepreneurship, leadership, and innovation in organizations.

4.3 ACTIONS IN THE EXTENSION

In an interview carried out with the Pro-Rector of Extension and Culture at UFFS, on February 15, 2022, she described her management's actions regarding the promotion of Entrepreneurial Education. The creation of the Science, Technology, and Innovation Division (DCTI) was mentioned, still in the structuring process, to support and promote innovative, technological, and entrepreneurial extension. This division aims to provide support to teachers in project submission, fundraising, activity development, communication, and

creation of notices. She emphasized the importance of respecting the regionalities and specificities of the institution and establishing more efficient communication with supporting foundations to raise external resources.

However, the lack of solid institutional support and the absence of joint work between management and extension teachers were highlighted as challenges. Some specific individual actions are no longer sufficient to meet the university's demands, and the need for a more comprehensive and coordinated institutional response is evident.

Regarding incubators, no specific actions were mentioned during the interview with the Vice-Rector of Extension and Culture. She indicated that incubators will be one of the focus areas for her management, but did not detail the planned actions or those responsible for their implementation.

4.4 SEARCH ACTIONS

Within the scope of research actions linked to the Federal University of Fronteira Sul (UFFS), it is possible to observe the relevance of Entrepreneurial Education (EE) in different fields of knowledge. An initial examination of the research programs and projects at UFFS reveals that EE is a prominent area in disciplines such as health, engineering, and chemistry. Still, it is essential to note that, to date, it is the areas of applied social sciences and languages that lead in terms of developing projects and research programs focused on EE.

4.5 THE PERFORMANCE OF THE INTERNATIONALIZATION AND TECHNOLOGICAL INNOVATION AGENCY - AGIITEC UFFS

The Agency for Internationalization and Technological Innovation (AGIITEC) of the Federal University of Fronteira Sul (UFFS) plays a crucial role in promoting innovation and entrepreneurship within the institution. Its creation aimed to grant greater autonomy to the Technological Innovation Center (NITS) at UFFS. To understand AGIITEC's performance, an interview with the current coordinator of AGIITEC was requested. The teacher, although she did not agree to a face-to-face interview, was available to answer the questions in writing, which occurred on February 20, 2022.

The AGIITEC coordinator explained that the change of responsibilities from NITS to AGIITEC was a necessary measure to grant greater autonomy to AGIITEC and link it directly to UFFS senior management, specifically the dean's office. Consequently, NITS now operates

under the management of AGIITEC, which occupies a higher hierarchical position, directly linked to the dean's office.

Regarding actions to promote Entrepreneurial Education, the AGIITEC coordinator highlighted several initiatives, including:

1. Creation and appointment of members of the AGIITEC Innovation and Entrepreneurship Advisory Committee (CAIE), with representatives on all UFFS campuses.
2. Participation in the creation and formatting of the NIT-SC NETWORK, through the funding notice from the Santa Catarina State Research and Innovation Support Foundation (FAPESC) aimed at Technological Innovation Centers (NITs) in Santa Catarina.
3. Organization, coordination, and delivery of online training events in technological and social innovation, including webinars in collaboration with other Scientific and Technological Institutions (ICTs), available to the entire academic community at UFFS and the region.
4. Filing of international patent applications, such as Biodiesel Production with HD seeds.
5. Preparation of a new Draft UFFS Innovation Policy, based on the new legal innovation framework of 2018, which is awaiting approval by the university's higher councils.
6. Development of the draft Internationalization Policy, after consultations with members of the academic community.
7. Establishment of a cooperation agreement with the University of Padua, Italy.
8. Selection and financing of 05 scientific articles for publication in journals, through the management of notice 498/GR/UFFS/2021.

It is important to note that, with the creation of AGIITEC, several responsibilities that originally belonged to NITS were transferred to the new agency. The UFFS Institutional Development Plan (PDI), effective until 2023, listed several actions that were originally attributed to NITS, but are now the responsibility of AGIITEC. These actions include strengthening regional cooperation, the formation of an innovation and entrepreneurship ecosystem, the creation of a Technology Park in the Border Region, and encouraging a culture of innovation at the university.

The AGIITEC coordinator emphasized that the task of promoting the triple helix of innovation at UFFS is an institutional challenge that requires the support of the entire

university community. To this end, notice No. 57/GR/UFFS/2020 was launched in 2020, aiming to establish partnerships for research, development, and innovation in UFFS institutional programs. This notice, in continuous flow, seeks to prospect collaborations to foster research, development, and innovation at the university.

Therefore, while AGIITEC is active in several innovation and entrepreneurship initiatives, there is a disconnection between its actions and UFFS Strategic Planning. There are gaps in teacher training, support for projects related to entrepreneurship, and the promotion of Entrepreneurial Education, which need to be addressed.

4.6 THE ACTIVITIES OF EMPREENDE UFFS

EMPREENDE UFFS is a comprehensive program dedicated to promoting entrepreneurship and innovation in the pillars of Teaching, Research, and Extension. Coordinated by professors Humberto Tonani Tosta and Kelly Cristina Benetti Tonani Tosta, EMPREENDE UFFS presents itself as a movement within UFFS, as described by Professor Tosta in an interview.

This program arose from the need to unify efforts to promote an entrepreneurial culture on the UFFS Chapecó campus. Initially, it involved actions in the Administration course, such as the INNE program, extension projects, and the course's junior company. Over time, EMPREENDE UFFS expanded its operations beyond the borders of the Administration course, becoming an agent promoting Entrepreneurial Education throughout the campus.

EMPREENDE UFFS has collaborated with a variety of undergraduate courses at UFFS, including Agronomy, Philosophy, History, Nursing, Environmental and Sanitary Engineering, Administration, and Computer Science. Its actions involve holding training events, granting extension scholarships, and supporting existing initiatives on the Chapecó campus.

Currently, EMPREENDE UFFS plays an active role in promoting and supporting five research projects, five extension projects, and three subjects related to entrepreneurship and innovation, two of which are taught in the Administration course and one in the Environmental and Health Engineering course. Furthermore, the program facilitates collaboration between UFFS and the Santa Catarina State Research and Innovation Support Foundation (FAPESC), assisting teachers in the search for external and internal notices that promote Entrepreneurial Education.

As a result of EMPREENDE UFFS' actions, more than 6,000 people have already been impacted. Furthermore, the program coordinators managed to raise more than R\$500,000.00

in investments through external notices, marking a historic achievement in promoting Entrepreneurial Education at UFFS.

This action by EMPREENDE UFFS is essential to fill a gap in the promotion of Entrepreneurial Education, given the lack of concrete actions by UFFS institutional bodies. Corroborating the literature, the efforts of EMPREENDE UFFS are aligned with the activities of the UNICAMP Innovation Agency, playing a crucial role in promoting and promoting Entrepreneurial Education at UFFS.

Therefore, EMPREENDE UFFS stands out as one of the main agents driving a sustainable entrepreneurial culture in the western region of Santa Catarina committed to the reality and socio-environmental challenges faced by UFFS.

5 DISCUSSION

As evidenced in the case studies presented, Entrepreneurial Education can be a transformative mechanism and, at the same time, must be approached with care to avoid the instrumentalization of entrepreneurship in favor of purely capitalist interests. Therefore, Brazilian public universities must establish concrete entrepreneurship and innovation policies aligned with their institutional mission.

Currently, research must focus on the essential skills needed to achieve entrepreneurial success through Entrepreneurial Education (Hsu & Pivec, 2021). Furthermore, it is important to investigate how teaching methodologies that promote Entrepreneurial Education impact students (Zobnina et al., 2019). As highlighted in the literature, the study of entrepreneurship in the classroom is essential for creating an entrepreneurial culture within a higher education institution (Campillo et al., 2019; Zobnina et al., 2019).

Undergraduate courses at UFFS demonstrate that they are aligned with institutional guidelines, allowing for curricular organization around a universal core. Though, there is a significant gap in the teaching of entrepreneurship, a fundamental skill in current times, which should be incorporated into all courses.

Furthermore, the difficulties faced by teachers involved in entrepreneurial extension actions at UFFS limit the impact of these initiatives, especially in courses that do not focus on applied social sciences and languages. Therefore, an institutional effort is needed to promote Entrepreneurial Education throughout the university.

In summary, the cases of AGIITEC and EMPREENDE UFFS illustrate the importance of specific agencies and programs to promote Entrepreneurial Education at a university.

These initiatives play fundamental roles in promoting an entrepreneurial culture, training entrepreneurial skills, and creating connections between the university and the productive sector. But, these actions must be integrated into a global entrepreneurship and innovation strategy at the university, reaching all courses and areas of knowledge.

Entrepreneurial Education must be seen as an essential transversal competence for all students, regardless of their field of study, to prepare them for the challenges of an ever-changing world. This discussion highlights that, although UFFS has taken important steps towards promoting Entrepreneurial Education, there is still room for substantial improvements. Therefore, the recommendations presented in the next chapter seek to offer practical guidance for improving Entrepreneurial Education initiatives at UFFS.

6 FINAL CONSIDERATIONS

This study successfully achieved its objectives, which consisted of analyze the initiatives that promote entrepreneurial education at the Federal University of Fronteira Sul (UFFS). The actions undertaken by professors in the fields of teaching, research, and extension were detailed, as well as the activities promoted by the institution's administration.

The main focus of this research was to understand how these entrepreneurial education actions are implemented, who are the agents responsible for their execution, and what tangible results have been achieved through the promotion of entrepreneurial education at UFFS.

In this context, we identified the existence of nine extension projects and eight research projects related to entrepreneurial education, along with the offering of subjects related to this topic in around 30% of the university's undergraduate courses. We also highlight the role of the Dean of Extension and Culture (PROEC) and the Agency for Innovation, Internationalization, Technology and Entrepreneurship (AGIITEC) as agents involved in this process. However, the Deans of Research and Postgraduate Studies (PROPEPG) and Undergraduate Studies (PROGRAD) seem to have a less expressive role.

The influence of these entrepreneurial education actions on the emergence and development of companies in the region, which contribute significantly to the local economy, is notable. Furthermore, we noticed a progressive change in the behavior and culture of the academic community concerning university entrepreneurship at UFFS. Several reports emphasized the positive transformations that entrepreneurial education has generated, both inside and outside the institution.

As highlighted in the literature, the management of higher education institutions must act in a coordinated manner, providing resources and publicizing research and extension opportunities for professors and students. Effective communication with bodies external to the university is essential to promote the triple helix approach, involving academia, the productive sector, and government.

It is recommended that there be a continued strategic focus on promoting entrepreneurial education at UFFS. This implies regularly monitoring and evaluating ongoing actions, ensuring that they are aligned with the needs of those involved in implementing entrepreneurial education in practice. It is also crucial to carry out a comprehensive mapping of actions related to entrepreneurial education in all Brazilian higher education institutions, as well as monitor their impacts and results.

One of the difficulties encountered during this research was the scarcity of records on entrepreneurial education actions, indicating that, although much is being done, little is being properly recorded. This points to the importance of effective knowledge and information management within the institution.

Finally, regarding the limitations of this study, the difficulty of collecting data from the deans of research and postgraduate studies, as well as undergraduate studies, stands out, due to the lack of availability for interviews. This limited our analysis of the role of these deanships in promoting entrepreneurial education. Yet, even with these limitations, it was possible to identify several actions undertaken by these vice-rectorates through secondary sources.

Another limitation was the impossibility of interviewing with the AGIITEC coordinator, although we obtained written responses. This affected the depth of information analysis compared to a face-to-face interview.

Nonetheless, despite these limitations, this study offers valuable insights into entrepreneurial education practices at UFFS and provides a solid basis for future research and the continued development of entrepreneurial education actions at the institution.

REFERENCES

APPOLINÁRIO, F. (2012). *Metodologia da Ciência: filosofia e prática da pesquisa* (2^a ed.). *Cengage Learning*.

BARRIOLUENGOA, M. SÁNCHEZ, & BENNEWORTH, P. (2018). Is the entrepreneurial university also regionally engaged? Analysing the influence of university's structural configuration

on third mission performance. *Technological Forecasting & Social Change*, 2, 206-218. DOI: 10.1016/j.techfore.2018.10.017

BIKSE, V., EZERA, I. L., RIVZA, B., & VOLKOVA, T. (2016). The Transformation of Traditional Universities into Entrepreneurial Universities to Ensure Sustainable Higher Education. *Journal of Teacher Education for Sustainability*. DOI: <https://doi.org/10.1515/jtes-2016-0016>

BUDYLDINA, N. (2018). Entrepreneurial universities and regional contribution. *International Entrepreneurship and Management Journal*, Rússia. DOI: <https://doi.org/10.1007/s11365-018-0500-0>

CAMPILLO, A. M., FERNÁNDEZ, M. DEL PILAR SIERRA, & SANTOS, Y. FERNÁNDEZ. (2019). Service-Learning for Sustainability Entrepreneurship in Rural Areas: What Is Its Global Impact on Business University Students? *Sustainability*, Espanha. DOI: <https://doi.org/10.3390/su11195296>

CHAPECÓ (SC). Universidade Federal da Fronteira Sul. (2017). Resolução nº 04/2017 [*Estabelece a Política de Extensão da UFFS*].

CHAPECÓ (SC). UNIVERSIDADE FEDERAL DA FRONTEIRA SUL. (2020). PORTARIA Nº 1207/GR/UFFS/2020. [*Constitui Agência de Internacionalização e Inovação Tecnológica - AGIITEC da UFFS*].

CHAPECÓ (SC). Universidade Federal da Fronteira Sul. (2013). Resolução nº 6/2013 [*Estabelece a Política de Pesquisa da UFFS*].

CHAPECÓ (SC). Universidade Federal da Fronteira Sul. (2017). Resolução nº 15/CONSUNI/PPGEC/UFFS/2017. [*Estabelece o Regulamento de Pesquisa da UFFS*].

Chapecó (SC). Universidade Federal da Fronteira Sul. (2015). Resolução nº 31/2015. [*Estabelece o Estatuto da UFFS*].

Chapecó (SC). Universidade Federal da Fronteira Sul. (2019). Resolução nº 5/CONSUNI/UFFS/2019. [*Estabelece o Plano de Desenvolvimento Institucional da UFFS 2019-2023*].

Chapecó (SC). Universidade Federal da Fronteira Sul. (2014). Resolução nº 9/2014 – CONSUNI/PPG. [*Estabelece a Política de Inovação da UFFS*].

FRANZ, A. H., LEITE, E. DA S., & RODRIGUES, M. S. (2020). O Processo de Empresarização e o Discurso da Universidade Empreendedora: Uma Análise da Universidade Federal de Pelotas (UFPel). *Arquivos Analíticos de Políticas Educativas*, 28. DOI: 10.14507/epaa.28.5325

GENÇ, S. Y., SESEN, H., CASTANHO, R. A., KIRIKKALELI, D., & SORAN, S. (2020). Transforming Turkish Universities to Entrepreneurial Universities for Sustainability: From Strategy to Practice. *Sustainability*. DOI: 10.3390/su1204149

GERHARDT, T. E., & SILVEIRA, D. T. (2009). Métodos de Pesquisa. Porto Alegre: *Editora da UFRGS*. ISBN 978-85-386-0071-8

GIBBS, G. (2009). Análise de dados qualitativos. Porto Alegre: *Artmed*. DOI: <https://doi.org/10.1590/0103-1104202012523>

GIL, A. C. (2010). Como Elaborar Projetos de Pesquisa (5^a ed.). São Paulo: *Atlas* S.a. ISBN: 9788597012613

GODOY, A. S. (1995). Introdução à pesquisa qualitativa e suas possibilidades. *RAE - Revista de Administração de Empresas*, 35(2), 57-63. Disponível em: <https://periodicos.fgv.br/rae/article/view/38183>. Acesso em: 12 dez 2021.

HAY, R. (1981). A Canadian university experience in technological innovation and entrepreneurship. *Technovation, Montreal*, 1, 43-55.

HSU, J. L., & Pivec, M. (2021). Integration of Sustainability Awareness in Entrepreneurship Education. *Sustainability*, Austria. DOI: <https://doi.org/10.3390/su13094934>

KLOFSTEN, M., FAYOLLE, A., GUERRERO, M., MI, S., URBAN, D., & WRIGHT, M. (2019). The entrepreneurial university as a driver for economic growth and social change - key strategic challenges. *Elsevier*, Brasil. DOI: 10.1016/j.techfore.2018.12.004

MARCONI, M. A., & Lakatos, E. M. (2011). Técnicas de pesquisa (7^a ed.). São Paulo: *Atlas*.

PAVAN, N. I. V. F. (2021). Desmitificando o empreendedorismo: A relação entre educação empreendedora, competências empreendedoras e intenção de empreender (Trabalho de Conclusão de Curso de Graduação). *Universidade Federal da Fronteira Sul*, Curso de Bacharelado em Administração, Chapecó, SC.

PUGH, R., LAMINE, W., JACK, S., & HAMILTON, E. (2018). The entrepreneurial university and the region: what role for entrepreneurship departments? *European Planning Studies*, Reino Unido. DOI: <https://doi.org/10.1080/09654313.2018.1447551>

THOMAS, E., & PUGH, R. (2020). From 'entrepreneurial' to 'engaged' universities: social innovation for regional development in the Global South. *Regional Studies, Regional Science*, Brasil. DOI: <https://doi.org/10.1080/00343404.2020.1749586>

TOSTA, H. T., CASSOL, A., & TOSTA, K. C. B. T. (EDS.). (2021). Desenvolvimento de Ecossistemas de Empreendedorismo e Inovação: desafios e perspectivas práticas. *CRV*. DOI: 10.24824/978655868632.3

VERGARA, S. C. (1998). Projetos e Relatórios de Pesquisa em Administração (2^a ed.). *Atlas*.

ZOBNINA, M., KOROTKOV, A., & ROZHKOVA, A. (2019). Structure, Challenges and Opportunities for Development of Entrepreneurial Education in Russian Universities. *Foresight and STI Governance*, Rússia.