Original Article

Extension Curricularization Through The Project Methodology As A Drive For Regional Development: An Application In Distance Education

A curricularização da extensão por meio da metodologia de projetos como propulsora de desenvolvimento regional: uma aplicação na EAD

A Curricularización De La Extensión A Través De La Metodología De Proyectos Como Impulsora Del Desarrollo Regional: Una Aplicación En La Educación A Distancia

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Abstract

This article aims to demonstrate the practical application of university extension, now a loyal requirement, in higher education distance courses. It demonstrates, based on a successful case, through integrative projects, using the methodology of teaching by projects (PM), which involves students from different courses and regions of the country, how the curricularization of the extension, on the one hand, is challenging and, on the other hand, it offers an opportunity for the practical application of knowledge learned throughout the course, transforming

regional realities in a positive way. In the end, it is concluded that curricularization is highly relevant for differentiated pedagogical projects in distance education.

Keywords: University extension; distance education; regional development; methodology per project.

Resumo

O presente artigo visa demonstrar a aplicação prática da extensão universitária, agora uma exigência legal, em cursos superiores de educação a distância. Demonstra-se, com base em um case de sucesso, através de projetos integradores, utilizando-se da metodologia de ensino por projetos (MP), que envolve alunos de diferentes cursos e regiões do país, como a curricularização da extensão por um lado é desafiadora e, por outro, oferece oportunidade para aplicação prática de conhecimentos apreendidos ao longo do curso, transformando realidades regionais de forma positiva. Ao final, conclui-se que a curricularização é altamente relevante para projetos pedagógicos diferenciados na educação a distância.

Palavras-chave: Curricularização da extensão; educação a distância; desenvolvimento regional; metodologia por projeto.

Resumen

Este artículo tiene como objetivo demostrar la aplicación práctica de la extensión universitaria, ahora un requisito leal, en cursos superiores de educación a distancia. Se demuestra, basándose en un caso de éxito, a través de proyectos integradores, utilizando la metodología de enseñanza por proyectos (MP), que involucra a estudiantes de diferentes cursos y regiones del país, cómo la curricularización de la extensión, por un lado, es desafiante y, por otro lado, ofrece la oportunidad para la aplicación práctica de los conocimientos aprendidos a lo largo del curso, transformando de manera positiva realidades regionales. Al final, se concluye que la curricularización es altamente relevante para proyectos pedagógicos diferenciados en la educación a distancia.

1. Introduction

The challenges of regional development in a country of continental dimensions like Brazil are enormous. There is a consensus that regional development is inseparably intertwined with economic development, which in turn requires positive actions to transform the social fabric promoted by quality education. This formation aims to empower professionals not only in technical bases but also in a transformative critical vision. In this context, higher education aligns with public policies aimed at democratic and inclusive access of people from different regions of the country through distance education.

Distance education has been promoting the transformation of realities, and with the mandatory implementation of extension curricularization, Higher Education Institutions (HEIs) have been challenged to rethink their teaching and learning processes by proposing different models. The main objective of this research is to thoroughly examine the implementation of extension curricularization in real contexts, taking into account regional particularities, and to assess how this approach positively contributes to the transformation of local realities, with emphasis on a specific case study.

This article therefore sets out to demonstrate that it is possible to apply the curricularization of extension in a comprehensive way, inserting students into problems that affect their community. We will look for innovative solutions so that this reality can be positively transformed. The focus will be on the detailed analysis of a specific case study, with the aim of understanding how the curricularization of extension, through the project methodology, contributes to the theoretical knowledge of classes being applied effectively, making the student's education comprehensive, practical and meeting the primary objectives of transforming lives through education.

2. Methodology

This qualitative scientific research explores the theme based on a case study. In the bibliographic foundation, relevant themes such as Distance Education (DE) and Curricularization of Extension were explored.

Marconi and Lakatos (2006, p.71) mention that a "[...] bibliographic review is not a mere repetition of what has been said or written on a certain subject, but it provides an examination of a theme under a new focus or approach, reaching innovative conclusions". Gil (2017, p. 44) explains that a literature review is:

> [...] developed on the basis of material already prepared, consisting mainly of books and scientific articles. Although almost all studies require some kind of work of this nature, some research is carried out exclusively from bibliographic sources.

After surveying the aforementioned topics, the texts were listed and analyzed. The inclusion of the texts was determined by their relevance and adherence to the theme discussed in this article.

In this way, it was possible to gather elements to promote a consistent reflection aimed at interrelating the convergent and divergent concepts found in the literature and the case analyzed.

Based on these reflections and inferences, it was possible to build the theoretical framework for this preliminary study. Next, the article presents a case study on the curricularization of extension as a tool for regional development through integrative projects in courses at the University of Marília (Unimar). This stage involved collecting, filing and analyzing information related to the practice of extension curricularization. The aim was to provide an applied view, emphasizing the real and tangible contribution of extension curricularization to regional development.

3. Curricularization of extension

The curricularization of university extension is a movement that seeks to integrate university extension into the curriculum of undergraduate and postgraduate courses, making it a compulsory part of the student training process. The idea behind the curricularization of extension is to recognize the importance of university extension as a way of promoting citizenship, social inclusion and regional development, as well as valuing the work of university students in extension projects as a way of complementing their training and making them more aware of their role in society.

The curricularization of university extension also seeks to broaden the dialogue between the university and society, allowing the knowledge produced in academia to be applied in projects that meet the demands and needs of the community in which the university is inserted. In addition, curricularization can help create a culture of social commitment on the part of university students and teachers.

In Brazil, the curricularization of university extension is provided for in laws and regulations governing higher education and university extension. The main pieces of legislation dealing with the subject are:

1. National Education Guidelines and Bases Law (LDB) - Law No. 9.394/1996: this law establishes the guidelines and bases of national education and provides, in its article 43, for the obligation of universities to promote extension actions open to community participation, especially in areas such as health, culture, the environment and human rights.

2. CNE/CES Resolution No. 7/2018: this resolution of the National Education Council (CNE) establishes the national curriculum guidelines for undergraduate courses in all areas of knowledge, including the mandatory inclusion of university extension in curricula.

3. Ordinance No. 1,114/2016: this Ministry of Education (MEC) ordinance institutes the National University Extension Policy and establishes the guidelines for its implementation in Brazilian universities, including the curricularization of extension.

4. National Education Plan (PNE) - Law No. 13.005/2014: this plan establishes the goals and strategies for the development of education in the country until 2024 and provides, in its goal 12, for the inclusion of university extension in the curricula of undergraduate courses.

These laws seek to strengthen university extension as a fundamental activity for the training of students and for the social and economic development of the country.

Serva (2020) explains that the maturing of the curricularization of university extension has not been linear, but rather cyclical, with advances and setbacks. Despite this, the author emphasizes that university extension must now occupy a prominent position in the academic tripod of universities, so that they can produce and disseminate knowledge.

This inclusion, however, must start with a reformulation of the curriculum, which allows theoretical classes to be replaced by extension programs and projects aimed at solving concrete problems in the society in which the university is located.

Thus, the curricularization of university extension is a great opportunity for universities to legitimize themselves in the communities in which they are located, especially so that, in the future, together, university and community can face the challenges and obstacles that the current situation imposes (SERVA, 2020).

4. The historical evolution of distance learning

Reflecting on today's society, we are faced with a digital culture. In this context, distance learning (ODL) has been used massively in all areas of education, as well as in the business environment in the context of organizational learning.

By definition, according to Brazilian legislation, the distance education modality is one in which didactic-pedagogical mediation in the teaching and learning processes occurs with the use of Information and

Communication Technologies (ICTs), in addition to developing educational activities by students and education professionals who are in different places and times (BRASIL, 1996).

The latest school census, published by the National Institute for Educational Studies and Research Anísio Teixeira (Inep), provides data that reinforces the dominance of distance education. In 2020, there was a significant increase in the number of students enrolled in higher education via distance learning, while in face-to-face learning there was a drop. Between 2010 and 2020, the number of admissions varied negatively by 13.9% in face-to-face undergraduate courses, while in distance learning courses it increased by 428.2% (BRASIL, 2022).

For the first time, the number of new entrants to higher education is higher in the distance mode (53%) than in the face-to-face mode (47%). While the percentage share of entrants to distance learning degree courses in 2010 was 17.4%, this share in 2020 was 53.4%.

It should be noted that the beginning of distance learning in Brazil fulfilled the requirement for a qualified workforce, which was necessary for the economic development of society, in a reality where geographical distances made access to new techniques and knowledge difficult (FARIA et al., 2011).

From that moment until today, distance education has been a means for the evolution and democratization of education, making knowledge reach the most remote places in society and potentially transforming this educational model, through the application of multimedia technologies, for more interactive, flexible and accessible teaching.

Martins and From (2016, p. 2) present the benefits and expectations that permeate this type of teaching and reinforce that:

> In the context of today's societies, distance education has emerged as a type of education that can enable different ways of seeing the world, of teaching and learning. It brings positive aspects to the educational context, such as the democratization of educational opportunities and the possibility of becoming an instrument for

the emancipation of the individual in the social context. It fosters the production of individual and collective knowledge, favored by digital and interactive learning environments.

In this modality, learning occurs in a multifaceted and complex manner, and the overall performance is influenced by the effective functioning of the parts and actors that compose this process (PAVANELO; KRASILCHIK; GERMANO, 2018). Thus, it is noted that it becomes an area of research of broad public interest (ABBAD; ZERBINI; SOUZA, 2010), given that the expansion of research has accompanied the evolution of this educational modality.

Keegan (2013) presented some inherent aspects of distance education, such as the physical distance between teachers and students, the use of media to connect teachers and students, two-way communication and students seen as individuals and not as groups of students. In addition, for Vendruscolo and Behar (2016), other essential characteristics and potentialities of the modality are the emphasis on student-centered learning, flexibility of time and space, interaction and digital inclusion.

In this context, distance learning is responsible for the development of virtual learning environments and media languages that break with the traditional panorama of the face-to-face classroom and bring interaction between students and education professionals in synchronous or asynchronous contexts. The actors in the learning process therefore require new skills to access, understand and use information (MOORE; KEARSLEY, 2008).

In addition, it must be considered that, given the challenges faced by distance learning in information environments, the Covid-19 pandemic and its consequent demand for social isolation imposed the need to transform physical classrooms into virtual environments, and face-to-face meetings began to be mediated by technologies in order to save lives (OLIVEIRA; FERNANDES; ANDRADE, 2020). Thus, one of the

factors mediating information was active methodologies in different areas of knowledge, which enabled the recipient individual to read, write, ask questions, discuss or solve problems and develop projects (RÊGO; GARCIA; GARCIA, 2020 apud OLIVEIRA; FERNANDES; ANDRADE, 2020).

Thus, with regard to the technologies applied in distance education, Oliveira et al. (2019) point out that, at the moment, there is no more education without technology, just as there is no more life without it.

5. Curricularization of extension in distance education through integrative projects: a case study

Project Methodology (PM) is an educational approach that emphasizes active, hands-on learning, in which students work on projects to build their knowledge. In this approach, students are encouraged to engage in challenging and entrepreneurial tasks to apply knowledge and skills in real-world situations (BORILLE, BEHRENS, LUPPI, 2020). The application case presented below understands that through PM it is possible to comply with the requirement to curricularize extension, in addition to regional development.

The curricular matrices of the management courses at Unimar EaD, with the approval of their respective structuring teaching nuclei, started to include, as of 2021, the Integrative Project discipline. The Integrative Project discipline - distance learning modality - at the University of Marília aims to provide students with an interdisciplinary and systemic vision, giving them the opportunity to exercise the collection and systematization of information about their professional area and develop the ability to elaborate and present a report that characterizes the dynamics of the organization. The Integrative Project discipline consists of a challenge to be carried out by the student in a real company, chosen by the

student, which allows access and the articulation of competencies and skills of the course with the local and regional needs in order to create real and applied solutions. It is a requirement of the Integrative Project discipline that the company chosen by the student be classified as micro, small, or medium, allowing the student to contribute to the development of the regional business community.

The challenges proposed by the Integrative Project discipline are: PESTEL Analysis; Innovation Management; Net Promoter Score (NPS); Housekeeping; Porter's Five Forces. The methodology applied in the Integrative Project discipline aims to stimulate student autonomy by favoring the articulation of theoretical disciplines with practice in the chosen company. For this purpose, the discipline is structured through stages, allowing the student to follow a meaningful learning itinerary. There are a total of four stages where the student receives guidance, supplementary materials, and live lectures.
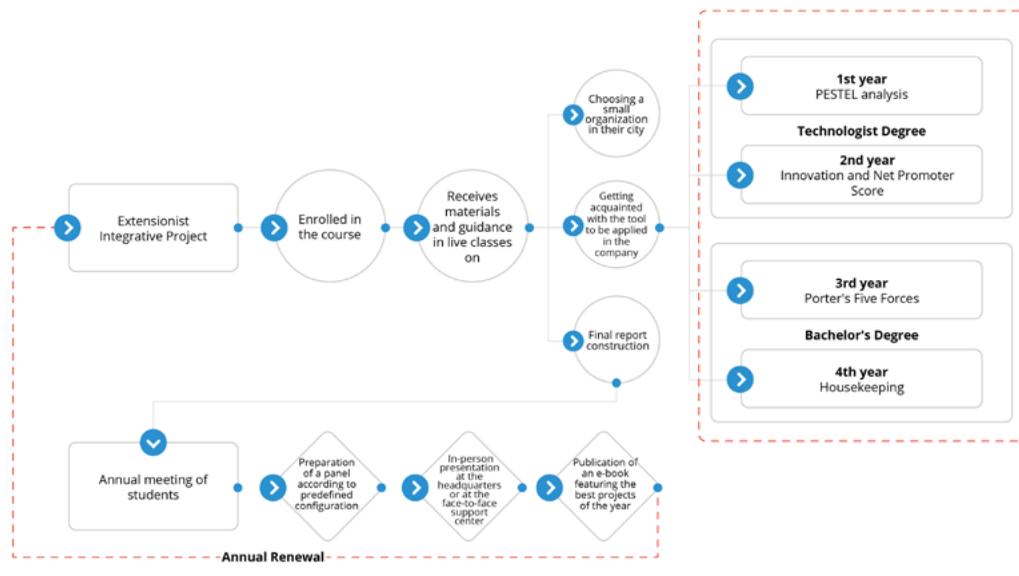
The Integrative Project discipline applies the concept of presence in distance learning through the Annual Students' Meeting. The Annual Students' Meeting is the event where students present the partial and final results of the projects executed in the current year, held at the headquarters of Unimar EaD and at the Unimar EaD campuses.

From this learning path, the Curriculum Extension Practice Method (MPCE - EaD) was born, with the main objective of uniting two legal requirements to which higher education institutions (HEIs) are subject: the integration of curriculum extension and presence within the context of distance education.

Within the complex context of Distance Education (DE) and the legislations demanding presence and curricularization of extension, this approach is grounded in project methodology. It's the convergence of these three pillars (Presence, Curricularization of Extension, and Project Methodology) that gives rise to the MPCE-EAD.

The following framework details each step of the MPCE-EaD application process.

Image 1: MPCE-EaD Framework

Source: Cazane, Ducatti, Pardo (2023).

6. Application of extension curricularization through project methodology as a driver of regional development

Since the Integrating Project discipline was implemented in 2021 in the curricula of Unimar EaD's management courses, with the aim of curricularizing extension and boosting regional development, a total of 13,770 (thirteen thousand seven hundred and seventy) projects have already been carried out across Brazil, with 93 cities impacted in 14 states.

Image 2: National Coverage of the Integrative Projects in Management Courses at Unimar EaD

Source: Compiled by the authors, 2024.

The southeast is the region with the largest number of Integrative Projects in Unimar EaD's Management courses, followed by the south, but it is important to note that the project has reached an increasing number of regions, covering different realities throughout Brazil, such as Acre, Maranhão, Mato Grosso and Bahia. The following graph shows the concentration by region.

Image 3: Integrative Projects of Management Courses at Unimar EaD by Federative Region
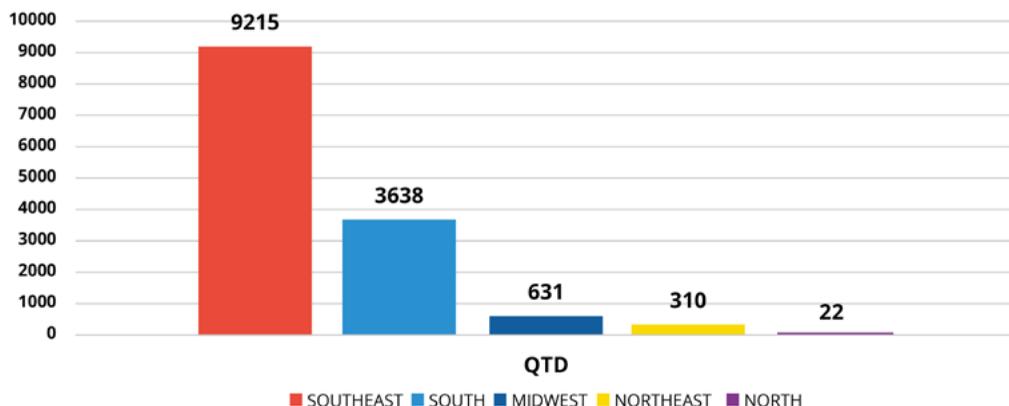
Source: Compiled by the authors, 2024.

Over these two years (2021 and 2022), the students carried out projects to develop the following tools: Pestel Analysis; Innovation Management; Net Promoter Score (NPS); Housekeeping; Porter's 5 Forces, in small and medium-sized companies. Table 1 shows the number of companies impacted by the development of the Integrator Project and the application of these tools..
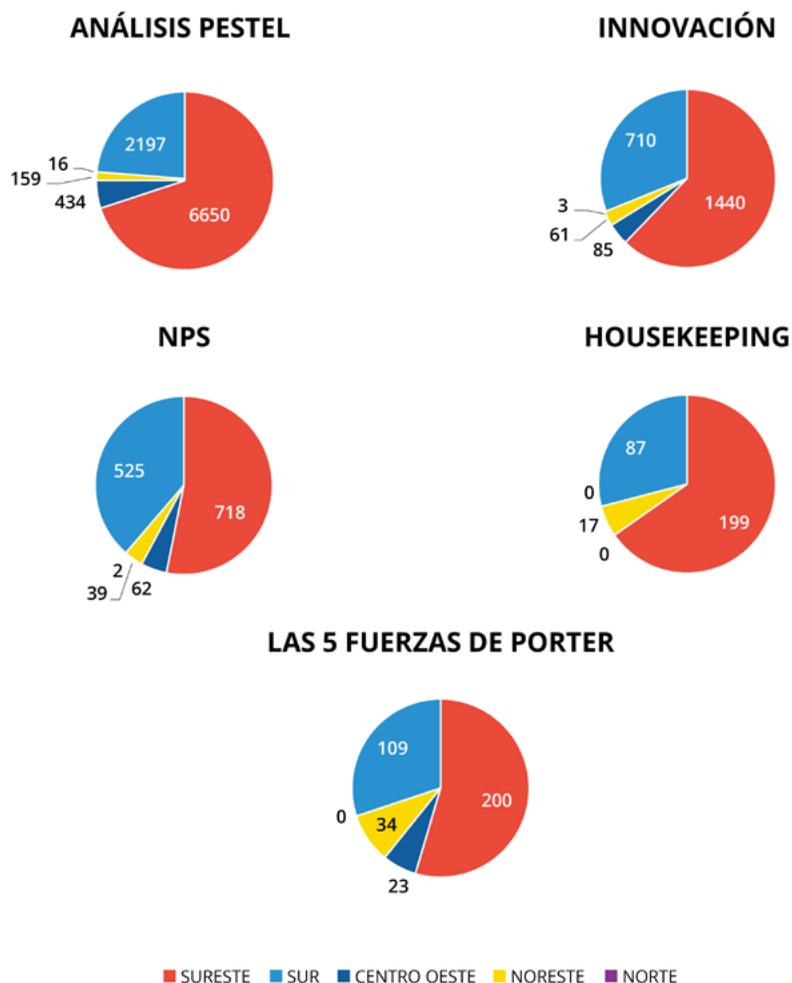
Table 1: Number of Companies Impacted by Tool Applied in the Integrative Project

THEME	Quantity
PESTEL	9.456
INOVAÇÃO	2.299
NPS	1.346
HOUSEKEEPING	303
PORTER	366
TOTAL	13.770

Source: Compiled by the authors, 2024.

The following graphs show the companies by region impacted by the application of the tools through the Integrator Project.

Image 4: Companies Impacted by the Integrative Project by Federative Region

ANÁLISIS PESTEL

INNOVACIÓN

NPS

HOUSEKEEPING

LAS 5 FUERZAS DE PORTER

■ SURESTE ■ SUR ■ CENTRO OESTE ■ NORESTE ■ NORTE

© VG Educacional

Source: Compiled by the authors, 2024.

The final reports, resulting from the execution of projects carried out by students, are made available in the university repository at the following address: https://unimar.agencianx.com.br/repositorio.

The best projects developed by students were selected to compose the e-book "Integrative Projects: Practical, Meaningful, and Challenging Learning", organized by the method's creators, resulting in publication for the students. The books were registered with ISBN 978-85-86860-52-2 and 978-65-5423-044-5 for the first and second editions, respectively.

Image 5: Cover of the Unimar EaD Integrative Projects books

Source: Compiled by the authors, 2024.

7. Final considerations

Based on the analyzed literature and the presented case, we are faced with the possibility that curricular extension can ensure theoretical knowledge with practical applicability in the social context in which students are inserted, fostering a true interrelationship between the university and the community.

The Extension Integrative Projects, in the methodology developed by Unimar, stimulate extension and promote interdisciplinary actions, bringing together different areas around common objectives. Thus, it is possible to observe the integration between the local community, while also developing important competencies for professional formation such as leadership, teamwork, communication, among others, which are essential in the context of higher education in the current scenario.

Thus, we concur with Serva (2020) who explains that for the effective curricularization of university extension, it is not sufficient to merely distribute curriculum, allocating 10% of extension activities within the curriculum matrix. Such a measure, despite formally complying with

legislation, does not enable the fulfillment of its objectives nor does it allow the university to effectively engage with society, generating knowledge that feeds back into teaching and research activities in a virtuous cycle that ensures the achievement of its main goals.

Thus, this article achieves the proposed objective of presenting a successful case of implementing curricularization of extension, not only as a response to the legislation coming into effect in 2024, but also addressing this possibility as an opportunity for the university to be increasingly involved in communities, positively impacting regional development and the personal development of students.

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