

Resonances of the Project Pró-Ensino na Saúde in the interior of Brazil*

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In this article the resonances of the project Pro-Ensino na Saude are discussed, from the perspective of two teachers, now PhDs, who participated in it through Universidade Federal de Mato Grosso (UFMT). The project's proposal is the education of health professionals in Master's and Doctoral programs in Education. Some of the project's objectives are: to contribute to the strengthening and expansion of graduate programs in Mato Grosso in the area of health teaching, and to foster integration between research groups and academic teams of Education and Nursing. We analyzed the results of this project in two perspectives, which we call resonances, namely: resonances of knowledge production, and resonances in education and in the services. The measurable results were established mainly by the advance in the graduate sector and research in the teachers' place of origin.

Keywords: Staff development. Intersectoral action. Public policies.

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The proposal of the education project of MAs and PhDs in Education for health professionals with emphasis on health teaching for *Sistema Único de Saúde* (SUS - Brazilian National Health System), approved by Notice no. 24/2010 of CAPES (Coordination for the Improvement of Higher Education Personnel), had, among its objectives: to contribute to the strengthening and expansion of Master's and Doctoral programs in the State of Mato Grosso (Central-Western Brazil) in the health teaching area; to enable the integration between Education and Nursing research groups and academic teams, aiming, at the end of the project, to create at least one proposal for a professional Master's program at one of the campi of *Universidade Federal de Mato Grosso* (UFMT) that participated in the project; and to expand and qualify the scientific, technological and innovation production about the theme of Health Teaching, based on the investigation of situations related to the practice of Health Teaching in its interface with the health services.

To achieve this, a partnership was established between Postgraduate Program in Education (PPGE) of the Education Institute and Education in Health and Nursing Research Group (GEFOR), connected with Postgraduate Program in Nursing of the School of Nursing (FAEN), both of UFMT. This partnership was fundamental to the consolidation and success of the proposal for professional qualification of teachers from the health area, mainly from undergraduate Nursing courses, who work in one of the four university campuses.

We believe that many of the resonances are subjective and impossible to narrate. Thus, we proposed to describe the objective transformations the project triggered. To accomplish this, we initially discuss the results of studies carried out in two Doctoral Dissertations and, subsequently, developments related to the Rondonópolis Campus, the place where the teachers perform their professional activities, and to the local and regional health services network.

Resonances of knowledge production

The dissertation entitled¹ "Health at School Program: Intersectoral Limits and Possibilities" was defended in 2014 and approached intersectorality between health and education, contributing to the enhancement of this policy. Some of the reflections approached in the dissertation are presented below.

The search for integrated actions with intersectoral approaches has been the strategy adopted by public policies to develop actions aiming to promote schoolchildren's health, in an attempt to mitigate the vulnerabilities to which this population is exposed.

By promoting the interaction between the areas of Education and Health, with the aim of studying an intersectoral action in these areas, we elected Health at School Program (PSE), whose purpose is to provide, through an intersectoral approach, health promotion actions for students from Brazilian public schools. By means of PSE, we constructed the general objective of this research: to reflect on intersectoral limits and possibilities for the development of self-care at school.

According to Orem², self-care is the practice of activities that the individual initiates and performs on their own behalf in maintaining life, health, and wellbeing. These activities are learned and surface from the combination of cognitive experiences, beliefs, habits, and practices that characterize the group's way of living and the culture to which the individual belongs. The performance of these activities necessarily involves a decision, a choice. Its purpose is the actions that, following a model, contribute, in a specific way, to human integrity, functions and development.

In a qualitative approach, we used semi-structured interviews and the resonant analysis of narratives. At a second stage, to approach intersectoral dialogs, we narrated our experience in the performance of intersectoral actions.

The results reveal the need to make policies to face health problems that exist at school. However, intersectoral actions still happen in an incipient way.

The majority of the families of this study (258 - 52.02%) receive help from *Programa Bolsa-Família* (PBF), a conditional cash transfer program of the Brazilian government. Regarding the level of schooling of students' mothers, we found that 275 (55.44%) mothers had studied up to junior high school at the most. Perhaps the mothers' low level of schooling justifies their lack of help in extra-class

activities. Concerning the performance of school activities, 313 (63.10%) students do not receive help to perform them. We believe that extra-class help is important, as 201 (40.52%) students reported difficulties in their studies. Analyzing some aspects related to students' physical conditions, like the Body Mass Index (BMI), a measure used to calculate whether a person's weight is ideal by relating weight to height, we found that 95 (19.1%) of the evaluated students are overweight, presenting risk of developing diseases like arterial hypertension and diabetes.

Another factor that contributes to increase weight is sedentariness. Watching television, playing electronic games, and surfing the internet are the main leisure activities of the majority of the children (441 - 88.91%). Lack of leisure options in peripheral neighborhoods, as well as lack of security, contribute to the parents' option of maintaining their children at home.

As for hygiene habits, we elected oral hygiene for the illustration below. We found that 429 (86.52%) students answered that they brushed their teeth twice a day or more. However, when we evaluated oral health conditions, a group of 392 (79.03%) students presented dental cavities. Dental cavities occur due to a biochemical imbalance in the mouth, with physiological processes of demineralization and remineralization of the teeth.

The problems surveyed and illustrated in this study cannot be ignored by the school. These are not "false problems"; they are real problems that are present in classrooms. During the class, the teacher can trigger reflections beyond the content of the school syllabus that can contribute to students' empowerment in issues related to self-care.

Our experience allows us to say that it is possible to promote health in the school environment. However, in addition to the performance of activities by education professionals, managers must focus on improving the infrastructure of the schools' spaces. Teachers' living and working conditions must be revised. To develop transversal themes and intersectoral actions, these professionals need a working day that allows time for them to prepare activities and moments of collective planning for articulated and intersectoral actions.

Physical proximity between health and education institutions, and assistance provided for a similar population are essential, but are not determining factors for these institutions to articulate integrated actions aimed at health promotion. When actions are performed, they are unilateral, and it is necessary to develop co-accountability.

When we researched the performance of the Health at School Program as an intersectoral policy, we found dichotomies: the program is prescribed by the health sector and is conducted by the education sector, in a sectoral view of an intersectoral program. Lack of articulated and integrated actions among managers of different government sectors, as well as among professionals, produces many limitations, such as bureaucratization of the services, waste of time and of financial and human resources, and duplicity of actions, leading to the unfulfillment of the program's objectives.

When the teacher and the school community educate for health, they contribute, in a significant way, to the education of citizens capable of acting in favor of self-care. Based on this, these citizens will also care for the environment where they live, being agents who transform the collectivity.

On the other hand, we recognize that diverse factors determine the health-disease process: people's singular living conditions, the way they are born, live and die, and their health and disease experiences. A large part of these factors cannot be tackled at school, but the school plays the role of educating citizens to face their vulnerabilities. When the citizen is aware of these vulnerabilities, they are able to take the first step that leads to better living and health conditions.

We realized that the public policies do not fulfil the established objectives. Rather, they point ways. On the other hand, these ways present numerous difficulties, like the Brazilian Law of Guidelines and Bases for Education³, which defines transversal themes and establishes they must permeate the content of disciplines, invading all their actions, being present, and interfering in them. In a second attempt to approach the health theme at school, the Health at School Program is implemented. The program has two main components: the first is clinical and psychosocial assessment, carried out by health professionals. The second component is health promotion and disease prevention.

To promote health at schools, school practices must echo in the families, in the community, and in the environment where people live and work, so that they can interfere with efficacy in the

population's ways of living. School practices would focus on the problematization of self-care, helping the human being who needs care to see their vulnerabilities and the possible risks to which they are exposed.

The health sector can develop actions in an intersectoral way, offering support for the activities performed at school. However, the health sector must review its practices, expanding them in the care network, which will meet new demands, and preventing the frequent reduction of the human being to the health/disease binomial. After all, the human being who is prepared for self-care will demand that the health sector should provide a type of healthcare that respects their singularity and their special way of acting in the world, shedding lights that enhance them and make them better day by day. This process is known to be slow. However, the movement has to occur so that it is feasible to have access to the possible benefits of this articulation.

In the program's body, these actions should be performed in an articulated way between health professionals and education professionals. However, in the established goals, it is clear that health professionals are responsible for the first component, while education professionals are responsible for the second component.

Life also develops at school and, during this march of life, students have familial and social experiences. At school, they have the possibility of transforming experiences into life values that will subsidize the making of decisions and foster the strengthening or change of habits. As life is imbricated in school, we understand that the school can be part of life, bearing in mind, however, that life does not have a disciplinary character. Life happens, befalls, permeates, crosses. To achieve this, it is necessary to have a school that permeates life, that promotes it at the moment it materializes in the classroom, and its objectives must be related to the objectives of the living being.

The school can be the scenario where self-care is promoted, but for this to happen, many movements still need to occur, like the valuation and education of health and education workers, investments in infrastructure, and the improvement in the access to services and healthcare. Actions like these are fundamental to fulfil the objectives of intersectorality and, consequently, to promote health at schools.

We are aware that the reflections presented here are not unique. More than this: the interventions suggested here can be questioned, which gives them new perspectives. However, we believe that the discussion opens new doors so that we can reflect on the work that has been developed at schools, pursuing new paths to education and health in the school.

The second dissertation⁴ was defended in 2015. Its title is "Teachers' Professional Development: The Trajectory of a Group of Nurses in Higher Education" and it aimed to investigate how nurses who are also teachers construct their professional development in teaching based on their insertion in higher education. The theoretical framework was formed by studies that approach teachers' education as professional development, focusing on the knowledge and learning necessary to higher education teaching, professional insertion, and construction of the teacher's identity.

The research participants were six teachers, all of them women. They had been selected in civil-service examinations and had been working as teachers for less than six years. The locus of the investigation was the Undergraduate Nursing Course of the Rondonópolis Campus of UFMT.

Following the stages that comprise the development of an investigation, the approach to the six teachers who participated in this study consisted of three stages. In the first stage, we characterized the nurses-teachers by means of a questionnaire with open and closed questions. The questionnaire contained information related to age, how long the subject has been a nurse, institution where she attended the undergraduate Nursing course, how long she has been a higher education teacher, titles, motivation to become a teacher, and aspects the teacher considered important to the exercise of teaching. In the second stage, written narratives were used for the participants to recall how the process of change from nursing to teaching happened. Finally, in the third stage, we collected oral narratives. The data were collected and analyzed considering the qualitative approach as the methodological presupposition.

In the study, we viewed teaching as a complex action⁵ in which reflections, knowledge and learning related to teaching are necessary, as we referred, specifically, to a group of teachers who came from

a Baccalaureate course, without pedagogical education. To achieve this, we proposed that the study participants, by means of narratives, reported their experiences regarding the process of becoming higher education teachers, in their personal, professional, institutional, and organizational dimensions. These experiences intertwined with each other and were gradually re-signified in the teacher's process of education and professional development.

Furthermore, we reiterate the option of using narratives in the research due to their character, which is also educational, enabling the intertwining that is necessary to the investigation and formation of the same action. In addition, concerning the teacher's process of education and professional development, in the same proportion that teachers build their narrative, either oral or written, they also reconstruct their experience in a reflective way, providing a self-analysis of their teaching practice⁶.

In this context, from the perspective of the six nurses-teachers, we will list some reflections that emerged from their oral and written narratives about the teacher's process of professional development.

In the teachers' voices and texts, they recalled their experiences as participants in a social context where, usually, educational policies do not consider pedagogical knowledge as essential for the composition of a base of knowledge for becoming a higher education teacher. The nurses had experiences in the daily teaching routine that made them question themselves, but they were also questioned about their knowledge and capacities to assume a discipline, manage a group of students, and develop planning and evaluation; in short, they were asked about their teaching functions.

In the teachers' learning process, the study participants showed that, in the period of admission to higher education teaching, marked by the absence of specific education in the field of teaching, they attempted to give visibility to images and beliefs related to the meaning of being a teacher, using specific knowledge deriving from their practical exercise as nurses, which initially grounded the teaching activities.

It is also a fact that the dynamics of knowledge construction for teaching varies from one teacher to the other, as personal and professional motivations, experiences, the university context, and education opportunities, among other aspects, influence this process. Thus, during the exercise of teaching, it is necessary to have professional maturity, mainly to search for teacher education. We could verify this in our study, as the nurses-teachers perceived the need to face new challenges in their processes of professional development as teachers, like the search for Masters' and Doctoral programs.

Day⁷ emphasizes that the teacher's learning process involves engaging in different types of reflection and requires a moral and emotional commitment. Moreover, the teacher must have some kind of support, which the author called partnership. Learning through partnerships suggests that teachers should search for and access people, programs, and institutions with the aim of developing themselves professionally.

Thus, developing oneself professionally as a teacher requires willingness to change in order to walk new paths towards the knowledge and learning that are necessary to the exercise of teaching, that is, it involves personal and professional experiences throughout life and the professional career. However, this alone is not enough, as teachers' professional development also requires institutional support and organizational structure grounded on professional valuation and stimulation, enabling to impact, in a positive way, teachers' practice and students' learning.

In this perspective, teacher education strategies assume the appropriate relevance, according to each educational institution and to the interest of undergraduate courses, like Nursing, for example. Thus, higher education institutions, by means of an organizational management, assume a particular importance in the faculty's professional development by promoting their education as an instrument to improve personal and professional performance, with direct reflections on the quality of education.

The echoes that resonated from this research corroborate the remarks above. One of the main conclusions is that developing professionally as a higher education teacher in Nursing demands a process that lasts during the entire professional career, and this process is dynamic and more or less intense depending on the personal and professional experiences the person has during their lifetime.

Furthermore, special attention should be paid to teachers in the beginning of their careers due to the magnitude of the actions and knowledge that are demanded from them in the exercise

of teaching, such as knowing the academic and institutional culture, knowing how the course is organized, knowing students, knowing peers, building professional knowledge, and exercising all the activities related to teaching.

Becoming and assuming the function of higher education teacher means walking a path that, sometimes, is arduous, as it is necessary to learn intensely about teaching during one's personal and professional life, during the exercise of teaching, and during pedagogical education for the exercise of the teaching activity.

Therefore, the teacher's professional development is a permanent, continuous, and non-linear process. The nurses-teachers' narratives revealed that personal trajectories integrate into professional trajectories; in addition, they showed that many factors such as school experiences, previous experiences as nurses, motivations, context, and the university's organization, among other elements, influence this process.

Thus, we highlight that the exercise of teaching of the nurses that participated in the study takes place in the interconnection between the fields of health/nursing and education, which demands a dialog among teaching, learning, and healthcare.

Resonances in education and in the services

The return of the two PhDs to the Rondonópolis Campus enabled the investment in postgraduate studies; namely, two Multiprofessional Residency Programs were created.

Some guidelines of the Residency Program can be listed here, such as: central focus directed at the local reality, with emphasis on people's and populations' health needs, by means of the multiprofessional and interdisciplinary work process; adoption of active teaching and learning methodologies, considering that seminars of interdisciplinary studies, knowledge meetings, integration moments, local and academic supervision, and in-service education are the best spaces for the development of this process; and adoption of innovative evaluation methodologies that focus on integrality and facilitate the evaluation of interaction between students-professionals and different practice scenarios in the perspective of constant interaction, by means of the problematization of spaces and also of their transformation.

With the implementation of the two Multiprofessional Residencies, we highlight the significant contribution to the development of many studies and extension activities targeted at the local health services' demands, with the participation of residents, tutors, and professionals.

With the actions developed in the Multiprofessional Residency programs, as well as the joint activities of teachers and residents, we created two research groups that culminated in the proposition of a Professional Master's program that aims to articulate the Residency, the service, and the regional demands for knowledge production in the area of health.

The creation of Professional Master's Program in Health Sciences and Technologies of *Universidade Federal de Mato Grosso* (PPGCTS/UFMT), which is currently being evaluated by CAPES, will be a benchmark for health research in the Rondonópolis Campus, fostering the integration of the research groups, which, involved in meeting the research demands of undergraduate and postgraduate programs, will receive new members and obtain funding for projects from different agencies.

Health professionals' education has been undergoing an important reorientation in view of new trends deriving from new demands presented by the SUS, and also from models of management, development of technologies, and care. Undoubtedly, this has required that educational institutions commit themselves to redirecting their teaching strategies and pedagogical model, including students early in the services.

However, it is necessary to face traditional curricular structures. Thus, it is relevant to amplify forms of professional qualification after the completion of the undergraduate course, with the aim of filling the gaps of initial education and, mainly, enabling teaching-service integration, focusing on the local and regional health reality.

Articulation between work and education, construction of permanent education processes, consolidation of cooperation networks, and recognition that both education and work processes produce technical and political knowledge are principles that ground UFMT's commitment.

In this perspective, PPGCTS/UFMT aims to foster knowledge production in health sciences and technologies in the region. It is the first interdisciplinary postgraduate program in the area of health of the State of Mato Grosso. Disciplines and knowledge production in PPGCTS/UFMT are articulated in a common interdisciplinary axis of the program and in two lines that approach the Molecular and Functional Mechanisms of the Health-Disease Process and Interdisciplinary Healthcare.

PPGCTS/UFMT aims to provide professionals holding Master's degrees for the region - professionals with competence to promote health, develop health science and technology, and strengthen the healthcare system, considering social and epidemiological characteristics and challenges of the health sector in the State and region. The Program intends to promote the development of research groups and postgraduate health programs in the south region of the State of Mato Grosso, and to enable the emergence of new research vocations in the area. Thus, it will contribute to knowledge production and development of technologies, in order to participate in the health production of the State's population, allied with the construction of the SUS and of integrality and interdisciplinarity, both in the region and in Brazil.

We believe that educating professionals in the modality of Professional Master's Program in Health is a relevant initiative to enhance the knowledge acquired in undergraduate courses, and also to enable the professional to reflect on their daily practices and contribute to improve the service. This opens the possibility of articulating different types of knowledge and introducing, in the undergraduate course, contents and practices related to shared work, with a multiprofessional approach, collaborating with the construction of the new working process in the area of health.

The inclusion of professionals in academia will strengthen the development of teamwork and knowledge exchange for the construction of new knowledge that originates in the interface of different fields of professional work, intensifying the partnership between academia and the services. It contributes to expand knowledge, educating health professionals capable of committing themselves and operationalizing the necessary changes related to development of innovative technologies and organization of care. Such professionals should be able to improve people's health and quality of life based on a political-pedagogical project grounded on learning based on professional practice, knowledge production, adult education, and on significant learning; in addition, they should provide comprehensive care and develop health sciences and technologies.

The proposal for the professional Master's program reaffirms the understanding that health professionals' education must be perceived in the context of a broader teaching policy, taking into account the process of social changes in which knowledge and information are situated. Understanding that health work guides political and technical decisions involving all the components of professional education, the proposition of a Professional Master's Program in Health fulfills the aim of articulating the world of labor, research and education, creating one more consolidation space of knowledge and practices, as well as responding to the National Permanent Education Policy. We highlight that PPGCTS will enable an institutional transformation movement grounded on the presupposition of significant learning, with daily reflections on practice, mainly on multiprofessional practice.

The offer of seats in the program to professionals corroborates the construction of solidarity practices, which joins the health professions in the common objective of providing healthcare and recognizing the importance of all the professionals involved in health work. Each profession contains its own competency nucleus, whose knowledge must be expanded and guaranteed, aiming at knowledge interchange and considering the collective nature of health work. Interdisciplinary and multiprofessional works provide different nuclei of competencies for care that, together, re-dimension individual work.

Final remarks

The Project of human resources education through Master's and Doctoral programs for health professionals with emphasis on health teaching to the SUS in the context of *Pró-Ensino na Saúde* fulfilled its preliminary objectives, educating MAs and PhDs in the State of Mato Grosso.

The resonances of this initial education cannot be totally measured because they are present in the new understandings of world, professional education, teaching, and research held by the professionals who received this qualification, especially through the enhancement of the theoretical framework concerning the experience of being a nurse and becoming a teacher.

The measurable results, as we described here, were obtained remarkably in the postgraduate sector, with the creation of two Multiprofessional Residency Programs, two research groups, and one Postgraduate Program (Master's and Doctoral degrees).

We reported the experience of *Pró-Ensino na Saúde* in the interior of Brazil to provide feedback for managers about the importance of fostering education, interiorizing research, and focusing on the infinite resonances enabled by projects of this nature.

Authors' contributions

The authors Aristides José da Silva Junior and Magda de Mattos participated actively in the construction of the article. The author Neuci Cunha dos Santos participated in the general review and final version of the article.

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