


## The transformative integration of university extension and education in communities

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### ABSTRACT

This article explores the transformative integration of university extension and education within communities. Universities play a central role in society through three pillars: education, research, and extension. Historically, the emphasis was on research and teaching, with little consideration for the potential of university extension. The latter represents a vital force in the practical application of academic knowledge, promoting social engagement and community transformation. Originating in 19th-century England, university extension in Brazil began in the early 20th century, evolving into a participatory model that values community knowledge. During the democratization of the 1980s, university extension gained prominence with the creation of the National Forum of Extension Pro-Rectors (FORPROEX), which institutionalized and organized extension activities nationwide. The 1988 Constitution and the National Extension Plan (PNExt) reinforced the importance of extension, promoting the integration of teaching, research, and extension, and encouraging social transformation through knowledge. University extension provides an interface between research and community, promoting sociocultural development, entrepreneurship, and environmental sustainability. For students, participation in extension projects offers opportunities to apply theoretical knowledge in practical contexts, developing skills such as leadership and teamwork, and fostering social responsibility.

**Keywords:** Community, University, Student participation, Extension.

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## INTRODUCTION

Universities have a central role in society, they are recognized by three key elements: education, research and extension, which in a hierarchical way work together, contributing to the intellectual formation and development of society. For much of the history of higher education, the main purpose of universities was research and teaching, with little consideration of the potential of applying acquired content as a tool in community service and social engagement. In this context, university extension represents a vital force considering today the current understanding we have of the concept of education and its potential with regard to social transformation. Although essential and integral to the educational mission of higher education institutions, academic extension is still an incipient practice and, therefore, faces challenges in attracting investments and resources that allow the expansion of its potential in order to highlight the practical benefits that extension programs can provide to society. University extension plays a fundamental role in the transformation of the contemporary educational context, transcending the conventional boundaries of academia, and expanding the concept of learning, applying content in a practical way, beyond the physical walls of the university.

## UNIVERSITY EXTENSION

Becoming one of the three fundamental pillars of the structure of universities, along with teaching and research, extension occupies a prominent place in the practical application of academic knowledge for the benefit of society. University extension must be democratic and protagonists in the dialectical process between theory and practice, identifying and solving challenges that, in most cases, demand an interdisciplinary approach. In this sense, university extension acts as a mediator and integrator of knowledge through the development of activities and programs that directly connect the university with society in a practical way, promoting the exchange of knowledge and experiences.

Emerging in England during the nineteenth century, from the 1870s onwards, universities began to offer extension courses for adults outside the traditional university environment that encouraged access to knowledge, allowing the community and people from different backgrounds and levels of education to enjoy learning from different subjects, from literature and history to natural sciences and mathematics. With this initiative, it contributed to establishing the foundations of university extension as a tool for the dissemination of knowledge and the promotion of continuing education.

In Brazil, the first reports of the implementation of extension programs occurred at the beginning of the twentieth century, carried out by the Free University of São Paulo, with the aim of taking knowledge from the classrooms outside the university walls, in order to decentralize academic



knowledge and establish contact between intellectuals, technicians and the community. The need for dialogue and interaction between these three agents becomes especially pronounced in a historical context in which the community outside the academic environment was often stigmatized, perceived as a social group incapable of understanding academic values and solving challenges that required theoretical knowledge. It is important to highlight that this initial extension model did not critically address the social and economic contradictions that generate the problems faced by the community, thus offering a limited view of the transformative potential of the actions carried out. However, throughout the development and refinement of its practices, university extension has evolved into a more participatory and collaborative model, understanding the value of the community's practical knowledge and promoting a true partnership for social development.

In the 1980s, the process of national redemocratization had a direct impact on the concept and applicability of university extension. Created in 1987, the National Forum of Pro-Rectors of Extension of Brazilian Public Universities (FORPROEX) provided significant advances for the institutionalization, elaboration and organization of extension activities in the country. This forum promoted greater integration between universities and the community, reinforcing the social role of higher education institutions.

The 1988 Constitution in Brazil recognized the importance of university extension, highlighting the need to promote a more substantial relationship between teaching and research. In the years 2000 and 2001, the National Extension Plan (PNExt) was created, establishing guidelines for this practice, essentially directed to the possible social and regional impacts of the practice of academic extension, the dialogic interaction between university and society, interdisciplinarity and the integration between teaching, research and extension. The PNExt reflects a modern and plural vision of the potentialities offered by university extension, seeking to promote social changes and strengthen the civic commitment of students.

## **KNOWLEDGE INTEGRATION**

Emerging trends, contemporary challenges, and future opportunities for the practice of extension in higher education are points resulting from studies and activities in the field, highlighting its unique ability to catalyze personal and social transformation through knowledge, collaboration, and community involvement.

The extension offers a diversity of areas of practical application, within which it is possible to observe positive effects of transformation and socio-cultural development of communities. The dialogue between research, extension and the community drives and promotes substantial changes when actions are applied to socio-cultural movements, encouragement of entrepreneurship, environment, health and well-being, among others, a range of opportunities is created for work that



can be carried out in conjunction with research. Thus, as it is part of the university triad, the research is directly linked to the practices that can be exercised in the extension, establishing a relationship of exchange between the intentionist and the community contemplated with the project. In this context, all empirical demands found in extension work can and should be taken into universities, where they can be studied and improved. Subsequently, the results of this theoretical refinement are returned to society in a practical way, uniting social actions with scientific knowledge. This dynamic interaction between research and extension allows not only the practical application of academic knowledge, but also contributes to the social, economic and cultural development of the communities involved, where dialogue is established, and is a crucial factor for the development of a whole.

Still dealing with the exchange relationship over extension, the integration between research and extension also offers significant benefits for the university students themselves. By participating in extension projects, students have the opportunity to apply the theoretical concepts acquired in the classroom in real situations, developing practical skills such as leadership, teamwork, and communication. This practical experience enriches your academic training, promoting interdisciplinary reasoning for the solution of challenges and demands of the labor market and thus promoting a more complete academic experience. In addition, participation in extension projects stimulates collective awareness and a sense of social responsibility and citizenship among students, encouraging them to make positive changes in their communities. Thus, the articulation between research and extension promotes positive social impacts, as well as contributes to the personal and professional development of university students themselves.

The importance of university extension as an integral part of the academic path and in the process of training the student as an agent of social transformation is a crucial theme in the contemporary educational context. University extension is a valuable tool that complements classroom teaching, providing future professionals in training with the opportunity to apply their theoretical knowledge in practical and real-world situations, promoting engagement with the community and the development of social and professional skills.

## **INTEGRATION OF THEORETICAL AND PRACTICAL KNOWLEDGE**

University extension gains even more importance when we consider the guidelines established by educational legislation. Law No. 13,005/2014, which approves the National Education Plan (PNE) 2014-2024, determines goals and strategies for the improvement of the Brazilian educational system. Within this context, university extension is recognized as an essential component for the fulfillment of these goals, promoting integration between the university and the community and contributing to the improvement of the quality of education.



Decrees such as Resolution No. 7, of December 18, 2018, issued by the National Council of Education (CNE), reinforce the relevance of university extension as part of the training of students, establishing that "all undergraduate courses must have 10% (ten percent) of the workload of their curricular matrix allocated to extension activities" (CNE, 2018, p. 2). Such determinations reflect the official recognition of the transformative potential offered by extension as an integral part of the educational process, ensuring that students have the opportunity to engage in practical activities whose results directly and objectively impact the community of which they are part during their academic training path.

In this way, university extension enriches the academic training of students, allowing them to experience in practice the concepts learned in the classroom, providing a deeper and more comprehensive understanding of the dissemination, decentralization and applicability of knowledge, promoting critical thinking and interdisciplinary skills to solve challenges and demands in the field of practice. Following an example, a university student who participates in an extension project that provides technological solutions to a disadvantaged community not only applies their knowledge, but also develops social characteristics such as empathy, social responsibility and a sense of community. The interaction between the student and the community is fundamental for the fulfillment of the role of the university institution as a promoter of social transformation, crucial for the contribution to the regional and national development of individuals, professionals and communities.

Outreach projects that target the delivery of services to the community (such as legal assistance, health care, or business consulting) not only directly benefit the population, but also provide students with a broader perspective on the complex challenges and needs they face outside the classroom.

## **ADEQUACY AND REFINEMENT OF UNIVERSITY EXTENSION PRACTICES**

University extension is, in fact, a dynamic field that develops in response to social, economic and technological transformations. Progressively, higher education institutions have adapted to meet the demands that accompany any and all social development processes, expanding and redefining practices in order to better serve local, national and global communities. As social issues emerge and evolve, universities respond to these changes by redefining and redesigning their extension programs to work proactively to address these issues. We can mention, as an example, the growing concern with environmental issues, which has led many institutions to develop extension projects for the dissemination of information about environmental sustainability. Such social demand has driven the development of programs aimed at recycling, conservation of natural resources, and environmental education for local communities.



In times of adversity and collective challenges, such as the COVID-19 pandemic, extension programs play an even more relevant role within the basis of education and as a tool for social transformation. The protagonism of university extension programs as agents for the dissemination of knowledge and in the provision of services shows the practical potential of contact between future professionals and community demands. Such programs had a strong and positive impact on the availability of practical support to those who needed objective clarification, physical care and practical solutions in order to control a situation of collective calamity.

In conclusion, university extension programs greatly enrich the academic experience through the opportunity offered to students to apply knowledge in a practical and objective way, at the service of many social demands. The articulation between extension, research and community is essential for the professional enrichment of students and for social development at local and global levels. The opportunity to experience the contrasts between theoretical knowledge and the practical application of this content provides the intellectual enrichment of those who are part of the academic environment, as well as fosters the dissemination of information and makes knowledge available to those who are on the margins of the university institution.

However, it is essential to highlight the constant need for improvement and refinement of the practices and guidelines that regulate university extension programs, considering the constant social changes. It is essential that extension programs actively monitor social demands in an analytical and objective way, in order to explore all the transformative potential that this tool offers.

Finally, the dialogue between research, extension and the community offers a unique platform for the construction of critical thinking, collective thinking and social responsibility. The interdisciplinarity and synergy between the community experience, the academic path and the exchange of knowledge offer a unique potential for individual and collective growth for the professional in training.



## REFERENCES

1. Caumo, H. L. V., & De Marque, L. M. (2016). University extension. In H. L. V. Caumo & L. M. De Marque, \*A extensão universitária na arquitetura e urbanismo e engenharia ambiental: disseminação da sustentabilidade e a construção da cidadania\*. \*Revista de Extensão da Universidade de Cruz Alta\*, 7.
2. Carbonari, M. E. E., & Pereira, A. C. (2007). A extensão universitária no Brasil, do assistencialismo à sustentabilidade. \*Revista de Educação\*, 10(10).
3. Da Silva, M. G., & Ackermann, S. R. (2014). Da extensão universitária à extensão tecnológica: os Institutos Federais de Educação, Ciência e Tecnologia e sua relação com a sociedade. \*Extensão Tecnológica: Revista de Extensão do Instituto Federal Catarinense\*, (2), 9-18.
4. Diniz, E. G. M., et al. (2020). A extensão universitária frente ao isolamento social imposto pela COVID-19. \*Brazilian Journal of Development\*, 6(9), 72999-73010.
5. FFD, Meireles., & HCADG, Afonso. (2024). A extensão universitária obrigatória voltada para a educação básica como recurso para atingir metas do Plano Nacional de Educação.
6. Gadotti, M. (2017). Extensão universitária: para quê. \*Instituto Paulo Freire\*, 15(1-18), 1.
7. Mélo, C. B., et al. (2021). A extensão universitária no Brasil e seus desafios durante a pandemia da COVID-19. \*Research, Society and Development\*, 10(3), e1210312991-e1210312991.
8. Nogueira, M. das D. P. (org.). (2005). Políticas de extensão universitária brasileira. Belo Horizonte: UFMG.
9. Peretiatko, J., et al. (2020). Contribuições da extensão universitária para a formação acadêmica a partir de um projeto de educação ambiental. \*Revista Brasileira de Extensão Universitária\*, 11(3), 417-427.
10. Pinheiro, J. V., & Narciso, C. S. (2022). A importância da inserção de atividades de extensão universitária para o desenvolvimento profissional. \*Revista Extensão & Sociedade\*, 14(2).
11. Santos, F. A. S., & Teixeira, L. N. (2017). Percepção ambiental e análise de desenhos: prática em curso de extensão universitária. \*Revista Brasileira de Educação Ambiental (RevBEA)\*, 12(2), 156-177.