

Teaching Practice Through the Integrated Curriculum: Permanent Education in the Amazon, Para, Brazil

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Abstract — *This article reveals the teaching practice in health education in a Nursing Undergraduate course guided by the guidelines of the integrated curriculum in a Higher Education Institution (HEI) in the Amazon region, Pará, Brazil. This institution has specific singularities in the region, and teachers need to change their didactic and pedagogical practices. . The objective was to analyze whether the continuing education of teachers at the researched HEI meets the operational guidelines for the practice of the proposed curriculum. We opted for a qualitative, descriptive, exploratory methodology with triangulation of collection methods and a case study approach. Data collection took place in two stages: via documentary Curriculum Lattes of participants and oral semi-structured interview. For analysis, the techniques of simple descriptive statistics and categorical content were used, supported by the theoretical references of Freire, Perrenoud and Berbel. Among the results, it was pointed out that the institution does not have a permanent education program to support the implementation of the integrated curriculum, among the main factors, the low proximity between the initial training of the teaching staff and the redefinition of the practice stand out didactic and pedagogical for institutional curricular demands. It is*

concluded that there were advances in relation to practical changes, for strategies that mobilize the student to elaborate a reflection. However, they point to the institutionalization of permanent education for teacher training with an emphasis on interdisciplinary practice, active methodologies and Integrated Health Activities.

I. INTRODUCTION

In the scenario in which teaching in health is inserted, it is considered essential that teacher education encompasses a theoretical and practical arrangement, based on pedagogical and didactic knowledge, which must interact according to the teaching demands of Higher Education Institutions (HEI). Pedagogy constitutes the theoretical field of educational practice, being present in several actions of society, which go beyond the didactic aspects of the classroom. Didactics, on the other hand, is understood as the theoretical organization of the teaching activity, in which the objectives, contents, methods and forms of class planning are related to each other to create a favorable condition for knowledge and learning for the student (Libâneo, 2015; Anastasiou & Pimenta, 2008).

In this sense, it is considered essential that teaching practice in higher nursing courses achieves a balance for the mastery of pedagogical and didactic knowledge, with the objective of promoting success in the construction of professional training. In this way, permanent education assumes the role of deepening knowledge between theory and practice in the work context, in addition to guiding the necessary transformation of the curricular training processes of interdisciplinary pedagogical practices and the articulation between health service managers and training institutions (Abreu et al, 2003; Fontenele & Cunha, 2014; Brazil, 2014).

Thus, the concept of curriculum refers to a proposal for the cultural organization of educational centers that articulate fragments that guide teaching and learning in tune with a logical condition for the construction of learning, however, they surround problems of reality related to theory and practice and the relationship between education and society. Thus, among the demands of teacher education, the constructivist concept brought great repercussions to the educational sphere, with changes in educational curricula and didactic and pedagogical practices based on active learning methods, which value the action of the subject, the rescue of knowledge prior to meaningful learning and openness to a critical and reflective posture (Freire, 1996; Gómez, 2011; Sacristán, 2013; Lima, 2017).

Faced with the repercussions of higher education, the discourse on curricular integration was resumed in Brazil and in many countries in the 1990s, within the scope of

official proposals and of international bodies such as the United Nations Organization for Education, Science and Culture (UNESCO) and as part of the literature published by foreign and Brazilian authors. In this sense, the curricular guidelines, developed in the educational reform movement of the time, provide for various forms of integration for education and objections to teacher training (Freire, 1996; Veiga, 1998).

Among the challenges, we highlight the task based on professional training that integrates work and teaching, linking to the actual practice of a profession, bringing theory and practice closer to professional practice, highlighting innovation in the field of education, called integrated curriculum. Such proposal, in contrast to the fragmentation of knowledge, represents the concept of integration, learning based on the exchange of knowledge and balance in the pedagogical relationship, placing interdisciplinarity as one of the axes within the scope of a proposal that represents education as a social, scientific practice, cultural, humanistic, technical and ethical-political (Bernstein, 1996; Santomé, 1998; Lopes, 2008; Silva et al, 2016).

However, in the trajectory of academic training of undergraduate courses in the health area, among them the Undergraduate Nursing Course, it is pointed out that didactic and pedagogical knowledge is not prioritized. This scenario is in conflict with the expansion of the nurse's professional practice area in the field of secondary and higher education, given the challenges of articulating two professional practices: teaching and health care. Thus, the discussion on the training of nursing teachers gains strength by reflecting on the quality of education they offer (Furlanetto, 2011; Fontenele & Cunha, 2014; Brazil, 2015; Corrêa et al, 2018).

Thus, bringing to the reality of a public, state HEI, located outside the headquarters, in the interior of the state of Para, Amazon region, Brazil, it faces specific singularities, related to the reduced number of teachers in the region, who need to aggregate transformations. In its didactic and pedagogical practices, develop interdisciplinary activities, scientific initiation programs, extension programs, together with the expressive demand for an institutional training program aimed at meeting the guidelines of the institutional curriculum.

In the search to adapt to the National Curriculum Guidelines (DCN), this institution guides in the Pedagogical Course Project (PPC) new methodological strategies such as the active problematization methodology and other critical-reflective and transformative pedagogical strategies in accordance with the curriculum guidelines integrated. Although sometimes, the processes of change in HEIs focus mainly on changes to the curriculum, with changes in the adjustments of subjects, workload and not on the peculiarities of training and changes in practice in the academic community (Barbosa & Viana, 2008).

From this perspective, in order to confront the reality of a HEI to the process of adaptation of the professors to the curricular guidelines, this study aimed to answer the following question: What are the demands in continuing education actions for the professors of the Nursing Course of a HEI located in the countryside from the Amazon region, Pará, Brazil, to meet the guidelines of the Pedagogical Course Project (PPC) based on the Integrated Curriculum?

Based on the foregoing, this research aimed to analyze the demands in continuing education actions to the faculty of the undergraduate Nursing course at the HEI researched to meet the guidelines of the integrated curriculum. In support of meeting the proposed objective, the characterization of the academic and professional profile of the professors of the course was carried out, as well as the description of the pedagogical and didactic practices.

II. MATERIALS AND METHOD

To achieve the analysis proposed in a research developed in a Master's program in Education and Health in the Amazon from 2017 to 2019, this study was based on a qualitative methodological design, of the descriptive and exploratory type, with triangulation of collection strategies in an approach of case study.

In summary, triangulation is used as a resource in qualitative research, it proposes multiple views through various collection and analysis instruments that complement quantitative, qualitative perspectives, ensuring a deeper understanding of the phenomenon investigated, but which is based only on the qualitative axis. The case study technique, on the other hand, allows the choice of a unit that belongs to a larger context that can be analyzed with greater particularity (Denzin & Lincoln, 2003; Minayo, 2004; André, 2005; Canzonieri, 2011).

The field determined for the study was a state HEI, located in the interior of the state of Para, Amazon, Brazil. It is characterized as a Polo University Campus for

municipalities in the southeast of the state. The target audience was the professors of the Undergraduate Nursing Course, a representative of the pedagogical advisor, a representative of the assistant coordination of the course, and the general coordinator of the institution. The faculty of the Nursing Course is made up of several professional categories, but the majority is composed of professional nurses.

With reference to data collection, it was carried out in two phases: documental via the information source of Curriculos Lattes and oral via semi-structured interview. Both stages were developed by a professor and researcher in the area of teaching and health at the researched HEI. The first phase took place through a survey of the number of professors allocated in the first semester of 2018 in the Undergraduate Nursing Course. It was established as an inclusion criterion for this stage only professors who develop theoretical or practical academic activities in the Nursing Course, since the other courses on the researched campus do not yet work under the guidelines of the integrated curriculum.

Through the list of 25 professors, the database of the National Council for Scientific and Technological Development (CNPq) Lattes Platform was used as a secondary source of information to compose the academic and professional profile of the course professors. However, it is noteworthy that to characterize this profile, information collected in the two phases of data collection was used in order to avoid a possible bias in outdated curricula.

In the first phase, a Lattes Curriculum Assessment Registration Form (FRACL) was used as a collection instrument, used in selection processes for professors at the institution. The choice of this one enabled the organization of data with statistical resources through the scoring and systematization of information related to the area of health teaching, such as: academic titles, length of professional experience, scientific production, teaching, research and extension activities.

The second collection phase reiterating the qualitative methodological predominance of the research, a previously structured interview script was used as a collection instrument, containing 18 standardized guiding questions for the pre-defined thematic categories: Teacher training for the integrated curriculum, Continuing teacher education for the integrated curriculum; and didactic and pedagogical strategies of the teacher in the practice of the integrated curriculum.

Of the 25 professors in the first collection phase, in this second stage, 20 professors were approached for the interview, according to the inclusion criteria: bond in the

institution for at least 6 months, this period was established with the purpose of selecting professors who had already had some proximity to the practice of the integrated curriculum. As well as the criterion for the order of approach with participants, we prioritized professors with more time in the institution, considering the purpose of collecting valuable information from the period of implementation of the integrated curriculum in the institution.

Regarding the exclusion criteria, it was applied to: teachers on health and maternity leave; vacation; I terminate the contract with the institution during the research collection period, as well as the use of the sampling technique by information saturation - operational aspects for redundancy and repetition of data. (Denzin & Lincoln, 1994).

It is noteworthy that among the 20 professors interviewed, three are professors who exercised positions of coordination or pedagogical accessory at the institution, with more than half of these participants having been working for 10 years or more at the institution. The interviews took place with the invitation and prior scheduling of the time and place most suitable for the participant, the recording of data, took place at the same time as the collection with annotations by the researcher and the aid of an mp3 voice recorder for further detailed analysis.

In summary, the information collected in the first and second stages of data collection enabled the triangulation of data and evidence between the statements presented in the interviews and the information mentioned in the curricula. Likewise, ethical aspects were respected, based on Resolution 466/12 and 510/2016 of the National Health Council, which regulates research involving Human and Social Sciences, with regard to the right to spontaneous participation after explanation of the research objectives and signing the Informed Consent Term (FICF), confidentiality of information and risk reduction for participants. As well as approval by the Research Ethics Committee under the opinion number CAAE-83174217.3.0000.5174 (Brazil, 2016).

Based on the requirements of analysis strategies with data triangulation, it was based on simple descriptive statistics, expressed in numerical data, percentages, tabulation of pertinent information in graphs and tables to characterize the academic and professional profile of the participants. This strategy allowed us to explore more widely the data from the second collection phase for the content analysis of a qualitative nature of the social research proposed by Bardin, (2012), with theoretical

support in authors such as Berbel, (1992), Perrenoud, (2000) and Freire, (1996).

The coding scheme for data analysis was performed by the three authors and researchers who participated in the data processing in the three stages of the chronological poles of Bardin, (2011). In pole 1 - pre-analysis: there was the alphanumeric codification of the participants, systematic organization of the answers, with transcriptions and exhaustive reading of the answers to understand their meanings. These were compiled according to thematic categories pre-defined by the guiding axes in the semi-structured interview script. A model called "inverse process" was developed: once the system of categories is provided, the elements are divided, in the best way, as they are found" (Turato, 2008, p.447).

In pole-2: exploration or coding of the material: the process of subcategorization was started, which consisted of designing prominence, according to the frequency, repetition and relevance of the data, which allowed the description of the relevant characteristics expressed in the reports. At this pole, it was decided to organize the categories and subcategories into tables, thus facilitating the visualization of data for analysis. In pole 3: Treatment of results, inference and interpretation, the data were presented in the form of words, phrases and ideas, then went through interpretations and inferences, in order to relate the categories and their respective dimensions, which was represented by means of a diagram synthesis of the categories, providing a panoramic view of the research findings (Fig. 1).

In compliance with the scientific rigor in qualitative research, the reliability and validity criteria were used during the coding stages of the analysis. Among them, the use of different collection instruments to analyze the same research problem stands out, data triangulation to overcome limitations in the use of a single instrument with cross-referenced results, as well as conference of members between the authors, providing elements of coherence internal evaluation of the results in the analysis and review of the research stages with external evaluators (Flick, 2009; Creswell, 2007).

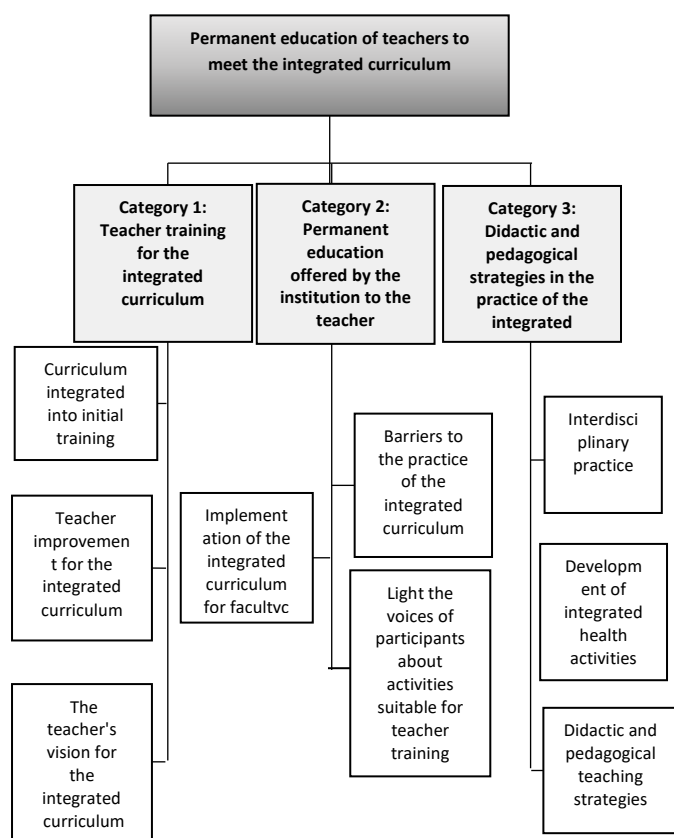


Fig. 1: Overview diagram categories and subcategories of analysis Overview diagram categories and subcategories of analysis

III. RESULTS AND DISCUSSION

3.1. Academic and professional training of teachers and the nuances of the integrated curriculum

In order to recover the subsidies from the initial training of the participants, the characterization of the academic and professional profile, allowed an analysis of the potentials and limitations to the new adaptations of the integrated curriculum in the institution, as well as triangulated information from the participants' discourse to the conceptual understanding of the integrated curriculum.

Among the potentialities, we point out: the initial training of teachers from the year 2000 (80%), training in public HEIs (76%), graduates of academic training at the institution (36%) and time of experience in teaching for ten years or more (60%). On the other hand, there were findings that represent weaknesses, these are represented by the limited participation in research and extension activities (40%), low investment in scientific production (30%), associated with little training in the stricto sensu type of teachers (32 %), in addition to the low rate of academic training with a degree (28%).

Certainly, initial academic training from the 21st century onwards is seen as an advantage in the academic body, as it represented the growth in the offer of HEIs, postgraduate courses, with an increase in the demands for the teaching profession in the labor market, in addition to covering a period of new training and curriculum changes in Brazil (Schwartzman, 2014; Sampaio & Sanchez, 2017).

Furthermore, professors with initial graduation from public university institutions provide opportunities for the relationship between teaching, research and extension practices. Since, public institutions lead the ranking of scientific productions and point to the greatest incentive in the teaching-research-extension triad (Carmo & Santos, 2015).

Though, despite the predominance of training from the 21st century onwards, in the speeches of the participants, a limited contact with the integrated curriculum is revealed. Mainly due to the few trainings for licensure and contacts with the integrated curriculum only as students, which does not represent a formal training for this curriculum, since, for the deepening of this training, training for licensure or concomitant with bachelor's training, a scarce feature in the training of most health courses (Nóvoa, 2017).

In this context, the dimensions that made up the subcategory "the curriculum integrated in initial academic training", the statements of most participants express that they had no experience for the integrated curriculum in initial training:

[...] I did not receive any graduation training for this curriculum. I had a very traditional education [...].
(Teacher-01).

[...] This curriculum was not mentioned. It was the traditional teaching, but what helped me to understand a little were the two years I did my degree [...]. (Teacher-17).

As a result, it is considered that the low rate of teachers with a degree is unfavorable for the practice of this curriculum, since it requires more than just knowledge related to the subjects taught, but also the requirements of professional skills for the act of teaching post that initial bachelor's training does not cover these demands (Tardif, 2002).

However, professionals who join as professors in the same HEI of initial academic training are considered a potential because they enable the entrenchment of the teaching profile fostered by the institution due to familiarity with the routine and guidelines of institutional practices. As well as the length of professional experience, it is classified into periods, which mark characteristics

ranging from instability to professional maturity, since the longer the period of professional experience, a trajectory of solidification and consolidation in the teaching career is expressed (Humberman, 1992; Star, 2010).

Also in the characterization of the training of the participants, we sought to describe "the improvement of the teacher for the integrated curriculum", the results show that the majority did not participate in any external training activity in the last 24 months, as shown in the following statements:

[...] I haven't taken any courses outside the institution. I still haven't had the opportunity to participate [...]
(Teacher-07).

I didn't even do a training abroad. What happens a lot is the socialization of materials among teachers (Teacher-12).

This situation reflects a scarce routine of participation in refresher courses, which is confirmed by the weaknesses found in the training profile of the participants. Few professors report the search for professional improvement for the presuppositions of the institutional curriculum, a reduced framework for academic education of the *stricto sensu* type, which contributes to the low scientific production. Given that this type of training requires greater rigor in production through a system of courses that strengthens advanced training for scientific research (Brazil, 2017).

With reference to the types of participation in research, relevance is expressed only for the quantitative in Course Conclusion Work (TCC) guidelines, showing an incipient picture in intellectual production in research of a deep scientific nature, which is not possible to achieve in research at graduation. This scenario causes a distance from the dissemination of technical, pedagogical, scientific and cultural knowledge, as well as the low participation in extension projects, which generate barriers for the propagation of knowledge from the academic field, to return and promote transformations in society (Vieira, 2013).

Therefore, it is noteworthy that valuing access in *stricto sensu* postgraduate courses in education and health, contributes to the achievement of methodological demands of pedagogy and didactics, provides subsidies to instruct knowledge about active learning processes that foster autonomy, creativity, criticality of students, consolidation of training spaces that favor the confrontation of problems and challenges within the scope of professional practice, combining the perspective of qualifying higher-level professional training (Freitas & Seiffert, 2007).

During the interviews, "the teacher's vision for the integrated curriculum" was also asked, making it possible to explore the theoretical knowledge formed by the participants:

[...] I understand that this curriculum can support, in general, all subjects. Train the student to work in a generalized manner in accordance with the demand of various health sectors. [...] prepares the student to work according to the experience of the service. Prepares a professional to experience various areas of knowledge (Teacher-13) [...].

[...] The integrated curriculum is a practice, a way of doing things. In this way he only adds, because everything that is fragmented he loses. So, when I propose to work through content integration through contextualization, I manage to make that speech bring meaning to his reality. Because I'm not working on an isolated subject, but, bringing knowledge from various areas through a simple correlation, this will add to the student's learning [...]
(Teacher-12).

Regarding the teacher's vision for the integrated curriculum, despite the gaps in initial training among the majority, a theoretical deepening close to the real potential that encompasses the conceptual context of the integrated curriculum was noticeable. However, there were no references in the statements about critical and reflective competence. This characteristic is considered essential for the development of an integrated curriculum and should be part of the attitude between professors and students.

The structuring of a concept that meets the core of the requirements of the integrated curriculum must be supported by knowledge organized in content that relate to various subjects, having the following guiding principles: the conception of critical-reflective teaching-learning, interdisciplinarity and the relationship theory and practice, conceiving forms of integration from the intercalation of problems resulting from the contextualization of practical needs in the real context of a profession and inserted in a dynamic process open to criticism and changes, providing integration between academia, service and community (Barba et al, 2012; Kikuchi & Guariente, 2014)

From this angle, it is essential to know the experiences present in the faculty and incorporate the requirements to improve this training in the trajectory of implementing changes in the education system. The success in adapting the new curriculum recommendations is contiguous with academic activities and in the role of the teacher in teaching practices. Without adherence, awareness and encouragement to the training of these professionals, such changes tend to fail (Kopruszynski & Vechia, 2011).

3.2. Continuing teacher education for the assumptions of the institution's integrated curriculum

The first group of themes was called "implementation of the integrated curriculum for the teaching staff". In this finding, the participants were professors in stating that they have not received permanent education since the implementation of the curriculum at the institution. The reasons that made up this analysis were expressed in the following speech:

[...] When he switched to the integrated curriculum, which was in 2007 [...] there was a meeting with the coordination here on campus, they did a 2-day work explaining how the curriculum was, they gave us some material to read, the problematization was discussed, but there was no practical monitoring or evaluation work and that is how it has been happening until today [...].
(Teacher-04).

This context reflects an unfavorable scenario to align with the demands of curriculum implementation. Since, the teaching profession is constituted in the midst of a process of constant transformations, added to the various knowledges that are mainly constructed in accordance with the institution's needs. It is necessary to establish an open dialogue about the difficulties of the faculty and use the space of the HEI to empower them, valuing the exchange of experiences (Vogt & Morosini, 2012).

Given the complexity portrayed in the lack of institutionalization of a teacher training program, barriers related to the process of adapting to changes are revealed. During the speeches, limitations to the adequacy of the curriculum were raised. Among them, the following were cited: the lack of integration among the faculty, local and regional limitations, together with staff turnover in the institution and the attitude of the student. These findings comprised the theme "the barriers of the path to the practice of the integrated curriculum", as shown in the following statement:

[...] In fact, in our professional rush we are unable to integrate and for those who do not live exclusively from teaching, this prevents us from participating and only the same teachers always end up in the activities we carry out. [...] All of us professors have other jobs, so we can't get together to plan an activity that shows this reality of integrating disciplines for the student. I think this is the first point, the problem is with us [...]. (Teacher-02).

Such statements express that the professor recognizes himself as one of the main barriers to the implementation of the curriculum, which is justified by the multiple employment bonds in other institutions. Since, according

to information from the professional profile of the participants, 85% have more than one employment relationship. In addition, the Exclusive Dedication regime in the framework is occupied by only three professors (15%) and the rotating links are represented by half of the group (48%). These factors contribute to the lack of integration and influence various limitations in labor relations, such as the negative performance of work activities, instructional effort, academic productivity and commitment to a professional career (Rowe, Bastos & Pinho, 2013; Alves & Pinto, 2011).

As well as, in the speeches of the participants, the specific limitations of the region of a university campus located in the interior of the state of Pará, Amazonia, Brazil are referred to.

[...] The university demands a lot from us, I don't know if it's the reality of being on a campus in the interior of the state. Here at this institution, we do not receive continuing education [...] The level of demand is a lot and there are few subsidies to teachers [...] When it happens, it is not disclosed in advance and few people participate [...].
(Teacher-03).

In this sense, it is reiterated that interiorization is a feature present in state university campuses. As of 2001 there was an expansion of state universities, with 17 located in capitals and 22 in the interior of Brazil, totaling 39 university campuses by 2016. This process was accompanied by some implementation problems, such as factors related to infrastructure and deficits in the composition of the human resources framework. On the other hand, they were responsible for the expansion of enrollments in public higher education, representing 27.5% across the country (Andrade, 2012; Fialho, 2012; Carvalho, 2018).

Regarding the barrier raised on the students' posture for the development of the integrated curriculum, there is a real weakness that permeates since high school, as the adaptations of the integrated curriculum in basic education are not yet established in Brazil. In general, these young people entering higher education carry trajectories of a school culture of low valuation of education and content fragmentation, which, if not properly conducted, can represent difficulties in monitoring the demands of higher education (Sampaio, 2011).

During the interviews, many participants also make suggestions for continuing education activities, represented by the theme: "Light the voice of participants on the appropriate activities for teacher training":

[...] What we need is monitoring. Designate a team to come here, make an intervention and again come back and

assess the changes that have occurred or not (Teacher-18).

[...] Listening to the teachers to find out about the needs, the main difficulties, the themes, but that the teacher could also participate contributing ideas [...] (Teacher-05).

In fact, the reluctance of the speeches show that there is no teacher training program in the institution that directs towards the precepts of the integrated curriculum. The statements give rise to effective strategies aimed at continuing education actions such as: the development of internal working groups for the schedule of educational interventions, action planning, setting goals to achieve theoretical and practical professional improvement in didactic and pedagogical performance, establishing a flow of monitoring and follow-up by the external coordination (matrix campus) of the goals and transformations achieved in the group's practice.

In this sense, it is noteworthy that the successes in continuing education activities developed in the educational institution, intend for the need for systematic meetings that must take place under supervision, valuing information exchange environments in order to expand interpretations and meanings of teaching practice through collective reflections raised on the particular needs of each institution (García & Vaillant 2001; Bolfer, 2008).

3.3. A critical look at reality: the curriculum produced in the didactic and pedagogical field

In order to promote the analysis of the development of the guidelines of the integrated curriculum in the researched institution, we sought to make an interpretation of the practice of teachers in order to explore the context of the actual practice of the curriculum.

In this sense, for the first group of results in this category, score on "the interdisciplinary practice" as described in the following speech:

[...] The interdisciplinary practice still doesn't occur as it should, some teachers still show resistance. They are still carried out in a very tenuous way with some subjects in some semesters, but not with others [...] This is a consequence, I would say, within this very lack that the university has to work and accompany teachers from the interior [...]. (Teacher-14).

The term interdisciplinarity is used to express an interlocution between the understanding of a science in its most varied areas, covering themes and contents, allowing the articulation of innovative and dynamic resources for the expansion of learning. The collaboration of different professional areas for health care allows for a broader

understanding of the health-disease process, reinforcing the goals of prevention and health promotion with a focus on comprehensive care (Costa & Guariente, 2016).

Only a small part of the participants described the concept close to the one mentioned above. The majority pointed out the difficulties in the practice of interdisciplinarity, referring to the same points mentioned above as: teacher turnover, difficulties in participation and integration, limitation as it is a rural campus and the need to reorganize disciplines in the axes of the curricular components.

In this sense, in relation to interdisciplinary practice, the teaching staff is encouraged to build a methodological dialogue, adding similar structures from different disciplines. To achieve this process, the rescue of stages that are much more relational than structural within an HEI is required, involving dedication and interaction with the academic community, adaptation to innovative practices, proactive reactions and flexible and changeable planning (Freire, 1996; Veiga & Quixadá, 2012; Pereira & Nascimento, 2016).

For the findings of questions about practical experiences in teaching actions in the internship field, the description for the "development of Integrated Health Activities (AIS)" was sought. The lines give the following description:

[...] Little happens in some axes and in others it doesn't happen. [...] To develop these activities, you have to have an integrated team that keeps up to date. There cannot be professors who own the subjects [...] (Teacher -14).

[...] My experience with integrated activities is that we work on continuing education for professionals according to the needs of the service [...] (Teacher -17).

In the different scenarios of health training, it is necessary to use didactic strategies in the practical internship field, among the participants' statements refer to a shallow picture in the development of AIS. Since, they showed little proximity to the requirements of the concept that make up these activities. This framework reflects the predominance of biomedical and content teaching, with training by disciplines, approaching fragmented and specialized knowledge, with little proximity between the different areas and the tendency towards isolated work among professionals (Carabetta, 2016).

AIS are identified as educational actions that are integrated into the actual practice of a profession. They can provide a rapprochement between the academic community in different areas of health and SUS professionals. They promote the understanding of different health scenarios through interdisciplinarity. Therefore,

overcoming such barriers is crucial to sustaining integrated education, since they are considered strategies centered on the production of knowledge, based on the socio-sanitary reality and on assistance consistent with the needs of SUS services (Freire, 1996; Franco, Soares & Bethony, 2016; Toassi & Lewgoy, 2016).

To complete this analysis, we sought to describe the approach of the didactic and pedagogical practice developed by the participants. These findings comprised the theme "didactic and pedagogical teaching strategies", as expressed in the following lines:

[...] I use well blended methodologies. I use lectures I try to reduce as much as possible in 50 minutes, because it is saturating and the concentration level drops. I do targeted studies, case studies of systems involving diseases to understand the normal and the pathology even if they are not seeing the pathology yet, but they need to understand that there are already structural changes. [...] They do seminars, field research, technical visits, I try to bring other professionals from other areas and basically that's what I try to do [...] (Teacher-20).

[...] I provide moments of brainstorming in the internship field, work with situational diagnosis and portfolios. In these portfolios, I guide them to write daily reports, making their own reflection, putting the advantages and disadvantages of internships [...] (Teacher-06).

Regarding the description of didactic and pedagogical practices among teachers, most intersperse the use of strategies that mobilize the student to elaborate a reflection and situations with isolated approaches such as: use of portfolios, case studies and brainstorming, with a prevailing movement innovative interventions. This framework reflects advantages in the attitude of the teacher, given that the use of constructivist-based methods prevails, however, such statements do not support the development of active teaching-learning methodologies.

In summary, active methodologies are operationalized from teaching-learning strategies based on the constructivist approach, with valuing of prior knowledge to significantly reframe the construction of new knowledge, with a collaborative approach, social interaction, interdisciplinary integrated with other disciplines and contextualized through problematization, mediated by the purpose of stimulating the student to question, examine, critically reflect on their reality, with the need to solve impasses through autonomous choices and decision-making integrating a social context (Freire, 1996; Perrenoud, 2000; Farias, 2015).

Among the didactic and pedagogical strategies to better serve the integrated curriculum, the problematization

methodology stands out. Such method constitutes a permanent circle of inquiry and search for adequate solutions to the problems observed in the concrete reality of the learning scenario. With each new hypothesis applied to reality, a new reality to be observed is generated, from which the participants are again encouraged to reflect, analyze and propose new hypotheses for solutions (Alves & Berbel, 2018).

However, in relation to the problematization methodology that is recommended in the Pedagogical Course Project (PPC) of the institution, few professors reveal its use in the didactic routine. In addition, a perfunctory view of the stages of the strategy is exposed, as shown in the following speech:

[...] I use problematization as a strategy. I encourage students to go to the field to reflect, culminating in a context of transforming reality [...] (Teacher-04).

With regard to the problematization methodology, the first reference in conducting these steps is related to Charles Maguerez's arch method, guided by a sequence of 5 systematized and linked steps due to a problem detected in the learning reality, such steps mobilize a path that must be followed by the student and involve reflections, questions and theoretical deepening, to then prepare the latter for an awareness of the world with the search for solutions to intentionally transform it (Freire, 1996; Bordenave & Pereira, 2007; Berbel, 1998).

In addition to the active problematization methodology, other teaching and learning strategies for the development of the integrated curriculum are mentioned, such as: discussions in curricular internships linked to clinical case studies, dramatization, theorization, systematization, synthesis, training of technical skills, home visits and the encouragement of research (Alves & Berbel, 2018).

In this context, it is noteworthy that, in order to meet the assumptions of the integrated curriculum, it is essential to invest in permanent training aimed at teaching skills such as: learning situations, encouraging the progression of learning, designing devices that provide for the evolution of the learner, involving them in learning, teamwork, participating in the administration of the institution, using new technologies, facing the duties and ethical dilemmas of the profession and administering their own training continuously (Perrenoud, 2000).

IV. CONCLUSION

In view of the concerns raised in the course of the research, the proposed analysis allowed us to detect that there is no institutionalization of a continuing education program for teachers to support the implementation of the

integrated curriculum. Such a strategy is necessary since, in the last two decades, there have been curricular changes in the institution and the initial training of the teaching staff has little proximity to institutional demands.

The lack of an institutional training program creates difficulties for the development of teaching practice, and are out of step with the guidelines of the proposed curriculum, such factors are expressed by the absence of an interdisciplinary approach and discreet use of active teaching-learning methods. What happens in practice are individual initiatives among teachers for innovative didactic and pedagogical strategies that, although they can mobilize the student to elaborate a reflection, cannot be classified as the use of active methodology, especially with regard to the method suggested by the institution.

However, there are interferences related to local and regional singularities such as the turnover of professors in the institution, the mitigated institutional culture for teaching, research and extension activities, and a reduced framework of *stricto sensu* training. Analyzing teaching practice in the light of the integrated curriculum requires looking at it from different angles, including one of the pillars of educational institutions represented by the teacher.

Thus, it is concluded that among the demands for permanent education actions, effective institutionalization and the rescue of the institution's commitment to the continuous construction of knowledge for the competences of teaching practice, followed by theoretical and practical professional improvement are raised. , establish an internal and external program of follow-up, planning, monitoring and evaluation of actions, start interdisciplinary work, adjustments in the development of AIS and encouragement of active methods of teaching and learning with an emphasis on problematization.

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