


CURRICULARIZATION OF EXTENSION IN HIGHER EDUCATION: CASE ANALYSIS AND PRACTICES AT FAVENI UNIVERSITY CENTER

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ABSTRACT

This study examines the implementation of extension curricularization in higher education, focusing on its implications for the academic and social development of students. Using the FAVENI University Center as a case study, the work analyzes the effectiveness of extension activities when integrated into the curriculum, promoting a comprehensive education that encompasses both theoretical development and social practice. The research was based on accessibility and nonverbal communication experiments, where students experienced common barriers faced by people with disabilities. The results indicate that practical activities provided greater awareness of inclusion: 83% of participants reported being better prepared to apply academic knowledge in real contexts, and 76% observed the development of interpersonal skills, such as empathy and collaboration. In addition, 92% of students highlighted a broader understanding of social and environmental issues. These findings reinforce the curricularization of extension as an essential political-pedagogical project for the formation of critical and engaged citizens. In response to the National Education Plan and Resolution No. 7/2018, the study highlights the relevance of extension practices as a central part of the academic curriculum, contributing to a more inclusive and transformative higher education.

Keywords: Curricularization. Extension. Innovation. Education. Higher Education.

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INTRODUCTION

The curricularization of university extension has been consolidated as a central theme in the Brazilian educational scenario, especially after Resolution CNE/CES No. 7 of 2018, which determines that Higher Education Institutions (HEIs) integrate extension activities into their undergraduate curricula, corresponding to 10% of the total course load. This movement aims to overcome the fragmented view of knowledge, promoting a comprehensive education that articulates teaching, research, and extension, by the principle of inseparability present in Art. 207 of the Federal Constitution (BRAZIL, 1988). However, despite the normative advances, there are challenges for this integration to be effective, both in terms of curricular adaptation and in the perception of students and teachers about the role of extension as an essential part of the educational process. The central problem lies in the difficulty of establishing an extension culture that goes beyond complementary activities, organically inserting itself into the curriculum and contributing to the citizenship formation of students (MACHADO et al., 2023). Although the curricularization of extension is an important step towards training professionals committed to social reality, it is observed that many HEIs still face difficulties in operationalizing this process, from the definition of activities and projects to the articulation with the communities involved (ANTUNES; PADILHA, 2010). According to Sacristán and Gómez (1998), the challenge is administrative and involves a conceptual restructuring of the curriculum, which should be understood as a comprehensive political-pedagogical project and not a set of disciplines. Thus, the question that arises is: how to implement the curricularization of extension in a way that contributes to the education of students?

The relevance of this work is due to its theoretical and practical contribution to the field of higher education. By exploring the application of the curricularization of extension in a real context, it is expected that this study will provide insights into the implementation of extension activities that are effectively integrative and capable of impacting both the student and the community involved. Furthermore, it seeks to highlight the role of extension as a promoter of critical and humanistic training, which encourages social transformation ((MACHADO et al., 2023).

This study aims to analyze the implementation of the curricularization of extension through a project applied at the FAVENI University Center, verifying the impacts of curricularization on the academic and social development of students. By adopting the single case study method, this work aims to understand how extension activities can be

inserted in a practical and meaningful way into the curriculum, aligning with the principles established by the 2018 Resolution. The justification for carrying out this study lies in the need to contribute to the debate on the challenges and potential of the curricularization of extension.

RATIONALE

The curricularization of university extension emerges as a process to integrate teaching, research, and extension, three fundamental pillars of higher education. Extension, traditionally treated as a peripheral activity, needs to be incorporated into the curriculum as a central pedagogical practice, promoting comprehensive and interdisciplinary training. This model seeks to overcome a fragmented approach, encouraging the connection between academic knowledge and community experiences, and enriching students' learning by engaging them in real projects that reflect social and cultural needs (ANTUNES; PADILHA, 2010).

In this way, the standardization of university extension in the undergraduate curricula of Higher Education Institutions (HEIs) is based on the constitutional principle of the inseparability of teaching, research, and extension. According to Article 207 of the Federal Constitution, "universities enjoy didactic-scientific, administrative and financial and asset management autonomy, and shall comply with the principle of inseparability of teaching, research and extension" (BRASIL, 1988).

The 2018 Normative Law, formalized by Resolution CNE/CES No. 7 of the Ministry of Education, determines that Higher Education Institutions (HEIs) must include extension activities in their undergraduate curricula, corresponding to 10% of the total course load. This guideline reinforces the constitutional principle of the inseparability of teaching, research, and extension, established in Article 207 of the 1988 Constitution, which proposes an academic education committed to social development.

With the regulation, extension activities must be integrated into the Course Pedagogical Projects (PPCs), encouraging students to have contact with the community and providing training that combines theory and practice. The standard also guides that these activities prioritize areas of great social relevance, solidifying the role of universities as agents of transformation.

This curricular integration seeks to train professionals with a critical and humanistic vision, promoting a connection between academic knowledge and the real demands of

society (MACHADO et al., 2023). In this way, the 2018 Normative Law encourages curricular flexibility, allowing students to choose extension activities that are most aligned with their interests and social context, contributing to the formation of more aware and active citizens.

In this way, the curricularization process strengthens the social function of universities and expands the scope of student education, providing an academic experience that goes beyond theoretical content, favoring the development of practical skills, ethical values, and a humanistic vision that prepares them to contribute to society (FRANCO, 2008).

MATERIALS AND METHODS

This study used the single case study method to examine the implementation of extension curricularization projects at the FAVENI University Center, carried out between February and June 2024.

The single case study method is a qualitative research methodology that examines, in-depth and detailed, a single subject, phenomenon, or institution in its real context (YIN, 2015). This type of study allows for a comprehensive and contextualized understanding of the research object, providing a detailed analysis of its characteristics and particularities. According to Yin (2015), the single case study is ideal for situations in which the case to be analyzed is exceptional, exclusive, or critical, offering a unique value for understanding the phenomenon studied.

To this end, the project "Creating Bridges for Accessibility and Inclusion" was applied. The research was carried out through participant observation, where data were collected throughout the activities and experiments carried out by the students, with monitoring and evaluation stages. The following is a step-by-step description of the method used:

The first step was to select the project that would be implemented throughout the year, aligning it with the principles of the extension curriculum. The project was implemented in the first semester (February to June), "Creating Bridges for Accessibility and Inclusion", with a focus on awareness and accessibility. Specific objectives, teaching methodologies, and practical activities were defined for the project that would allow students to apply their learning in real situations.

Between February and June, students participated in a project focused on inclusion and accessibility, whose objective was to develop critical awareness and practical skills to promote inclusive environments. At each stage of the project, students participated in theoretical classes on inclusion, accessibility, and the use of artificial intelligence to create accessible solutions. During the development of the project, two social experiments were carried out:

- Experiment 1: "Mobility" — Students experienced mobility difficulties to understand the barriers faced by people with reduced mobility.
- Experiment 2: "Nonverbal Communication" — This experiment focused on alternative communication, allowing students to understand the difficulties of people with hearing or speech impairments.

After these experiments, students mapped the accessibility conditions of the region and proposed improvements, developing a sense of responsibility and applying the learning in a practical context.

PARTICIPANT OBSERVATION AND DATA COLLECTION

During all activities of the two projects, the participant observation method was used to monitor the interactions of students with theoretical and practical content, as well as with the community. The students' reactions, difficulties, and developments were recorded throughout the process, providing a detailed analysis of the impact of the projects on academic training and the development of social and professional skills.

At the end of the project, students were encouraged to reflect on their experiences and the importance of practical learning. Assessment sessions were held where students discussed the results of the experiments and extension activities, analyzing the impact of theoretical knowledge on practice and how this learning contributed to the community and their personal and professional development.

RESULTS AND DISCUSSION

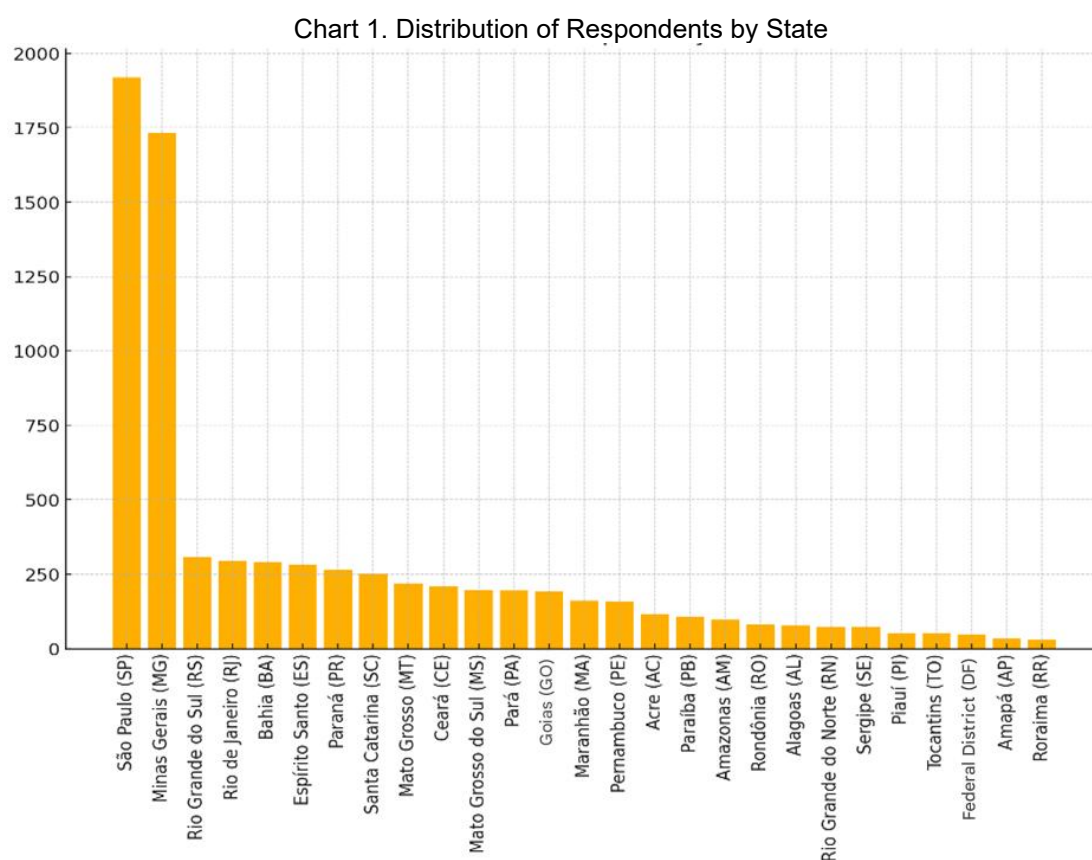
EXPERIMENT 1: "MOBILITY"

This experiment obtained a sample of 7,514 respondents, and the distribution by age group of the sample reveals that the age groups of 31 to 40 years and 41 to 50 years have the largest number of participants, with 2,560 and 2,286 responses, respectively. This

profile suggests that the Faveni University Center has these age groups with the highest number of students, as they are people of productive ages and active in the job market, who could develop accessibility topics in this environment. and social responsibility.

The 23 to 30 age group is also well represented, with 1,399 participants. This age group tends to include young adults, possibly recently entering the job market, who may be developing a greater awareness of social inclusion and accessibility.

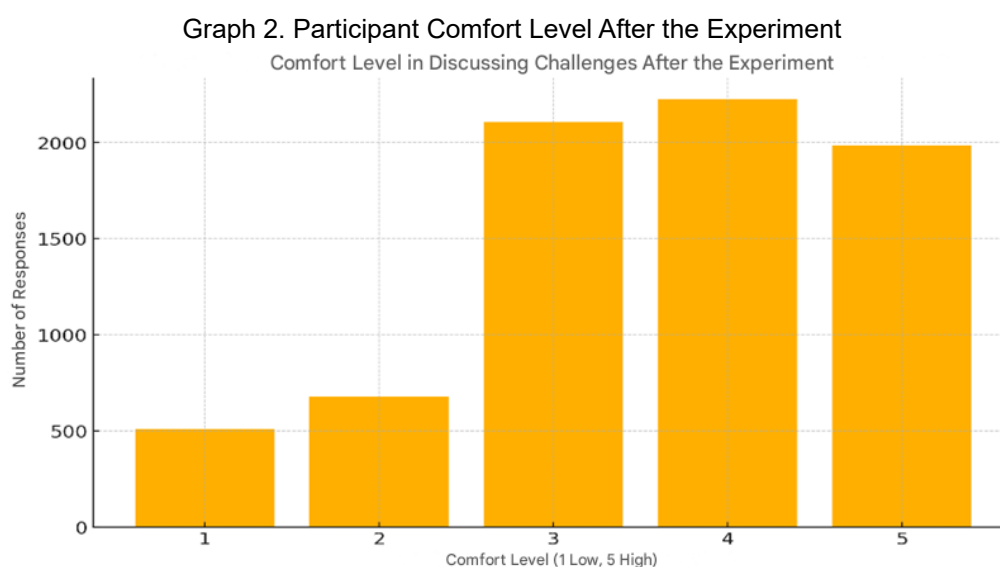
The 18 to 22 and over 60 age groups are the least represented, with 433 and 101 responses, respectively. The low participation of young people between 18 and 22 years old may indicate that the topic of accessibility is not yet widely discussed among this age group, or that opportunities for participation in activities like this are more limited. The over-60 age group, on the other hand, has a reduced representation, which may be related to less familiarity with or access to digital tools. This sample is also distributed across all regions of Brazil, as shown in Graph 1.



Source: Survey Data (2024)

Graph 1 shows the distribution of participants' responses by state, highlighting the representativeness of each region in the study. There is a high concentration in the

Southeast and southern states, with the states of São Paulo (SP) and Minas Gerais (MG) having the largest number of responses, followed by Rio Grande do Sul (RS) and Rio de Janeiro (RJ). This pattern suggests a greater concentration of participants in regions with higher population density and more developed educational infrastructure. States such as Bahia (BA), Espírito Santo (ES), Paraná (PR), and Santa Catarina (SC) also have a considerable number of responses, indicating moderate participation. This may reflect the interest or availability of access to research in these regions. The states of the North, such as Acre (AC), Amazonas (AM), Rondônia (RO), Roraima (RR), and Amapá (AP), have reduced participation, which may be related to factors such as lower population density, difficulties in accessing research initiatives, or lower representation of the institution under study.



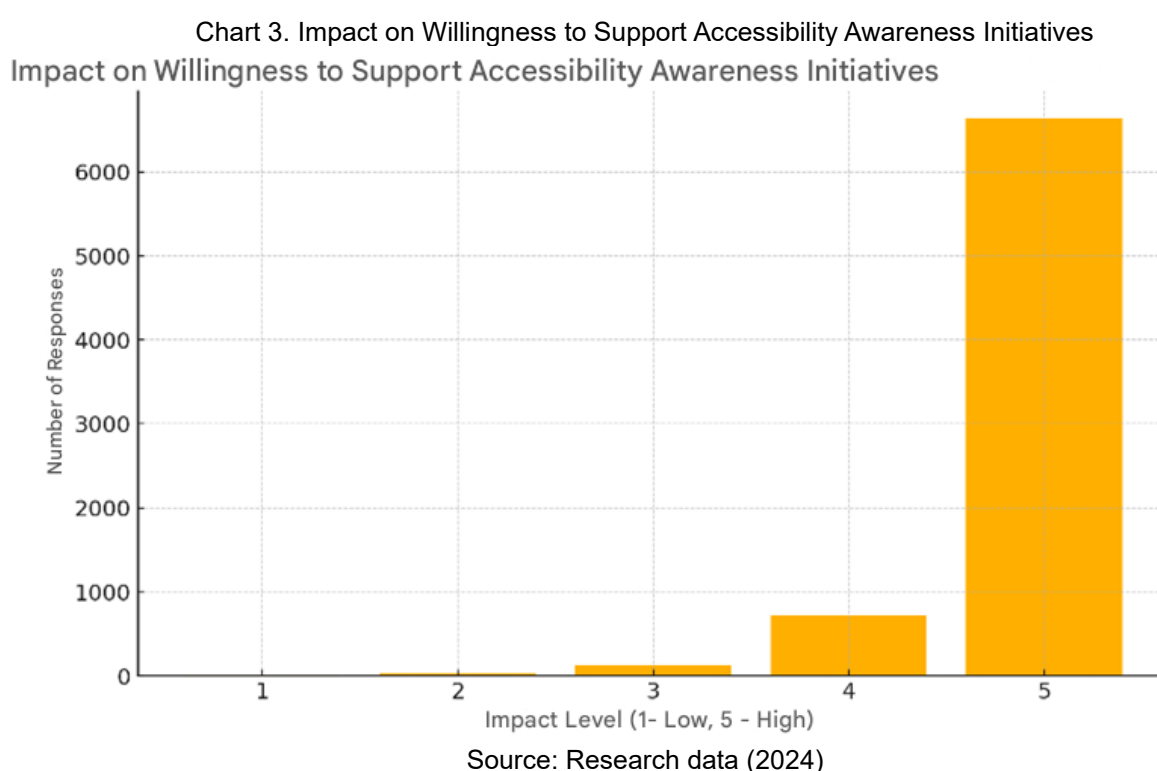
Source: Research Data (2024).

During participant observation in experiment 1, the first phase involved students walking around the college blindfolded and without assistance. During this first phase of the experiment, participants reported challenges when walking blindfolded in a disorganized environment, highlighting the sensory limitations experienced.

The second phase involved organizing the space, which considerably increased the comfort of the participants, highlighting the importance of a safe and well-structured space to assist the movement of people with visual limitations.

Graph 2 shows the data after the two phases, where most participants reported a high level of comfort when discussing the challenges faced during the experiment,

suggesting that this practical experience increases awareness and encourages openness to dialogues about accessibility. This experiment in the extension curriculum promoted reflective learning, where students were encouraged to exchange experiences and debate solutions, consolidating communication skills and an understanding of accessibility needs. In the context of extension curricularization, practical experiences like this allow students to explore in practice the benefits of adapted environments, reinforcing the relevance of adaptations in everyday life and promoting an accessibility perspective in the development of future projects.



Graph 3 indicates a high willingness of participants to support accessibility initiatives, showing that the practice contributes to more proactive attitudes toward inclusion. This predisposition is one of the main objectives of the extension curriculum, which aims to raise awareness and develop an active stance of commitment to ethical and social education.

It is noted that 76% of participants reported a significant increase in their awareness of accessibility after the activity, in line with the study's objective of promoting a practical understanding of relevant social issues.

After the experiment, participants were also asked "What were the main difficulties you encountered when walking blindfolded?" and the data revealed some recurring difficulties faced when experiencing locomotion without vision. The experience was reported as challenging by 89% of participants, who mentioned insecurity and difficulty in orientation as the main obstacles, and reported disorientation when walking blindfolded, even in familiar environments. The lack of vision causes a significant loss of spatial reference, which results in insecurity and hesitation during movement. This feeling of vulnerability highlights the importance of an organized and safe environment to facilitate the mobility of people with visual impairments.

The fear of bumping into furniture and objects was another common difficulty. This fear leads participants to move more slowly and cautiously. The experience shows that the presence of obstacles in the path represents a real risk, reinforcing the need to adapt physical spaces to avoid accidents.

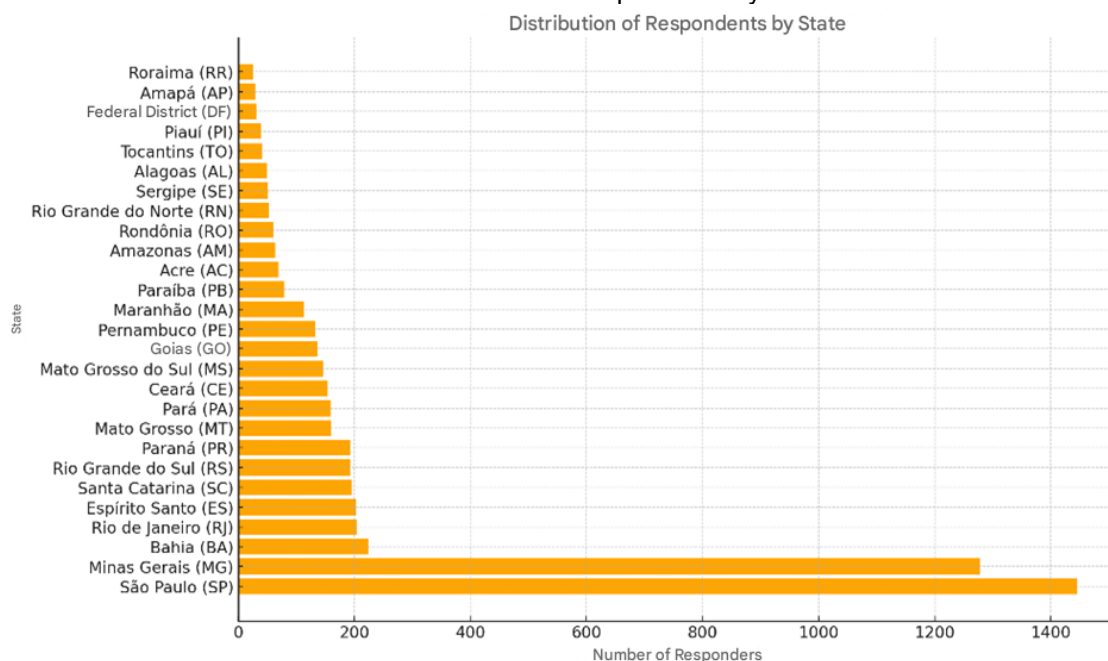
Some reported discomfort in relying on other senses, such as touch and hearing, to orient themselves. For people without visual impairments, adapting to this new form of perception in a short period creates a challenging and uncomfortable experience.

Several participants mentioned anxiety and a feeling of lack of control over the environment since they could not rely on their vision to predict or avoid obstacles. This experience simulates the stress and anxiety that many people with visual impairments face when navigating in unadapted spaces.

EXPERIMENT 2: "NON-VERBAL COMMUNICATION"

This experiment obtained a sample of 5,526 respondents, with the majority of respondents being in the 31-40 and 41-50 age groups. These age groups, which correspond to productive and active phases in the job market, possibly reflect the student population of the Faveni University Center and consequently a greater interest in topics related to inclusion and accessibility. The 23-30 age group is composed mainly of young adults. The extreme age groups (18-22 and over 60) are the least represented, which can be explained by a lesser familiarity with the topic or access to digital tools. A distribution similar to that of the previous experiment is observed.

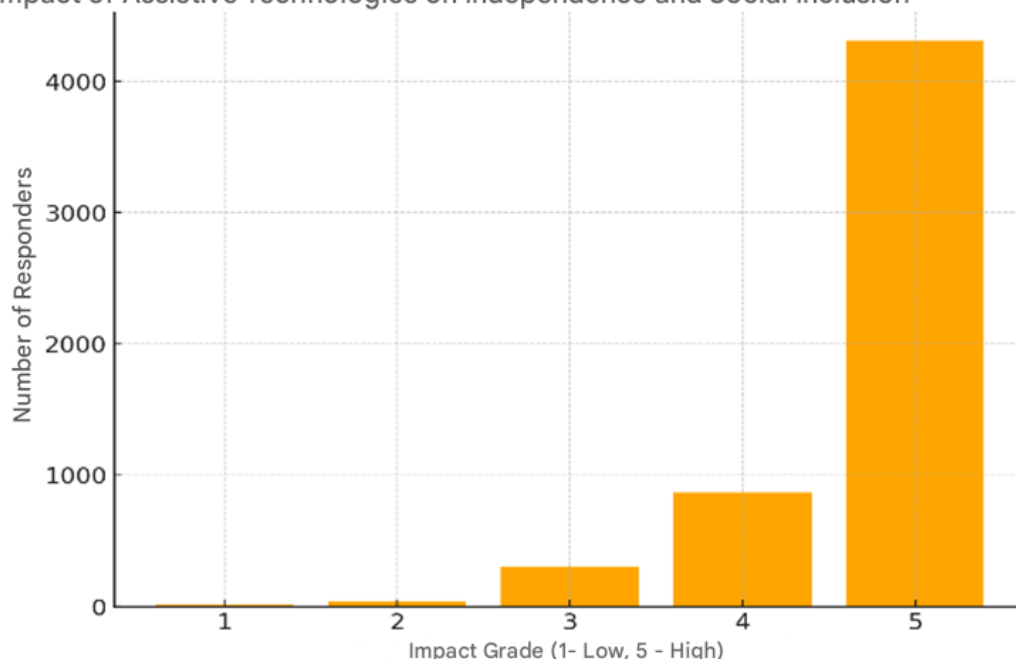
Chart 4. Distribution of Respondents by State



Source: Research data

Chart 4 shows the distribution of respondents by state. We can see that the states with the largest number of respondents are São Paulo (SP), Minas Gerais (MG) and Bahia (BA). The concentration in these states reflects a greater participation of populous regions with more accessible educational infrastructure. In contrast, states in the North, such as Roraima (RR) and Amapá (AP), have reduced participation, indicating a possible challenge of reach and inclusion in less accessible regions. This pattern suggests the need for actions by the Faveni University Center to increase the representation of less served states.

Chart 5. Impact of Assistive Technologies on Independence and Social Inclusion
Impact of Assistive Technologies on Independence and Social Inclusion



Source: Research data (2024)

Graph 5 shows that most participants positively assessed the impact of assistive technologies, with scores of 4 and 5, indicating that these technologies are widely seen as essential for independence and social inclusion. This data reflects the importance of continuing to invest in and make assistive technologies available to promote greater equality of opportunities and social participation for people with disabilities.

It can be seen that 81% of students reported feeling frustrated and anxious due to the lack of verbal expression, but at the same time, they recognized the importance of gestures and visual communication to establish interactions. After the experiment, the question was asked "How did the absence of speech and writing affect your ability to express yourself during the nonverbal communication experiment? Tell us about your experience". Participants reported that the absence of speech and writing was challenging and caused discomfort when trying to express themselves. Many mentioned that it was difficult to communicate ideas and feelings without these resources, experiencing frustration and discomfort. This response suggests that nonverbal communication imposes a barrier for those who cannot use speech and writing, highlighting the importance of developing alternative and accessible forms of communication.

The question was also asked, "During the experiment, what were the reactions of the people around you regarding your nonverbal communication?". Participant observation

showed that the reactions of the people around you ranged from curiosity and astonishment to confusion and difficulty in understanding nonverbal communication. Some responses indicated that people showed irony or strangeness, reflecting a lack of familiarity with nonverbal communication methods. This highlights the importance of education and awareness about alternative communication, which is essential to increase empathy and understanding of different forms of expression.

FINAL CONSIDERATIONS

This study demonstrated that the effectiveness of extension curricularization involves the intentional and planned integration of extension activities into the academic curriculum so that they are directly aligned with the contents of the disciplines and the training objectives of the course. Through the results obtained, it was evident that a well-structured curricularization facilitates the practical application of theoretical knowledge and promotes the development of interpersonal skills and humanistic values for the comprehensive education of students. Through the analysis of the implementation of extension curricularization in a real context, in this case, at the FAVENI University Center, it was shown that extension activities effectively integrated into the curriculum contribute to the academic development of students. The results obtained in the research show that 83% of the participating students reported feeling more prepared to apply their knowledge in real contexts after participating in extension activities. In addition, 76% of the students stated that extension experiences contributed to the development of interpersonal skills, such as empathy, communication, and collaboration. These data corroborate the idea that extension curricularization enhances learning by providing a practical educational experience, where students can apply theoretical knowledge to face real challenges in the community. Another relevant finding from this study is that 92% of the participants perceived that extension activities improved their understanding of social and environmental issues, which reinforces the contribution of these practices to the formation of critical and conscious citizens. The relevance of this work lies in its theoretical and practical contribution to higher education, especially for institutions that seek to implement extension curricularization effectively. In conclusion, for the curricularization of extension to reach its maximum potential as a promoter of comprehensive and socially responsible education, educational institutions must adopt a planned and integrated approach, with extension activities that directly engage with curricular content. This alignment strengthens

the institutional political-pedagogical project, ensuring that students not only master academic content but also develop a critical and humanistic view of reality. In this way, they contribute significantly to the construction of a more just and inclusive society, as demonstrated by the 84% of students who reported greater involvement in social issues after their extension experiences. This study provides evidence that the curricularization of extension, when well planned and aligned with the pedagogical project, promotes an academic education that prepares students to be agents of social transformation.

REFERENCES

1. Brasil. (2014). Lei nº 13.005, de 25 de junho de 2014. Aprova o Plano Nacional de Educação (PNE) e dá outras providências. Diário Oficial da União, Brasília, DF, 26 jun. Available at: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l13005.htm. Accessed on: November 3, 2024.
2. Brasil. (2018). Resolução nº 7, de 18 de dezembro de 2018. Dispõe sobre a extensão na educação superior brasileira e regulamenta o disposto na Meta 12.7 do Plano Nacional de Educação - PNE 2014-2024. Diário Oficial da União, Brasília, DF, 19 dez. Available at: https://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/55877883. Accessed on: November 3, 2024.
3. Fragnan, R. P. (2023). Curricularização da Extensão na Graduação da Pedagogia: uma Práxis Pedagógica na Transformação da Sociedade. Repositório Institucional das Faculdades Integradas de Jaú.
4. Gil, A. C. (2008). Métodos e Técnicas de Pesquisa Social (6th ed.). São Paulo: Atlas.
5. Machado, et al. (2023). Curricularização da Extensão no Ensino Superior: Práticas Aplicadas e Impactos na Formação Acadêmica.
6. Pereira, N. F. F., & da Silva Vitorini, R. A. (2019). Curricularização da Extensão: Desafio da Educação Superior. Interfaces - Revista de Extensão da UFMG, 7(1).
7. Ribeiro, M. R. F., Mendes, F. F. de F., & Silva, E. A. (2018). Curricularização da Extensão em Prol de uma Universidade Socialmente Referenciada. Revista Conexão UEPG, 14(3), 334-342.
8. Santos, M. J. C. dos. (2023). Inovação Pedagógica no Ensino Superior: Reflexões Teóricas e Práticas do PAAP.
9. Yin, R. K. (2015). Estudo de Caso: Planejamento e Métodos (4th ed.). Porto Alegre: Bookman.