How to engage and motivate distance education students in extension projects?

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Abstract: This study investigates the challenges faced by students in a university extension project with the goal of developing effective strategies to increase student participation. Using a qualitative explanatory approach and categorical content analysis, the study revealed a lack of knowledge about the project and motivation among students. Recommended strategies include expanding dissemination of the project, integrating extension activities into students' regular curriculum, creating online discussion groups, and offering extension scholarships to encourage student participation.
Keywords: Engagement; Motivation; Extension project.

Como atrair e motivar estudantes da modalidade EaD em projetos de extensão?

Resumo: Esta pesquisa investiga os desafios enfrentados por estudantes em um projeto de extensão universitária, com o objetivo de desenvolver estratégias eficazes para aumentar sua participação. Utilizando uma abordagem qualitativa-explicativa e análise de conteúdo categorial, o estudo revelou um desconhecimento sobre o projeto e a falta de motivação entre os alunos. Como estratégias recomendadas, sugere-se ampliar a divulgação do projeto, integrar as ações extensionistas ao currículo regular dos estudantes, criar grupos de discussão on-line e oferecer bolsas de extensão para incentivar a adesão dos alunos.

Palavras-chave: Atração; Motivação; Projeto de extensão.

¿Cómo atraer y motivar a los estudiantes de la modalidad de educación a distancia en proyectos de extensión?

Resumen: Este estudio investiga los desafíos a los que se enfrentan los estudiantes en un proyecto de extensión universitaria para desarrollar estrategias eficaces que aumenten su participación. Mediante un enfoque cualitativo-explicativo y un análisis de contenido categorial, el estudio reveló que los alumnos desconocían el proyecto y que carecían de motivación. Entre las estrategias recomendadas, se sugiere ampliar la divulgación del proyecto, integrar las acciones de extensión en el plan de estudios regular de los estudiantes, crear grupos de discusión en línea y ofrecer becas de extensión para incentivar su participación.

Palabras clave: Atracción; Motivación; Proyecto de extensión.

1 INTRODUCTION

University Extension - with a Brazilian historical-conceptual foundation and a phenomenon of public policy, interdisciplinary and inclusive - contributes to the comprehensive education of students and to the promotion of citizenship among participants, thus contributing to social development (Marcon, 2020; Frutuoso; Silva, 2024). Extension acts as a strategic axis, disseminating the knowledge produced by the university beyond its physical boundaries and providing benefits to the community (Almeida; Barbosa; Moreira, 2020).

The growing demand for academic activities that offer practices that meet the specific needs of students (Miranda; Amaral, 2023), driven by the increase in the number of students in the Distance Education (EaD - as it is called in Brazil) modality (Mello et al., 2023), requires a significant challenge for leaders of extension activities and for public universities that offer distance education courses. Given this information, the following question arises: how to engage and motivate distance education students in university extension projects?

In this context, the main objective of this study is to develop effective strategies to increase the engagement and motivation of students in extension projects, based on the difficulties identified by the students themselves. The specific objectives of this experience study include: (i) to examine the problem situation regarding the obstacles to the entry and permanence of students in the extension project; (ii) to analyze the arguments for improvements in extension activities from the perspective of students of extension actions; (iii) to propose actions to increase the engagement and motivation of students in the extension project.

This study uses a qualitative methodology of an explanatory nature (Gil, 2023) and is structured as an experience report, a format that has proven effective for presenting research in the field of education, especially in the context of higher education and its integrated teaching, research and extension practices (Mussi; Flores; Almeida, 2021). In order to provide a theoretical basis for the research, a literature review was conducted. This review included both national and international publications from prestigious scientific journals, a process that helped to build a solid and diversified knowledge base to support the analyses, discussions, and conclusions derived from the research.

Educator Paulo Freire provided pertinent reflections on the term "extension" and highlighted

the complexity of the concept when used in the field of education (Freire, 1983). For this reason, and to help the reader understand the key theoretical points of the study, the basic concepts of the research are described below. An extension activity is understood - not only as a complement to theoretical teaching subjects - but as part of an interdisciplinary, pedagogical, and scientific process that can create spaces for the production of new knowledge involving different fields of knowledge (Fernandes, 2023; Piekarski et al., 2023; Ripa; Unglaub, 2020). Extension projects, on the other hand, are continuous and procedural actions with specific objectives and defined deadlines. These projects aim to promote the exchange of knowledge and strengthen the university's performance in the social context (Jesus; Ratton; Campos, 2023; UFRJ, 2024).

The relevance of this study is demonstrated by the detailed analysis of the barriers that limit student participation and retention in university extension projects. The interventions proposed in the report aim not only to overcome these barriers but also to contribute significantly to the development of a more engaged and active academic community. In addition, these interventions are designed to stimulate knowledge production and increase the social impact of extension projects, an action that can benefit both students and society in general.

In terms of originality, as of December 2024, no research was found in the Scopus, ERIC, Scielo, and Google Scholar databases that combined in one study the report of student experiences and recommendations for improvement of actions to attract and motivate participants, especially through the use of content analysis methods. The research proposes actions that integrate different strategies for attraction and motivation, which makes the study applicable to other academic extension realities.

2 METHODOLOGY

2.1 Research Context and Participants

The Lab-Lid Resenhas University Extension Project (Projeto de Extensão Universitário Lab-Lid Resenhas) is located at the Federal Rural University of Rio de Janeiro (UFRRJ), which is a member of the Consortium of Distance Higher Education of the State of Rio de Janeiro (CEDERJ). The students who participated in this study are enrolled (or were students) in the Administration course offered by UFRRJ through CEDERJ. The students were actively involved in the Lab-Lid

Resenhas Extension Project during the period from 2021 to 2023.

The CEDERJ consortium has more than forty thousand students enrolled in eighteen undergraduate courses. In April 2024, CEDERJ is part of seven public higher education institutions: The Celso Suckow da Fonseca Federal Center for Technological Education (CEFET), the State University of Rio de Janeiro (UERJ), the State University of Northern Fluminense (UENF), the Fluminense Federal University (UFF), the Federal University of the State of Rio de Janeiro (UNIRIO), the Federal University of Rio de Janeiro (UFRJ) and the Federal Rural University of Rio de Janeiro (UFRRJ) (Machado, 2023; Fortunato; Predes Junior; Calvosa, 2023).

The Federal Rural University of Rio de Janeiro, which is part of the extension project, was founded over a century ago (Calvosa et al., 2022) and offers a wide range of academic programs, including 67 undergraduate courses (MEC, 2024) and 20 graduate programs (Sucupira, 2024). In this context, the Administration Course offered by the UFRRJ through CEDERJ has approximately five thousand students enrolled (Fortunato; Predes Junior; Calvosa, 2024).

The Lab-Lid Resenhas Extension Project is the result of collaboration between members of partner institutions and aims to discuss, organize, and disseminate studies, organizational applications, and scientific research on the topics of Business Leadership and Organizational Management. Thus, the project aims to produce scientific knowledge – specifically reviews of scientific articles – through the guidance of multipliers of these activities and studies (Fortunato; Predes Junior; Calvosa, 2023).

Figure 1 - Research context
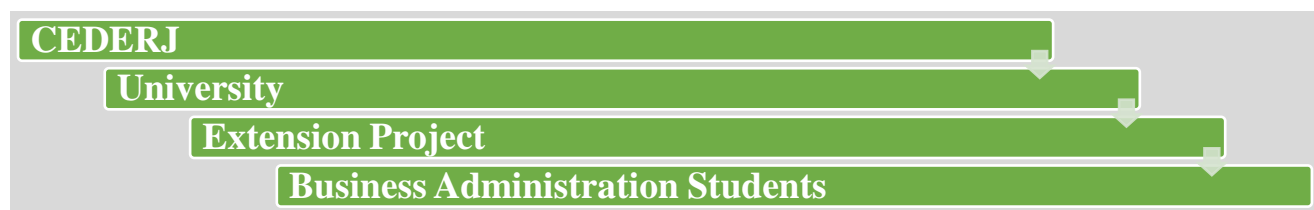
Source: Prepared by the authors (2024).

Although Business Administration students reported significant academic contributions during the extension project (Fortunato; Predes Junior; Calvosa, 2024), motivating these students to effectively participate in extension activities is a significant challenge. This reality highlights the need for a more in-depth analysis to identify the barriers that prevent students from participating more actively and continuously. Therefore, it is imperative to conduct a detailed study that maps the main

obstacles related to engaging and retaining these students in the project. To do this, it is first necessary to understand the sociodemographic and academic characteristics of the participants.

2.2 Methodological Approach

This experience report is part of a study that investigated the main academic contributions for Administration Students in the distance education modality, focusing on a university extension project dedicated to the preparation of critical reviews.

Based on the perceptions of the interviewed students, this work aims to explore strategies to increase student engagement. In order to achieve an accurate and well-founded diagnosis, the study was conducted in two main stages. The first one involved a literature review to gather a better understanding of the topic and examine the existence of a codebook or categories that would support the next stage. In the second stage, a content analysis was carried out guided by Bardin's guidelines (2016) and supported by Atlas.ti *software* (2024).

2.3 Literature Review

The literature review of this study was carried out to theoretically substantiate the analyses and propositions related to the engagement and motivation of distance education students in university extension projects. For this purpose, the Scopus, ERIC, SciELO, and Google Scholar databases were consulted, the latter with the support of the Publish or Perish software (Harzing, 2024). The search criteria were to retrieve studies published between 2019 and 2024 in scientific journals positioned in the first quartile 'Q1' of the Scimago Journal Ranking (2023), and national publications classified in the 'A' stratum in Qualis/Capes (2017-2020).

Several studies found in the review identified barriers that limit student engagement in extension activities. Almeida, Barbosa, and Moreira (2020) highlight that the lack of dissemination and the perception of academic relevance are critical factors that hinder participation. Complementarily, Mello et al. (2023) address the structural challenges faced by distance education

students, such as difficulty in accessing information and academic isolation. These barriers make it even more important to propose specific strategies to increase the visibility and attractiveness of Extension activities. Studies such as Carvalho and Mourão (2021) examine the relationship between participation in complementary activities and the development of professional skills, showing that activities well integrated into the curriculum can increase engagement. In addition, Fernandes (2023) highlights the role of digital technologies in promoting innovative extension experiences, allowing for greater accessibility and participation of distance learning students.

Distance education presents unique characteristics that exacerbate the challenges of engagement in Extension projects. Ripa and Unglaub (2020) argue that the lack of in-person interaction can create a disconnection between students and academic activities. However, authors such as Lessa, Leitão, and Silva (2022) highlight the potential of digital technologies to create virtual communities that foster interaction and collaboration.

In order to fill this gap, this study, based on empirical data, proposes interventions adapted to the needs of this audience and builds a set of strategies aimed at attracting and motivating distance learning students in extension projects, meeting the practical demands and gaps identified in the literature.

2.4 Content Analysis

At this stage, of the 28 students who participated in the extension project, 17 (61%) responded to the research questionnaire. The analysis of the experience reports was carried out through content analysis, using the categorical method described by Bardin (2016), with the support of the Atlas.ti software to extend and deepen the investigation. As described by Oliveira et al. (2021), the use of software in qualitative studies can contribute to the objective study of the phenomenon. Ronzani et al. (2020) highlight that Atlas.ti software provides valuable analytical resources for academic research, including: organizing, retrieving, and analyzing data in a continuous, cyclical, and comparative manner. Following Bardin's guidelines, the analysis process included pre-analysis and the creation of the research corpus, followed by coding and categorization of the collected material.

Inductive categorization was chosen for data analysis because the literature review did not

provide pre-existing categories appropriate to the study objectives. Thematic recording units were used for coding, and the frequency of interviewee citations was recorded. This method allowed us to identify emerging patterns and recurring themes in the interviews. The use of Atlas.ti software facilitated the organization and visualization of the data, contributing to a more holistic understanding of the categorical interactions.

3 CHALLENGES AND OPPORTUNITIES IN THE DISTANCE EDUCATION EXTENSION PROJECT

Preliminary analysis of the interviews revealed two challenges facing the extension project. First, there was a notable lack of awareness about the existence of the extension project, as unanimously reported by the students. This challenge indicates a failure in the communication and dissemination of the project. Second, there was a lack of motivation among the participants, a factor that can significantly affect student engagement and active participation.

Chart 1 summarizes selected excerpts from student testimonies that describe these challenges and point to possible opportunities for improvement. Evaluation of these accounts is relevant to understanding the main barriers to student participation and engagement in Extension activities.

Chart 1: Challenges and opportunities observed by students

Challenges/Opportunities	Reports (thematic recording units)*
Lack of awareness of extension opportunities	"[...] I learned about the extension project right at the end of my degree [...]" "Greater disclosure about the form of entry into the project should be presented in the first periods [...]". "Until I completed my degree, I had not participated in any extension project [...] and I was unaware of the diverse learning opportunities that only extension can bring." "It would be interesting to have more academic journeys, both in-person and distance education, to better present the university so that distance education students feel more embraced and welcomed by the university."

Challenges/Opportunities	Reports (thematic recording units)*
	"Exposing the project to the community can also be interesting."
Motivation gaps for engagement in extension activities	"[...] I believe that RAs [Remote Assessments] on a subject that interests the student can motivate them to develop an extension project in this sense [...]". "[...] it would be interesting and motivating to have the opportunity to present (orally explain) the review prepared in spaces, even virtual ones, at the university." "[...] Motivate students to carry out academic production activities to compose Complementary Academic Activities [...]". "[...] I believe the key is motivation, showing results from students who participated in these projects."

* Reports were translated and adapted for this chart.

Source: Research data (2024).

Chart 1 shows how a lack of knowledge about the extension project and a lack of incentives can demotivate students and significantly reduce their engagement. Given this situation, it is essential to develop a comprehensive strategic plan that integrates measures to increase the visibility of the project and to motivate participants. According to Calvosa (2023), a well-structured plan can serve as a facilitator and catalyst for the necessary changes.

The examination of student accounts conducted during the pre-analysis phase forms the basis for the subsequent development of the content analysis. This process includes everything from initial coding to final categorization of interviews. Such a detailed analysis is essential to uncover the central aspects of the phenomenon under study and to identify effective strategies that can increase both student attraction and engagement in extension projects. The goal is to overcome existing barriers and encourage more active and meaningful participation by all students involved, thus improving the effectiveness and impact of these academic initiatives.

4 RESULTS AND DISCUSSION

4.1 Participant Profile

Table 1 presents a detailed characterization of the research participants, including sociodemographic and academic variables. Among the 17 students who responded to the questionnaire, there was a predominance of females, with 65% of the responses coming from females, while males represented 35% of the respondents. This gender distribution is relevant to contextualize the reported perceptions and experiences. In addition, identifying gender disparities is important to understand whether there are specific barriers that affect minority and vulnerable groups more.

Regarding the age range of participants, 29% were up to 27 years old, 35% were between 28 and 32 years old, and 30% were 33 years old or older. These data are relevant to the content analysis of the interviews because they allow us to understand how demographic variables may influence the motivations and challenges faced by students in the Extension project.

Table 1 - Sociodemographic and academic profile of the participants

	Age	Gender	Higher degree of academic development	Undergraduate semester participated in the project	Before the project I had completed some higher education
E01	41	Male	Master's degree completed	GFA²	Yes
E02	29	Male	Graduation completed	5th or 6th	No
E03	42	Female	GGC¹	7th or 8th	Yes
E04	26	Female	GGC	7th or 8th	No
E05	24	Female	Undergraduation in progress	5th or 6th	No
E06	23	Female	Undergraduation in progress	7th or 8th	No
E07	32	Female	Specialization completed	GFA	Yes
E08	32	Female	Graduation completed	7th or 8th	No
E09	24	Female	Undergraduation in progress	3rd or 4th	No
E10	31	Male	Undergraduation in progress	5th or 6th	No
E11	30	Female	GGC	5th or 6th	Yes
E12	25	Female	Undergraduation in progress	7th or 8th	No
E13	58	Male	GGC	5th or 6th	Yes
E14	31	Female	Graduation completed	GFA	No
E15	40	Female	Master's degree in progress	5th or 6th	Yes
E16	38	Female	Specialization completed	11th or later	Yes
E17	34	Male	Specialization completed	7th or 8th	No

1 - GGC: Undergraduate with another degree completed.
2 – GFA: Completed Degree in Administration.

Source: research data (2024).

The data presented in Table 1 shows the considerable diversity in the academic backgrounds of the participants in the extension project. A diversity of educational levels can be observed among the students: 29% are undergraduates, 18% have already completed their undergraduate degree, 23%

are pursuing a second undergraduate degree, and 18% have completed specializations, while 12% are engaged in master's programs, either in progress or completed.

In addition, the data show that most students (94%) entered the extension project halfway through their Administration course. It should be noted that the duration of the course varies between eight and ten semesters and can extend to a maximum of fifteen semesters (CECIERJ, 2024). Regarding the previous educational background of the participants in the project, there is a balance: 58% of the participants did not have a full university degree, while 42% had already completed an undergraduate or postgraduate course. This diversity of academic experience provides a significant exchange of knowledge.

4.2 Coding and Categorization

The student interviews revealed a challenging scenario in the context of the extension project. Despite the obvious interest of the students in the learning and development that the project promises, there are significant barriers that hinder the recruitment of new participants and the continued engagement of those already involved. These barriers include both a lack of publicity for the activities and a lack of motivation among the students.

With this in mind, this section of the report suggests some practical changes and interventions, all based on the perceptions and experiences reported by the students. These suggestions are also in line with trends observed in recent research published in prestigious scientific journals. The intent is to develop more effective strategies to not only attract new participants but also to increase the engagement of current members.

Chart 2 presents the strategies for increasing the dissemination of Extension projects, categorized according to the frequency of mention (quotation) by research participants. The categories were extracted from the students' speeches and revealed the perceptions and needs of the university's internal public regarding the dissemination of extension projects. The analysis of the interviews, transcribed in Table 2, allows us to identify the main needs and opportunities.

Chart 2: Categories, subcategories and their frequencies

F*	Categories	Purpose	Subcategories	F*
104	Engagement strategies	Inform students about extension actions and explain the benefits.	Disclosure	64
			Integration into the curriculum	40
26	Motivation strategies	Provide constructive interactions and continuous support to students during the actions.	Discussion groups	20
			Encouraging participation	6

* F: Frequency.

Source: Research data (2024).

Chart 2 highlights that attraction and motivation strategies are the most common for the proposed research. Attraction strategies, which focus on informing students about Extension activities, include the following subcategories: (i) dissemination and (ii) integration into the curriculum. On the other hand, motivational strategies include the following subcategories: (i) discussion groups and (ii) encouraging participation. This analysis highlights the need for a multifaceted approach that combines measures to attract interest and engage students.

The frequencies of the categories listed in Chart 2 were calculated using Atlas.ti software. After pre-analysis and exploration of the collected material, coding, and categorization, all citations present in each category were counted. This procedure was repeated within each category to determine the frequencies of the subcategories in this study. The direct quotes from the questionnaires provide a solid basis that demonstrates the perceptions and experiences of the students involved, which support the proposed strategies for dissemination and engagement of distance learning students in the university extension project.

4.2.1 Category I: Engagement strategies

This category focuses on the study of the 104 contextual units extracted from the students' reports that propose actions to increase the recruitment of new participants in the Lab-Lid Resenhas extension project. In this category, the following subcategories were excluded: (i) dissemination (64 quotations) and (ii) curricular integration (40 quotations).

4.3 Subcategory: Dissemination of Extension Actions

Dissemination of Extension activities emerged as the most frequently mentioned subcategory in the participants' statements, highlighting a significant gap in the communication of these activities. Students recognize the importance of these activities in enriching their academic life, but express the need for more information in order to understand and participate in the proposed initiatives. The lack of detailed knowledge about the projects hinders student participation.

The integration of digital technologies in the consulting practice offers opportunities to improve the accessibility and visibility of the consulting project. An example of this is the suggestion made by a 34-year-old student who joined the extension project between the 7th and 8th semester of his undergraduate degree (E17): "There could be a specific website on the official university website for the extension project, where all previous evaluations could be available for consultation [...]" (translated by us). Facilitated access and effective communication of extension activities are important to increase student participation, as demonstrated by Lessa, Leitão and Silva (2022) and Piekarski et al. (2023).

Promoting extension activities through a dedicated website facilitates interaction among participants and increases the visibility of extension projects, as highlighted by Costa and Bezerra da Costa (2023) and Piekarski et al. (2023). This approach can increase student engagement in projects, as observed by Oliveira, Zezzo, and Coltri (2023) and Grangeiro et al. (2022). The authors note that the availability and ease of access to information can increase the effectiveness and reach of extension initiatives.

In this context, a 58-year-old student in his second undergraduate degree, corroborated by a student's report (E13), emphasized: "Institutional actions could promote participation through awareness campaigns, dissemination of available projects [...]" (translated by us). In a complementary way, a 32-year-old student who participated in the extension project between the 7th and 8th semester of her undergraduate degree (E08) suggested: "It would be interesting for the educational institution to begin to publicize participation in these extension projects more widely, with the help of all the professors of the course, also publicizing the benefits for the student's academic career [...]" (translated

by us). These strategies also contribute to reinforcing the positive image of the university, promoting greater integration with the academic and local community, strengthening relationships, and maximizing the social and educational impact of extension projects, as explored by Soares and Colares (2020).

In light of the above, it is recommended that the extension project and the university prioritize the development of digital infrastructures and comprehensive communication strategies to facilitate student engagement. This would include the creation of portals dedicated to extension activities and the use of social networks to publicize activities. This approach can enhance the educational experience of students and increase the social and educational impact of these initiatives.

4.4 Subcategory: Curriculum Integration

This subcategory appeared frequently in students' reports, demonstrating the significant opportunities for integrating extension projects into the academic curriculum. Although extension activities are sometimes considered secondary activities in education (Jesus; Ratton; Campos, 2023), the integration of the curriculum matrix with extension activities can provide significant gains in students' academic development (Carvalho; Mourão 2021).

The structuring of the curriculum matrix is also relevant to preparing professionals to face the adversities of the market, as demonstrated by Neri et al. (2024). In this regard, a 58-year-old student in his second undergraduate degree (E13) stated: "[...] integrate extension projects into the academic curriculum to give students academic credit for their participation" (translated by us). This integration has been shown to have a significant impact on students' perceptions of their professional development (Carvalho; Mourão, 2021).

Student participation in extension projects has been integrated as part of complementary academic activities at the university, a change supported by Haydu et al. (2024). A 34-year-old student who participated in the extension project in the 7th or 8th semester of his undergraduate degree (E17) reported on this point: "[...] Motivate students to carry out academic production activities to compose Complementary Academic Activities [...]" (translated by us).

The Federal Rural University of Rio de Janeiro has promoted the integration of extension

activities into the academic curriculum, allowing students to participate in extension projects as part of Complementary Academic Activities (AAC). This integration, although optional, represents a first step towards the curricularization of extension under Resolution No. 7 of 2018 of the National Education Council (Brasil, 2018), which establishes that at least 10% of the total workload of undergraduate courses should be allocated to extension activities. This initiative, formalized by the Council for Teaching, Research, and Extension (CEPE, 2007), aims to enrich the educational experience of students by linking academic knowledge with the demands of society, as shown in Chart 3.

Chart 3: Extension actions integrated into the regular curriculum in the form of AAC

Activity	Workload
Participation in extension programs and projects.	30 hours per project.
Taking extension courses or participating in workshops	30 hours per semester.
Organization of academic and cultural events	10 hours per event.
Participation in the UFRRJ Choir	05 hours per school period of participation.
Participation in extension groups recognized by UFRRJ	05 hours per school period of participation.
Participation in the organization of internal events at UFRRJ	04 hours per participation.
Participation in activities to assist children and adolescents.	12 hours per school period of participation.
Participation in activities to assist the elderly and people in social vulnerability.	Up to 30 hours per participation, at the discretion of the Course Coordination.

Source: Adapted from UFRRJ/CEPE (2007).

Extracurricular activities, integrated as Complementary Academic Activities, provide various opportunities for academic and social development, including participation in programs, projects, groups, and extension courses. In addition, activities aimed at assisting groups in vulnerable situations, such as children, adolescents, and the elderly, are also recognized and evaluated as AAC, with a specific workload assigned to each type of action. These initiatives enrich students' education by encouraging engagement with social issues and the development of practical and civic skills.

In a broader sense, a 41-year-old Master's student (E01) suggested: "The disciplines could offer complementary extension activities that are included in the curricula, as an integral part of the grade composition [...]" (translated by us). A 26-year-old student in her second undergraduate degree

(E04) added: "I think that practical activities in the classroom in the disciplines can be a gateway to learn something about what is developed in an extension project [...]" (translated by us). These measures can enhance the educational experience in extension activities and facilitate the transition of theoretical concepts learned in the regular curriculum to everyday practice in society (Silva; Lima; Alves, 2023). Carvalho and Mourão (2021) highlight that both the phase of the course in which the student is (freshman or graduate) and their participation in complementary academic activities are directly related to the perception of the professional skills acquired.

These integration measures have the potential to foster a culture of practical engagement and continuous learning among students, which facilitates the application of theoretical knowledge in real-world contexts. Therefore, it is recommended that the university and Extension project leaders explore ways to integrate Extension activities into the regular curriculum to promote a more holistic and applied education.

This integration can be achieved in several ways, including incorporating extension activities with the provision of additional academic hours that would contribute to the workload required for course completion. In addition, offering elective courses that align with the goals of the extension project can provide students with opportunities for direct hands-on learning relevant to their areas of study.

4.4.1 Category II: Motivational strategies

This category includes the analysis of 36 contextual units (quotes) based on students' experiences discussing possible actions to increase motivation and encourage students to continue in extension activities. The following subcategories stood out in this category: (i) discussion groups (20 quotations) and (ii) encouraging participation (6 quotations).

4.5 Subcategory I: Discussion Groups

Among the various strategies identified in the interviews, the implementation of discussion groups emerged as the most common subcategory. This reflects the participants' desire to increase interaction with other students and with extension project advisors. The creation of discussion groups is an effective strategy for fostering a vibrant and engaged learning community, especially in the context of distance education (Bortolazzo, 2020; Faria Júnior; Silveira, 2023; Lião et al., 2023).

In this context, a 26-year-old student studying for her second degree (E04) highlighted: "[...] The possibility of creating groups and collaborating on the development of a project in real time is one of the possibilities of using technology [...]" (translated by us). A 32-year-old graduate student (E08) added: "[...] Something that would be interesting to improve would be the interaction between volunteers within the project, perhaps with the creation of a WhatsApp group [...]" (translated by us). In an educational environment, WhatsApp groups and other possibilities of the application can improve communication between students, and create a positive atmosphere and a sense of belonging to the academic group (Bortolazzo, 2020; Coppi et al., 2022).

Digital spaces allow students to interact, discuss topics relevant to the course, exchange ideas, and collaborate on extension projects (Coppi et al., 2022; Soares; Colares, 2020). These interactions not only enrich the learning experience but also help overcome the isolation often associated with distance learning activities (Imperatore, 2020). A 38-year-old student taking a specialization course (E16) affirmed: "Participation through forums, involvement in debates and discussions on topics, can be promoted and passive interest in projects and research emerges" (translated by us).

These forums can facilitate both real-time and asynchronous discussions that allow students to explore and deepen their understanding of the topics being studied, which can improve knowledge retention (Bortolazzo, 2020; Coppi et al., 2022; Lião et al., 2023). In addition, forums can serve as valuable resources for sharing study materials, links, articles, and other useful information that promotes collective learning (Faria Júnior; Silveira, 2023; Soares; Colares, 2020).

The analysis of the interviews shows that the creation of discussion groups is an important strategy to enhance student interaction and engagement in extension projects, especially in the context of distance education. These digital spaces allow for the exchange of ideas and the collaborative development of projects. To optimize these interactions, it is recommended that Extension project leaders create and maintain discussion groups and ensure that they are effectively integrated with academic objectives. These groups should also serve as resources for sharing study materials and

useful information, thereby strengthening an engaged and connected learning community.

4.6 Subcategory: Promoting Participation

Although rarely mentioned in the interviews, the subcategory of "encouraging participation" has significant potential to help achieve the goals of extension projects. Encouragement through financial support is valued in the academic community and catalyzes more active and engaged student participation in extension projects (Almirante; Ferreira, 2023).

Financial support for students involved in extension projects is recognized as an important factor for both students and institutions seeking to promote more active and engaged participation (Almirante; Ferreira, 2023; Martins, Oliveira; De Oliveira, 2024). An example of this need is expressed by a 41-year-old graduate student (E01): "EAD institutions like CEDERJ can offer financial support grants for extension activities [...]" (translated by us). This suggestion reflects the perception that such incentives are relevant to facilitate student participation in projects. In this scenario, Nasu and Sasso (2021) state that students who receive scholarships tend to perform better academically than those who do not receive scholarships in undergraduate Business courses.

In line with the report in the paragraph above, a 32-year-old student (E08) emphasized: "It would be interesting for the educational institution to provide a scholarship for the students participating in the project" (translated by us). This recommendation underscores the need to alleviate the financial concerns that often accompany university students, ensuring can begin and remain engaged in their academic activities without the added pressure of economic challenges. In order to meet this need, government agencies make available calls for academic scholarships for extension programs aimed at public universities, as documented by Nasu and Sasso (2021).

Confirming the previous reports, a 58-year-old student studying for his second degree (E13) emphasized: "Higher education institutions can offer financial incentives to students who participate in extension projects and academic research, thus attracting students who do not have the means [...]" (translated by us). This perspective highlights the importance of institutions adopting a proactive stance in supporting their students, ensuring that educational enrichment opportunities are accessible

to all, regardless of their economic situation, as noted by Almirante and Ferreira (2023).

The testimonies collected in the interviews highlight the importance of financial support structures in higher education to democratize access to enrichment projects. These incentives are important in promoting a more inclusive and equitable participation of students in extension activities. The introduction of scholarships and other forms of financial support can reduce the economic barriers that prevent many students from actively participating in extension projects.

Given the evidence of the positive impact of financial support on Extension projects, it is recommended that Extension project leaders, together with university representatives, seek initiatives to explore available funding opportunities, whether through government resources or institutional partnerships. The primary purpose of these actions is to provide academic scholarships that support extension activities, thereby increasing student access and participation.

5 CONSIDERATIONS

This experience report focuses on how an extension project can increase the attractiveness and motivation of distance learning students by exploring the perceptions and experiences of students involved in the Lab-Lid Resenhas extension project. In response to the research question, the study found that lack of knowledge about the projects and motivation gaps were the main challenges for student participation.

Regarding the main objective, the research demonstrated the need to develop effective strategies to increase the attraction of students to extension projects. The secondary objectives were achieved: the problem highlighted the obstacles to students' entry and permanence in the extension project; the students' arguments were analyzed through a thematic content analysis; and finally, actions were proposed in an action plan.

In order to strengthen the attraction strategy, based on the inferences from the content analysis categories, it is recommended to increase the dissemination of the extension project and to integrate extension activities more effectively into the regular curriculum of the university. In terms of

motivation, the research results indicate the need to create online discussion groups and to encourage participation by providing extension scholarships. Theoretically, the study enriches the debate on how to attract and motivate distance learning students for extension projects by providing insights into the barriers and specific needs of this group. In terms of practical contributions, the proposed strategies and actions can be implemented by the extension project analyzed and by other projects that offer activities to distance learning students, adapting them to their realities and needs.

In terms of limitations, the study had a limited scope, focusing on a single extension project and a specific course. Based on the limitations, it is recommended to conduct research with more representative samples of CEDERJ students, covering different courses and extension projects. Conduct quantitative research to evaluate the impact of the proposed actions on student engagement, using performance indicators and questionnaires.

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