

## Experiences of the implementation of the integrator extensionist program in medical training

Experiências da implantação do programa extensionista integrador na formação médica

Experiencias de aplicación del programa de extensión integrador en la formación médica

### RESUMO

**Objetivo:** relatar a experiência da implantação do Programa Extensionista Integrador (PEI) como componente curricular do curso de medicina. **Método:** Trata-se de um relato de experiência do coordenador e docentes sobre a implantação do PEI, de uma instituição privada em Várzea Grande, Mato Grosso. As reuniões de planejamento foram presenciais e pela plataforma digital ZOOM entre 2022 à 2023. O treinamento ocorreu na própria instituição durante a semana pedagógica em 2023, utilizando a técnica de simulação realística e conferências. **Resultados:** O planejamento interprofissional foi dinâmico e permitiu a aprendizagem sobre diferentes estratégias de ensino. A simulação foi essencial para a definição da metodologia da problematização, planejamento estratégico e mapa inteligente como ferramentas para implementar ações de saúde na comunidade na extensão curricularizada. **Conclusão:** A experiência de planejamento do componente curricular possibilitou ampliar conhecimentos sobre trabalho colaborativo, extensão e atenção primária à saúde.

**DESCRITORES:** Medicina; Educação Médica; Ensino.

### ABSTRACT

**Objective:** to report the experience of implementing the Integrator Extensionist Program (PEI) as a curricular component of the medicine course. **Method:** This is an experience report by the coordinator and teachers on the implementation of the PEI, at a private institution in Várzea Grande, Mato Grosso. The planning meetings were held in person and via the digital platform ZOOM between 2022 and 2023. The training took place at the institution itself during the pedagogical week in 2023, using the realistic simulation technique and conferences. **Results:** Interprofessional planning was dynamic and allowed learning about different teaching strategies. The simulation was essential for defining the problematization methodology, strategic planning and smart map as tools to implement health actions in the community within the curricular extension. **Conclusion:** The experience of planning the curricular component made it possible to expand knowledge about collaborative work, extension and primary health care.

**DESCRIPTORS:** Medicine; Medical Education; Teaching.

### RESUMEN

**Objetivo:** Relatar la experiencia de implementación del Programa Integrativo de Extensión (PEI) como componente curricular del curso de medicina. **Método:** Este es un informe sobre la experiencia del coordinador y los profesores en la implementación del PEI en una institución privada en Várzea Grande, Mato Grosso. Se realizaron reuniones de planificación presenciales y a través de la plataforma digital ZOOM entre 2022 y 2023. La capacitación se realizó en la propia institución durante la semana pedagógica de 2023, utilizando la técnica de simulación realista y conferencias. **Resultados:** La planificación interprofesional fue dinámica y permitió aprender sobre diferentes estrategias de enseñanza. La simulación fue fundamental para definir la metodología de problematización, la planificación estratégica y el mapa inteligente como herramientas para implementar acciones de salud en la comunidad en la extensión curricularizada. **Conclusión:** La experiencia de planificación del componente curricular permitió ampliar los conocimientos sobre trabajo colaborativo, extensión y atención primaria de salud.

**DESCRIPTORES:** Medicina; Educación Médica; Enseñanza.

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**INTRODUCTION**

**E**xtension is compulsory in medical training as a curricular component, with 10% of the total course load<sup>1</sup>. Interprofessionality and interdisciplinarity is a trend in undergraduate courses. It is therefore essential to train teachers to develop the skills required in the national curriculum guidelines.

Understanding the challenges of university extension has been a current and intense discussion, within the curricula of undergraduate courses, in which its insertion has been proposed, these challenges permeate the dimensions of teaching and research, since, in this proposal, a new look is implied around training practices, as well as in the sense of better understanding the educational process<sup>2</sup>.

Thus, in order for education to break down social hierarchies, based on

inequalities and discrimination that have occurred throughout history, it is necessary to develop critical reflection. This, in turn, will enable innovative perspectives to emerge in the educational process, in order to think about the possible conditions for transforming reality<sup>3</sup>.

Thus, in line with the regulations of the Ministry of Education (MEC), according to CNE Resolution No. 07 of 18/12/2018, extension must be integrated into the curriculum matrix and develop activities such as projects, courses, workshops and service provision. With the aim of building medical skills, exercising citizenship, promoting sustainability, actively participating in the teaching-learning process, exercising scientific, technological and cultural research<sup>1</sup>.

University extension provides students with learning opportunities in other academic spaces, promoting

sharing and cooperation between the community outside the walls and university agents, with students playing a key role. In this way, they have a wide range of opportunities to debate ideas and exchange knowledge between different areas of knowledge. All of this makes the academic experience an active journey, in which they play a leading role in career choices and paths that would often not be possible without this direct participation in the application of knowledge in these more practical activities<sup>4</sup>.

Another point of note is the relationship between university extension and team communication, which has been much debated in contemporary times, as future professionals are expected to develop socio-emotional skills. In this way, extension activities in the community provide those involved with an increase in their perspectives of the world, without social issues

being neglected, situations that would go unnoticed if students only stayed in their classroom contexts. By broadening their world view, extension practitioners are brought into contact with new personalities, historical and life conditions that are different from their usual surroundings through their social interactions in different environments, allowing them to identify relevant demands for other social groups. In this way, university extension not only prepares professionals who are concerned with their technical function, but who are aware of their role as an instrument of citizenship in the different social, economic and cultural realities in which other people are inserted<sup>4</sup>.

This type of entrepreneurial education makes it possible to develop management and health care with humanization, collaborative and interprofessional attitudes, since the university needs to pay attention to society's needs. In this sense, the curricularization of extension allows students to select a target population for the development of actions. This process of citizen education makes it possible to achieve human values in medical education<sup>5</sup>.

In addition to the importance of humanization, the study carried out with 91 primary care health professionals shows that collaborative and interprofessional attitudes, such as teamwork, communication, shared decision-making and mutual respect corroborate the work in the Unified Health System (SUS)<sup>6</sup>.

Therefore, this study aims to report on the experience of implementing the Integrative Extension Program (PEI) as a curricular component of the medical course at a private higher education institution in 2023.

## METHOD

This is an experience report on the implementation of the Integrative Extension Program (PEI) at the University Center (UNIVAG) in the medical

course in Várzea Grande, Mato Grosso, Brazil, in 2023, which took place in two phases, the first referring to the planning of the curricular component and the second was teacher training.

Planning took place between the coordinator and teachers in an interprofessional and multidisciplinary way, with periodic face-to-face meetings and via the ZOOM digital platform, from August 2022 to February 2023. There was a division of tasks to immerse and deepen the project-based learning (PBL) methodology, building objectives, syllabus and resources needed to formalize the curricular component.

The interprofessional meetings were attended by the director and coordinator of the medical course, who are doctors, the PEI nurse supervisor and the vice-rector. The multidisciplinary meetings took place between the other teachers (nurses) with the collaboration of the supervisor. There were times when six teachers got together for interdisciplinary discussions between the Community Interaction Program (PIC) and the PEI.

The second phase was the implementation of the training workshop, which took place at the University Center (UNIVAG) during the week of February 6-10, 2023, in person. The pedagogical training took place over three days, with a complementary workload of 16 hours for 14 participants.

The information was collected from teachers' experiences of planning and training workshops. The data was analyzed as follows:

Theoretical experience on extension and teaching and learning methodologies.

Teaching and learning tools for implementing the curricular component.

Teacher training strategies.

Due to its methodological nature, it does not require the approval of the Research Ethics Committee (CEP) in accordance with Resolution No. 510/2016 of the National Health Council (CNS).

## RESULTS

The experience of implementing the PEI led to the immersion of knowledge in a search for literature, especially articles, books and videos, in order to appropriate theoretical knowledge about the curricularization of extension in the medical course and appropriate teaching methodologies for this curricular component.

The materials produced were presented to management, discussed collectively and adjusted according to guidelines. After the discussions, a teaching plan was created, as well as a training manual for teachers and assessment and teaching and learning instruments. In addition, a realistic simulation script and training schedule were created.

Building this process collectively was very important for professional growth. As the tools were built, it was possible to broaden the vision of medical education in contemporary reality, which demands innovative, creative, attractive, flexible, comprehensible, inclusive, scientific and entrepreneurial teaching from teachers.

The results of the training workshop experience were motivating. Initially, messages were expressed about gratitude for the opportunity to implement this curricular component. This was followed by a dynamic that led to reflection on the importance of teamwork, collaboration and creativity in solving problems. A pre-test was then administered with five questions on extension, interprofessionalism and the project-based learning method.

After the dynamics, there was an immersion in knowledge with three lectures, one on research, teaching and extension, the intention of which was to differentiate and clarify the concepts for the participants. This was followed by another on interprofessionalism, interdisciplinarity and multiprofessionalism in order to explain concepts and their applicability to the implementation of the discipline. The last lectu-

re was on interdisciplinarity between the Community Interaction Program (PIC) and the Integrating Extension Program (PEI). In the afternoon, the teaching plan for this new curricular component was presented and discussed.

On another day of the training, a realistic simulation took place, using the dynamic of raising problems arising from the territorialization process on an individual basis. The teachers wrote down a word that referred to a problem they had identified during territorialization with the students in the previous semester.

This was followed by individual presentations of the problems so that each person could defend why they had chosen that problem. Then it was time to discuss the problems in groups and construct the materials to be handed in by the students, such as a situational diagnosis, action plan and planning for the construction of a possible prototype. The next phases that the students would have to build in order to develop the new curricular component were then discussed.

By putting yourself in the student's shoes, you can see the importance of good mediation and facilitating knowledge, in order to recognize the roles and responsibilities of the teacher and the student. The activities ended with a round table discussion to exchange experiences, the application of the post-test and an evaluation of the pedagogical training, preparing the teachers for the implementation of the curricular component.

After the end of the training, the construction of the pedagogical training report led the working group to further reflections, especially with regard to the proposed method. Meetings and discussions led to the method being changed to problematization methodology using the Maguerez Arc. Since the products of project-based learning (PBL) methodologies need to be measurable, and the actions arising from health needs cannot always gene-

rate measurable prototypes. It was only after the whole process of planning and teacher training that it was possible to adopt the method considered most suitable for the extension of medical teaching as a curricular matrix for this educational institution.

In this experience it was possible to identify some difficulties, such as the teachers lack of prior knowledge of the PBL method, fear of the new curricular component and concern about the workload. The main strengths were professional satisfaction in the development of the training and organization of the subject, teachers capable of suggesting and adding ideas to improve the implementation of the IEP, with experience in management processes, the ability to listen and recognize that it can be done by everyone involved, collaborative attitudes, participation in the activities developed, the delivery of printed material that made it possible to broaden the discussion processes and the facilitators' communication skills. On the other hand, the limitations were, in particular, the design of the implementation for just one semester.

Despite this obstacle, the experience was considered successful, since the teachers were confident at the end of the training and meetings to start a new journey, with the method already known, which was the problematization methodology following the steps of the Maguerez arc: observation of reality, key points, theorizing, hypothesis of solutions and application to reality, as well as the evaluation process structured with formative grades that would be made up of the practical activities and the summative grades that would involve documentation of the extension, an integrating seminar and the student's individual portfolio.

## DISCUSSION

Transformations in medical training have been taking place in medical schools for some decades now. The main

attempts have been to restructure the methodology, pedagogy and curriculum. The aim is to train professionals who provide comprehensive care, with priority given to preventive activities, without prejudice to care services, and who understand the need for community participation. The training process is based on the national curriculum guidelines, which prioritize the training of a professional with a broad view of the clinic and a sense of social responsibility<sup>7</sup>.

To this end, the 2014-2024 National Education Plan (PNE) states that at least 10% of the total curricular credits required during graduation should be through extension programs and projects in areas of social relevance<sup>8</sup>.

In this way, it is understood that extension is a space that involves multidisciplinary, interdisciplinary and interprofessional learning. This process produces scientific, political, educational and cultural knowledge through experience and integrated practices, which brings different individuals together, promoting citizen and human awareness and social transformation, the exchange of knowledge through dialog and the inseparability of teaching, research and extension in the training of medical students.<sup>9,10</sup>

Curricularizing extension means rethinking civic education and interpersonal relations, promoting critical reflection capable of transforming social reality. This is a major challenge, as it requires curricular flexibility<sup>2</sup>. Extension allows professionals and university students to bridge the gap with society, as it brings the experience of integrating theory with practice, contributing to the development of a critical professional who is aware of their citizenship<sup>11</sup>.

The connection between theory and extension practices makes it possible to democratize knowledge and present solutions to the problems that affect social development. Considering the benefits of curricularized extension, it

is necessary to overcome the obstacles of teacher and academic resistance to a traditional teaching approach, as well as teacher training, support and dissemination to the communities served. Finally, extension activities have emerged in universities to improve student training and also to help tackle social issues and technological challenges<sup>4</sup>.

The curricularization of extension in health courses makes it possible to broaden students' experiences with the populations they serve. This enables the development of professional and relational skills in line with the real needs of the community. It is therefore essential for courses to develop training methods that enable learning to be assessed, with students playing a leading role in the process, relating theoretical knowledge to the real demands of heal-

th work, thus guaranteeing social commitment based on research, teaching and extension<sup>12</sup>.

## CONCLUSION

It is believed that the curricular component of the Integrative Extension Program (PEI) will achieve the competencies required in medical training focused on health care, decision-making, communication, leadership, management and education through the extension projects that will be developed.

The experience of planning the course made it possible to expand our knowledge of content and theoretical concepts about collaborative work, outreach and primary health care. The difficulty was defining the most appro-

priate methodology, but after pedagogical training, meetings and reflections, the decision was made to use the active methodology that best suited the proposal of outreach in the medical field.

The limitation was that only one stage of the course was completed. It is suggested that other universities share their successful experiences of implementing extension as a curricular component in medical courses.

## REFERENCES

1. Brasil. Ministério da Educação. Conselho Nacional de Educação. Câmara de Educação Superior. Resolução nº 7, de 18 de dezembro de 2018. Diário Oficial da União, Brasília, 19 de dezembro de 2018, seção 1.
2. Pereira NFF, Vitorini RA da S. Curricularização da Extensão: Desafio da Educação Superior. Interfaces - Rev. de Ext. UFMG [Internet]. 24º de julho de 2019 [citado 7º de novembro de 2023];7(1). Disponível em: <https://periodicos.ufmg.br/index.php/revistainterfaces/article/view/19047>
3. Barbosa FCM, Brunetto FS, Vitorini RAS. Direito à Educação: Ações Afirmativas como política pública para ingresso no Ensino Superior. In: Cadernos de Direito, v. 17, n. 33, p. 81-100, 2017. ISSN 2238-1228. Disponível em: <<https://www.metodista.br/revistas/revistasunimep/index.php/cd/article/view/3534>>. Acesso em: 07 nov. 2023.
4. Montenegro NG da SD, Moreira JCP, Silva JG da. Desafios para a curricularização da Extensão universitária nos cursos de graduação. Entre Ações [Internet]. 26º de outubro de 2023 [citado 8º de novembro de 2023];4(1):31-3. Disponível em: <https://periodicos.ufca.edu.br/ojs/index.php/entreacoes/article/view/1109>
5. Almeida SMV, Barbosa LMV. Curricularização da Extensão Universitária no Ensino Médico: o encontro das gerações para humanização da formação. Revista Brasileira de Educação Médica. 43 (1 Supl. 1): 672-680, 2019. Universidade de Pernambuco. <https://doi.org/10.1590/1981-5271v43suplemento1-20190013>
6. Ribeiro AA, Givisiez CR, Coimbra EAR, Santos JDD, Pontes JEM, Luz NF, Rocha RO, Costa WLG. Interprofissionalidade na atenção primária: intencionalidades das equipes versus realidade do processo de trabalho. Esc Anna Nery 2022; 26: e20210141 DOI: <https://doi.org/10.1590/2177-9465-EAN-2021-0141>
7. Gomes, Andréia Patrícia e Rego, Sergio. Transformação da educação médica: é possível formar um novo médico a partir de mudanças no método de ensino-aprendizagem?. Revista Brasileira de Educação Médica [online]. 2011, v. 35, n. 4 [Acessado 24 Fevereiro 2023], pp. 557-566. Disponível em: <<https://doi.org/10.1590/S0100-55022011000400016>>. Epub 10 Feb 2012. ISSN 1981-5271. <https://doi.org/10.1590/S0100-55022011000400016>.
8. Brasil. Ministério da Educação. Conselho Nacional de Educação. Câmara de Educação Superior. Resolução nº 7, de 18 de dezembro de 2018. Diário Oficial da União, Brasília, 19 de dezembro de 2018, seção 1, p. 49 e 50.
9. Caleman G. et al. Instituto Sírio Libanês. Projeto aplicativo: termo de referência. 1 ed. Reimp. São Paulo: Instituto Sírio Libanês. Ministério da Saúde, 2016.
10. Colussi CF, Pereira KG. (Orgs.). Territorialização como instrumento do planejamento local na Atenção Básica. Florianópolis: Universidade Federal de Santa Catarina, 2016. Páginas: 10-27,29-58,61-63. Disponível em: [https://ares.unasus.gov.br/acervo/html/ARES/13957/1/TERRITORIALIZACAO\\_LIVRO.pdf](https://ares.unasus.gov.br/acervo/html/ARES/13957/1/TERRITORIALIZACAO_LIVRO.pdf). Acesso em: 07 fev. 2023.
11. Malheiros, Rodrigo e Guimarães, Regina Guedes Moreira. Extensão Universitária e Formação Médica: Uma Análise da Experiência dos Bolsistas no Programa "Escola Cidadã". Revista Brasileira de Educação Médica [online]. 1998, v. 22, n. 2-3 [Acessado 24 Fevereiro 2023], pp. 67-76. Disponível em: <<https://doi.org/10.1590/1981-5271v22.2-3-008>>. Epub 21 Out 2020. ISSN 1981-5271. <https://doi.org/10.1590/1981-5271v22.2-3-008>.
12. Reis LC dos, Alves CM, Paiva HFB, Anversa ALB, Moreira EC, Oliveira AAB de, Souza V de FM. Curricularização da extensão em cursos da área da saúde: uma revisão integrativa. 2022. Jornal de Políticas Educacionais. V. 16, e86071.