

Critical thinking in nursing training: evaluation in the area of competence Education in Health

Pensamento crítico na formação do enfermeiro: a avaliação na área de competência Educação na Saúde

Pensamiento crítico en la formación del enfermero: la evaluación en el área de competencia Educación en la Salud

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ABSTRACT

Objective: To analyze the constitution of critical thinking in nursing training in the approach by competence and the integrated curriculum, considering the evaluation process by capturing its challenges, and proposing overcoming strategies. **Methods:** Qualitative. In the first phase of data collection, interviews were conducted with twenty-four professors, nine preceptors, and fifteen students to reconstruct the profile of competence, and in the second phase, a workshop to validate the profile identified challenges and proposals. The Collective Subject Discourse was used to analyze the interviews and the holistic competence reference in reconstructing the profile. **Results:** The critical thinking is built based on experiences in the world of work, and evaluation is the conductor of reflections towards emancipation. **Final considerations:** It signals the importance of professor training in the learning evaluation and working with the collective construction of subjects to overcome challenges that happen in the changes of training.

Descriptors: Thinking; Employee Performance Appraisal; Nurses; Professional Competence; Competency-Based Education.

RESUMO

Objetivo: Analisar a constituição do pensamento crítico na formação do enfermeiro ancorada na abordagem por competência e no currículo integrado, considerando o processo de avaliação, captando seus desafios e propondo estratégias de superação. **Métodos:** Qualitativo. Na primeira fase da coleta de dados, entrevista com 24 professores, 9 preceptores e 15 estudantes para reconstrução do perfil de competência; e, na segunda fase, oficina de trabalho para validação do perfil, identificação de desafios e propostas. Utilizou-se o Discurso do Sujeito Coletivo na análise das entrevistas e o referencial de competência holística na reconstrução do perfil. **Resultados:** Constrói o pensamento crítico com base nas experiências no mundo do trabalho, sendo a avaliação o eixo condutor das reflexões para a emancipação. **Considerações finais:** Sinaliza-se a importância da formação dos professores sobre a avaliação da aprendizagem e trabalho com a construção coletiva dos sujeitos para a superação dos desafios nas mudanças da formação.

Descritores: Pensamento; Avaliação de Desempenho Profissional; Enfermeiros; Competência Profissional; Educação Baseada em Competências.

RESUMEN

Objetivo: Analizar constitución del pensamiento crítico en la formación del enfermero ancorada en abordaje por competencia y en currículo integrado, considerando el proceso de evaluación, captando sus desafíos y proponiendo estrategias de superación. **Métodos:** Cualitativo. La primera fase de recogida de datos, entrevista con 24 profesores, 9 preceptores y 15 estudiantes para reconstrucción del perfil de competencia; y, en segunda fase, taller de trabajo para validez del perfil, identificación de desafíos y propuestas. Utilizó el Discurso del Sujeto Colectivo en análisis de las entrevistas y referencial de competencia holística en la reconstrucción del perfil. **Resultados:** Construye el pensamiento crítico basado en el mundo del trabajo, siendo la evaluación el eje conductor de las reflexiones para emancipación. **Consideraciones finales:** Destaca importancia de la formación de los profesores sobre la evaluación del aprendizaje y trabajo con la construcción colectiva de los sujetos para la superación de los desafíos en los cambios de la formación.

Descriptorios: Pensamiento; Evaluación del Rendimiento de Empleados; Enfermeros; Competencia Profesional; Educación Basada en Competencias.

INTRODUCTION

In the last century, three generations of medical education changes were produced, which impacted several professions, among them nursing. At the beginning of the 20th century, the first generation, with a strong influence of the Flexner Report, organized the curriculum based on science; the second generation in the middle of the last century introduced the training oriented by problems. Now, the third generation, prompted by the systems' improvement and transformation, needs a set of professional competencies to act in specific contexts, considering the global knowledge. For the third generation to develop, it is essential to build training changes, so professionals know how to mobilize their skills, which involves critical reasoning and ethical conduct, leading them to competent and responsible participation in the local health system, simultaneously connected with other teams and global practices⁽¹⁾.

In the document "Strategic Guidelines for Nursing in the Region of the Americas" (PAHO/WHO), some ways are presented to favor advances and support the presence of nursing in health systems. Amongst other strategies, there is a proposition to strengthen nursing education quality to respond to the requirements of access and universal coverage to health and meet the Sustainable Development Goals (SDG)⁽²⁾.

By the influence of the national and international context, the experiences of changes in Brazilian nursing education, based on the National Curricular Guidelines (NCG), have been striving to overcome the challenges of training models by implementing practices based on dialogue between professors and students to implement knowledge, with processes anchored in an ethical, critical, reflective, and transformative attitude. They seek to overcome the traditional practice focused only on technique, in courses already established, aiming to form a historical entity based on action-reflection-action dialectics, despite the institutions' resistance movements⁽³⁻⁴⁾.

This changing process generates conflicts and challenges since it calls for basic alterations in pedagogical and health practices, being permeated by new organizational, political, theoretical, and philosophical positions from institutions, professors, and the relationship between teaching and service. Among the alterations, it is recognized the low capability to elaborate critical thinking (CT) in front of existing situations that need decision-making, considering the context, culture, ethics, and avoiding damages⁽⁵⁾.

At the international level, the Ibero-American Network of Nursing Education Research seeks to investigate nursing education. For this purpose, it was chosen the multi-center project from all member countries, entitled "Development of reflexive and critical thinking in nursing students: the situation in Latin America."⁽⁶⁾

The challenges of educational institutions in training professionals committed to social transformation and health practices are signaled. That practice transformation involves the rescue of human development as a right to education in citizenship construction. However, some pedagogical projects might be used to adapt to the capital requirements or, in another vision, shape active subjects who may interfere in the social organization's destiny, fulfilling an emancipating role and generating social quality⁽⁷⁾.

From this perspective, the concept of CT is diverse. It passes through a movement that considers it an intentional and

self-regulating judgment, resulting from interpretation, analysis, evaluation and inference, besides explaining the evidential, conceptual, methodological, criteriological, or contextual considerations on which that judgment is based. This movement of CT construction is linked to metacognition, as a tendency towards the internal motivation to solve problems, and make decisions with the use of specific reasoning by comparing alternatives facing the decision to be made⁽⁸⁻⁹⁾.

In a second vision, CT must overcome the solely technical approach and be understood from the liberal humanist perspective, being contextualized and creative. In the third vision, the CT is also approached in a contextualized way, but human interests, values, and norms are considered in favor of the subjects' emancipation. There is a promotion of processes in which people act with autonomy to decide their life, emancipating the subjects⁽¹⁰⁾.

Assuming dialectics as a method in the construction of CT according to the third vision⁽¹⁰⁻¹²⁾, one works with a reflection considering the socio-cultural context in which the person is inserted. According to their way of existing in the world, the subject builds and reconstructs themselves in a relational movement with the world and its social determinants, recognizing its challenges/problems, contradictions based on their existence. It is kept in mind that "teaching is not transferring knowledge but creating the possibilities for its production or construction"⁽¹²⁾.

Therefore, education is much more than just training the person to perform practices with dexterity and right, scientific reasoning. It is valued the professor and the student's ethical responsibility as an educational attitude, specifically human for the constitution of the subjects' autonomy in their emancipation. The acting is committed to their social insertion, and with the others, that is, the person recognizes another presence as a "not me" and recognizes themselves as "themselves." In the context of the decision, evaluation, freedom, rupture, and choice establishes the need for ethics and imposes responsibility. "Right thinking" implies a reflection on what has social relevance, involving the multidimensionality of situations and visions in relationship between things and people. It is required a plural look, which opens space and possibilities for contestation and refutation, preceding consensus and/or pacts⁽¹²⁾.

In the professional training, from the perspective of the holistic referential and the dialogical approach of competence in the integrated curriculum, the focus is on the action. That implies directing the observation and analysis towards the person and not only to his/her behaviors, capacities, and tasks detached from the intention⁽¹³⁾.

That said, one realizes that there are challenges in the processes of change in nursing training. It is considered an assumption that, in this way, as planned to be built, it is not only about making changes in contents and methods of teaching and learning. It seeks to create educational processes that activate the CT in the face of emerging social problems and needs, driving new curriculum designs and teaching and learning methods. Above all, such processes must provide a professional performance of technical excellence, articulated towards the attitudes of commitment to a more solidary society, responsible for producing technologies that promote life and respecting culture and needs.

This research intends to collaborate with the debate and diversity of CT approaches in nursing training.

OBJECTIVE

Analyze the constitution of critical thinking in nursing training in the approach by competence and integrated curriculum, considering the evaluation process, capturing its challenges, and proposing overcoming strategies.

METHODS

Ethical aspects

The research was submitted to appreciation and approved by Opinion 3.290.052/2019 of the Research Ethics Committee of the Faculty of Education of the University of Campinas (UNICAMP). It was requested authorization for an audio recording of data and disclosure of the material for analysis.

Theoretical-methodological framework

This research was based on the Theory of Social Representations (TSR). This referential recognizes that the formation of a social reality happens when something “new” or “unfamiliar” for an individual or community conforms as usual; in other words, when it can be assimilated as a phenomenon that provides the interpretative referential so that the representations, when manifested, are formed in the quality of social practices. Social representations are revealed through language, attributing meaning to reality, aiming at culture, values, and cognitive aspects⁽¹⁴⁾.

Type of study

Descriptive research, of qualitative approach, with a methodological strategy of a single study case⁽¹⁵⁾, focusing on CT's construction from the perspective of an integrated curricular organization and the dialogical approach of competence adopted in the studied institution. The methodological choice had the purpose of deepening the CT constitution's analysis in this context of a curricular organization. This study has a link to the research “Health Professional Training: meanings and challenges of a critical and reflexive praxis.” This article will present the analysis of data of the area of competence Education in Health. The study followed the list of criteria included in the Consolidated Criteria for Reporting Qualitative Research (COREQ), which guides qualitative research.

Study setting

The research was conducted at a public, state-run higher education institution located in the mid-west region of São Paulo, Brazil. The nursing education takes four years, presenting a workload of 5.400 hours. The course has an annual, serial, full-time curricular structure, using active teaching-learning methods, an integrated curriculum, and a dialogical approach to competence. The curricular organization follows the Systemized Education Unit (Brazilian UES), Professional Practice Unit (Brazilian UPP), and Elective Educational Unit (Brazilian UEE)⁽¹⁶⁾.

Data source

In the first phase of data collection it was used an intentional sample, inviting professors, students, and preceptors, establishing the following criteria to include professors: professionals working at the Systemized Education Unit (UES) and Professional Practice Unit (UPP) -- also related to the Laboratory of Professional Practice (Brazilian LPP) and Support to Professional Practice (Brazilian APP) -- from the 1st to the 4th grade, having at least six months of experience; preceptors: professionals who work at the General Hospital (Brazilian *Hospital de Clínicas*) and at the Municipal Health Department, who have been accompanying students from the 1st to the 4th grade for at least six months; students: to be a student in nursing education, developing activities in the Systemized Education Unit (UES) and Professional Practice Unit (UPP), in each of the four grades of the course, for at least three months. Twenty-four professors (51% of the hired professionals), nine preceptors (23.7%), and fifteen students (10.3%) were interviewed.

In the second phase of data collection, participated the first phase members, distributed into three groups composed of professors and students according to the acceptance of participation, considering the group's time and configuration availability. In total, there were thirteen professors, nine students, and, although the preceptors could not participate during the workshops for institutional reasons, five participated individually in the activities planned in the second phase. Refusals in this phase were due to the members' availability of time to participate in the workshop groups. As an exclusion criterion for professors and preceptors, it was considered less than six months of experience in educational activities with the students; and for the students, less than three months of activities in the year attending the course.

Collection and organization of data

The profile of competence was reconstructed based on the data collected in the first phase adapting the Technical Note for the Process of Building the Professional Competency Profile⁽¹⁷⁾. They used semi-structured interviews. Everyone had two answer two questions: (a) How does the teaching and learning process develop, considering the perspective of the construction of critical thinking, using active methodologies in an integrated curriculum and with the dialogical approach of competence? (b) Which skills are necessary to be mobilized in the competence areas of individual/collective care, health management, and health education to constitute a practice that values critical thinking concerning the institution's curricular organization?

Initially, the researcher conducted four preliminary interviews and observed that the planned script would not require adjustment. Data collection took place between June 25 and September 27, 2019, at the educational institution or the family health units (USF), lasting between 9 and 53 minutes (average of 24.6 minutes). The researcher with experience in qualitative research conducted all interviews. She is a doctor, professor in the institution studied and has been teaching for 33 years in the undergraduate degree and eight years in the master's programs.

In the second phase of data collection, the same researcher conducted three workshops with professors and students who

had already participated in the first phase. The workshop was developed in three stages: the first had as intentionality the validation of performances, requesting that each participant read and fill out the instrument containing the key actions and performances of the profile of competence reworked and with lateral space for notes if they had suggestions for changes; in the second stage, the challenges, their causes, and proposals for overcoming them were identified in writing in an individual instrument; and in the third, the participants had time to dialogue about the various perspectives of the challenges, their causes, and proposals for overcoming them. Each workshop lasted two and a half hours and was held from September 30 to October 4, 2009.

The researcher coordinated the proposed activities in the first and second stages of the workshop. In the third, she mediated the discussion, asking for clarification of opinions to detail and expand data on the challenges, their causes, and proposals.

Data analysis

In the first phase, having as a reference to the adaptation of the Technical Note⁽¹⁷⁾ and the dialogical approach of competence, based on the holistic referential of competence^(13,18), it was reconstructed the profile of competence grouped by area, according to its respective key actions and performances. The confrontation and complementarity of ideas presented by the participants were used, based on the interview's triggering questions, utilizing the matrix of actions and performances presented in the Evaluation Notebook⁽¹⁹⁾ and the Professional Practice Unit (UPP) in-the 4th year⁽²⁰⁾ of the studied institution. Later, the material was resumed for triangulation⁽²¹⁾ between data from interviews and phases of the workshop, aiming at finalizing the reconstruction of the professional profile of competence.

Besides the profile, the material of all interviews was processed, by segment of participants (professors, students, and preceptors), through the Collective Subject Discourse (CSD), based on TSR⁽¹⁴⁾. It organizes qualitative data by aggregating particular discourses triggered from each interview, considering similar or complementary key expressions and central ideas, elaborating one or several synthesis discourses: the CSD⁽²²⁾. The area of competence Education in Health resulted in the systematization of 13 CSDs of professors, 14 students, and 12 preceptors.

The material from workshops about challenges, their causes, and overcoming strategies was organized in a table by area of competence, considering all the instruments filled in by the participants during the workshops.

Another researcher, with a full professor degree, validated the systematized and analyzed material, following the entire process of data collection and analysis.

RESULTS

The students are between 18 and 25 years old (average of 20.4 years); two men and thirteen women. The female preceptors are nurses, aged between 31 and 46 years (average of 37.9 years), having between 2 and 19 years (average of 8.5 years) working as preceptors; all have specialization; four have master's degree; one has a doctorate. Out of the nine participants, five (55.5%) are

undergraduate from the program of the institution studied. The professors are between 36 and 65 years old (average of 51.4 years); twenty-three women and one man; twenty nurses, two physicians, and two psychologists between 1 and 35 years of academic activity (average of 19.4 years). Twenty-one participants have specialization; two have medical residence; twenty have a master's degree; twelve have a doctorate, and one participant has a post-doctorate. Among the professors, fifteen (62.5%) are professional nursing and medicine graduates from the institution studied.

Area of Competence Education in Health: evaluating the constitution of critical thinking in nursing training

The participants highlighted transversal skills that enhance the constitution of CT in the students' practice, where the area of competence Education in Health (Chart 1) enables the operationalization of other areas, because it constitutes the "production and systematization of knowledge related to the formation and development for the performance in health, involving academic practices, didactic guidelines, and curricular orientation"⁽²³⁾. It was also understood that the evaluation in this area of competence is a structuring axis in the formation of professionals and in the construction of CT, through the use of processes that lead to formation of the person developing attitudes of co-responsibility (with themselves and others), besides allowing the situational analysis for the decision making based on ethical values, as a human condition in the established relationships.

In this perspective, in the delimitation of the profile of competence (Chart 1), an evaluative approach is pointed out for the recognition of the achieved capacities, potentialities, standing out the aid for the reconstruction of practice, socialization, and update of the knowledge to constitute the transformation of the practices.

The CT is considered a skill to be mobilized in actions experienced in professional practice scenarios (Chart 1). It is described that the construction of professional practice is based on the scientific method but in subjects' constitution. Recognizing themselves and the others with an ethical attitude and open to different points of view, being co-responsible with the group, and perceiving the impact/mobilization that the situations provoke in themselves.

For professors, preceptors, and students, evaluation is represented as a space for the expression of experiences, analysis of performance with a focus on how students operate their skills in daily activities in the world of work, promoting feedback through the analysis of performance in practice scenarios since the organization of training occurs through an integrated curriculum and a dialogical approach of competence. The professors (Chart 2) emphasize that it is possible to capture the previous knowledge of students, their technical ability or cognitive capacity, as well as develop the attitudes.

The preceptors highlight the professor/preceptor's need not to use the evaluation on a punitive basis (Chart 3).

Students (Chart 4) consider evaluation to be a complex practice, and it is necessary to build a space in which to promote safe and trusting relationships among the participants of the group.

For that, the capability to communicate through dialogue between people is represented in the CSD of the three segments as an essential attribute in learning when constituting CT, knowing how to make and receive criticism, and respecting each one's vision in times of conflict.

Chart 1 – Profile of area of competence Health Education, key actions, and performance, Marília, São Paulo, Brazil, 2020

Key actions	Performance
Identifies and processes learning needs	<p>Experience the reality of professional practice in real and simulated scenarios promoting learning in successive approaches through reflective narrative and problem situations about work in health and education. Analyzes the individual socio-cultural context, the service, institution, network, or project in which it is involved; presents an ethical and open posture to different points of view, committing and co-responsible with the development of group activities and realizing the impact/mobilization that the situations provoke.</p> <p>Use the exchange of knowledge and experiences to broaden the understanding of reality and promote knowledge construction and new meanings. Show interest, willingness, and openness to identifying and understanding knowledge gaps, the challenges related to emotional aspects and/or the relationships, based on the analysis of experiences in real and simulated scenarios, recognizing these for the production of new knowledge and practices.</p> <p>Identify and articulate problems by representing what was experienced in the practice scenarios and elaborated problem situations, considering the context understanding and data identification in the face of the situation, mobilizing the baseline of skills constituted throughout personal and academic life. Elaborate hypotheses/presupposed and build an explanatory network of problems based on the rational way of understanding the world, identifying learning gaps from recognizing what is known and what is needed to intervene in the problem situation. Elaborate questions to overcome learning requirements to advance the performance.</p> <p>Access databases with scientifically systematized knowledge production and other forms of knowledge production. Critically analyze the sources' quality, the scientifically produced information, and elaborate reflective individual synthesis that sustains the knowledge gap for understanding and explaining the collected problems.</p> <p>Socialize the understanding, analysis, and doubts about the systematized knowledge and how to access the databases; dialogue with the knowledge of other participants in the activity, communicating clearly; present arguments from the perspective of understanding and solving the identified problems; capture the various explanations and possibilities of interventions, relating them to the previously formulated hypotheses, repeating or modifying them. Take up the problems to identify actions/strategies to overcome them in the exercise of the professional practice or problem situation, considering the context, local culture, professional ethics, relationships, and the capacities and challenges to deal with the situations. Elaborate a synthesis of the construction of knowledge revealing the understanding of the construction of knowledge and proposed actions.</p>
Develops and evaluates educational actions	<p>Participate in educational actions based on the identified learning requirements, enabling a significant education and transformation of reality. Encourage the development of the ability to learn from people, team, and community, supported by the learning requirements, valuing previous knowledge, encouraging curiosity, intellectual autonomy of those involved in the production of care and education in health, through interaction and cooperation in groups, listening and respecting different ideas, promoting inter/transdisciplinarity.</p> <p>Cooperate in the creation, dissemination, and sharing of knowledge. Participate in education by example, showing persistence, patience, and respect for the difference in people, teams, and community learning timing in developing their skills. Conduct and receive criticism ethically, and respectfully.</p> <p>Support the production of new skills required for the professional profile, identify learning opportunities in the work process and the places of permanent education, considering them as a formal device to promote the construction, socialization, and updating of knowledge aimed at the management and transformation of health practices, according to the best available evidence.</p> <p>Use hits and mistakes as input for professional and institutional learning. Monitor and evaluate processes, products, and results related to educational actions, through peer, professor, and self-evaluation. Recognizes and analyzes its achievements, potentialities, and challenges, promoting meta-analysis, metacognition, and meta- evaluation, proposing a plan for monitoring the performances to be (re)built.</p>
Performs knowledge production and dissemination	<p>Identify the need for new knowledge based on reality and the challenges of working in health and education. Promote usage of adequate resources for production and recording of new knowledge based on practice.</p> <p>Develop and/or participate in the scientific production in the area of operation through research guided by ethical-scientific principles and focused on the generation and dissemination of knowledge relevant to health and education production, directed to people and society's quality of life. Participate in internal and external events as a way to improve, develop professionals, and share information.</p> <p>Participate in elaborating and/or disseminating guidelines involving care and organization of protocols, educational materials, and promoting a culture oriented towards excellence.</p>

Source: Marília Medical School^{19,20}.

Chart 2 – Professors' Collective Subject Discourse on transversal skills, focused on evaluation for the constitution of critical thinking, area of competence Education in Health, Marília, São Paulo, Brazil, 2020

Central idea	Collective Subject Discourse
Development of transversal capacities in the construction of critical thinking, with focus on evaluation	<p><i>[...] Evaluation is one last capability that I think is important and transversalizes the entire teaching-learning movement, which the constructionist spiral has realized to be a method that favors competence-oriented curriculum training in the dialogical approach. Besides evaluation peers, the lived process, and the professor, it has an aspect that is the self-evaluation. So, the critical capability of how much they manage to capture what they already have conquered, the power and what challenges they still have to develop, so that in the future we can make a meta-analysis, metacognition, a meta-evaluation of themselves. So, in every moment that we do some activity, they expect feedback. This evaluation of the process, how the people interacted [...]. This is very strong in graduation because from that they can also see themselves within a context. The proposition is that we can do this daily evaluation during the meetings, while the work in a group, and do it in a specific way with those you get closer that day and make a process comparison. But it's not a done issue, although making a comparison with the traditional, we have much more significant possibilities to understand, to get closer to this student, to get closer to previous knowledge and then see the process of knowledge construction both in terms of the cognitive issue, and in terms of attitude, mainly because we get closer to this student in the group meeting or by following the visits. [...] So, it may have many aspects, but I think the main one is that students can do self-criticism to see where they could have a different performance. I think they could look at this as a whole, but they look much more at themselves, how much they could advance, [...]. They can keep the service in check, and they can put themselves in a way that it would not seem like an unethical thing, a question that can suddenly hurt the people who are there. I think, in this sense, the evaluation helps this process of creating critical thinking.</i></p>

Chart 3 – Preceptors’ Collective Subject Discourse on evaluation, area of competence Education in Health, Marília, São Paulo, Brazil, 2020

Central idea	Collective Subject Discourse
Building criticism through the evaluation process	<i>Always at the end of the day, we perform an evaluation, leaving it available for them to expose what has to change that day, not only about the elaboration of the cycle in college but in practice. We make it very clear that there will be no punishment for expressing opinions [...] Moreover, the fear of exposing does not exist anymore because, since the beginning, they learn that the important thing is to expose an independent opinion, which can be favorable or not at that moment, but always making clear right from the start how they should expose the opinion [...]. However, some students from other schools, each one originated from a different place, can carry out the criticism in an offensive way. We also begin to work with them from the beginning because there are ways of exposing opinions without offending or hurting people next to us [...].</i>

Chart 4 - Students’ Collective Subject Discourse on evaluation, area of competence Education in Health, Marília, São Paulo, Brazil, 2020

Central idea	Collective Subject Discourse
Evaluation process as part of the training process	<i>At all times, we need to make a group evaluation at the end of every activity because it is part of the methodology. We evaluate the group, evaluate ourselves, and evaluate the facilitator, the preceptor, and the attending psychologist. It is not that it is difficult, it is very complex, and we can realize that it is necessary to be always self-evaluated, self-critical, and always showing respect. We can expose insecurity or expose something that did not please everyone, make constructive criticism, expose a favorable issue of the group, and feel this horizontality. [...] So, it is a constant evaluation, and in a way conveys security, because, since it is an active method, many people can feel insecure [...] But, this issue of evaluation always trying with everybody else, which also makes part of the process of knowledge construction, to assess and bring up their feelings; all of that could bring up security to the method which can be perceived, many times, as something fluid and insecure [...].</i>

Chart 5 - Description of challenges in conducting the evaluation, its causes, and overcoming proposals, area of competence Education in Health, Marília, São Paulo, Brazil, 2020

Challenges	Causes	Overcoming Proposals
Difficulty in carrying out the evaluation process proposed in the Pedagogical Political Project	<ul style="list-style-type: none"> - Some professors leave to present the gaps in the students learning only in the periods of registration of formats at UPP and tutoring, which generates incomprehension and non-acceptance by students in that situation, including the criticism made by the professor, having had little dialogue. - Evaluations are still more focused on the outcome than on the process. - The student had difficulty in receiving criticism from the professor and was unable to dialogue about the causes of the problem highlighted. 	Resume discussion about evaluation during the activities of Permanent Education (PE); constitute a place to debate and understand the proposal of evaluation with students, which should be part of the pedagogical activities; train the professor/preceptor and the student about the skills to make and receive criticism, through a workshop, considering ethical, dialogical, respectful and empathetic approaches; build strategies since the first year on how to evaluate and be evaluated; how to build changes of “behavior”/ attitude; compose evaluation in the group contract, to enable it to occur in a constructive, fair, democratic and human way, focusing on the process and product.

To develop the performances of area of competence Education in Health throughout the training, there were identified challenges, their causes, and overcoming proposals (Chart 5).

DISCUSSION

In the dialogical approach of competence and the integrated curriculum, learning will be built in the scenario of professional practice⁽¹³⁾. By defining the profile of competence, we indicate the direction to the work with the contents and the students during training, defining key actions to work on and which skills will be mobilized, according to the degree of autonomy and mastery for each moment of the training⁽²⁴⁾. Each student will mobilize the skills in the action depending on how they understand and interpret the existed situations, influenced by their world vision, by their baseline of skills constituted throughout their life through experiences.

In the description of performance, there is the influence of the actors who participated in its construction and delimited which actions and performances they consider important for the professional’s formation. This influence occurs because it corresponds to their social representation about the professional practice, values, beliefs, and theoretical approaches⁽¹³⁾.

In the CSD is revealed that the movement evaluation promotes the CT construction through self-analysis, metacognition, and

meta-analysis, based on an attitude that appreciates the student as a subject in their training. The movement evaluation has the purpose of generating learning with social quality. The quality is focused on learning, considering the student as a person. They are encouraged to reflect, build the CT on their performance in the scenarios, perceive their own attitudes, with intention to create bonds and relationships of trust, recognizing themselves as human beings in the face of the existing situation.

The educational processes are focused on human training, which is multidimensional, influencing the political, ethical, affective, corporal, cognitive, artistic, and cultural dimensions. All these dimensions, when present, promote critical and reflective practices towards the emancipation of the subject in the educational processes⁽²⁵⁾.

The thinking focuses on building professional practice as a social practice, inserted in the world of work. To support this process-focused movement, we rely on the perspective of formative evaluation and the principles of responsibility, which presumes joint action by the actors involved, assuming rights and duties referenced in the social quality of the public school⁽²⁶⁻²⁷⁾.

The assessment, as a means for the CT construction in the emancipatory vision^(10-11,28), configures itself as a social process, involving intersubjective processes and constituting itself in the relationship among people, is not exempt of values, because

it generates positions in the elaboration and presentation of criticisms during the analyses in the face of what has been lived, generating meanings, perceptions, and knowledge. It includes all those involved in the processes: professors, students, technicians, administrators, authorities responsible for public policies, members of society, among others. It operates amid communication processes with understandable languages and objectives, often requiring agreements that do not always contemplate all the desirable dimensions, revealing its temporary nature⁽²⁹⁻³⁰⁾.

Therefore, the construction and implementation of a project committed to human training translates into the collective, settled, and published elaboration of the educational process guidelines and its indicators in the Course Pedagogical Project (CPP)⁽²⁶⁻²⁷⁾. The permanent, critical, and reflective training of professors becomes a central strategy in change. One challenge is the difficulty of working with emancipatory evaluation, focused on processes and products, analyzing the path that the student builds throughout their education.

The formative assessment has the role of recognizing situations so that professors and students can analyze them to build new plans to promote student learning. It is reinforced that the assessment is not placed apart from the process, nor should the professor perceive themselves as a mere spectator of the students' performance. It is up to the professor to mediate rigorously to foster the achievement of education; therefore, they act to promote learning and not to measure the learning of the student outside those situations⁽³¹⁻³²⁾.

In the Alternative Formative Assessment (AFA), the student and professor build interaction and communication so that the latter can develop bridges between what is essential to learn and the world of the student (their characteristics, the accumulations they have already produced, how they think, learn, what they feel). The assessment then occurs through intelligent feedback to activate analysis and meta-analysis, help, and control learning, improving the student's motivation and self-esteem. It should be frequent, focused on the learning propositions and on the student's performance, which is the one who builds progressive responsibility for learning in greater depth and establishes a commitment to the actions they perform, developing the complexity of thought, which helps them to regulate and guide their work⁽³¹⁻³²⁾.

When discussing work at school, the educational process, involving evaluation, is constituted of a network of multilateral relations; and, in order to bring a collaborative work among its participants, it is necessary to establish relational trust, as opposed to the competition activity expressed in the promotion of awards or the punishment and correction of deviations from the goal. The concept of relational trust establishes four essential factors in the constitution of its dynamics: respect, consideration for others, competence, and integrity. When a failure or absence occurs in one of them, the entire relationship built is affected⁽⁷⁻³³⁾.

Study limitations

In this article, it was discussed the constitution of CT in the area of competence Education in Health. It is also necessary to unveil how to work in this area of competence in combination with the other Individual and Collective Health Care and Management

in Health Care areas. The intention is to seek an understanding of how the profile of area of competence Education in Health, especially the evaluation, helps in the constitution of CT in each one of the other areas.

Contributions to the field of Nursing

The adoption of CT, using the dialectic method to build processes, connects to environmental analysis and understanding in which individuals act as historical subjects, involved in humanization, and devoted to social justice, having influence from political, ethical, emotional, corporal, cognitive, artistic, and cultural dimensions. When present, all those dimensions promote critical and reflective practices towards the subjects' emancipation in the academic processes. Education might promote valorization and emancipation of professors, students, and people/family/community who need care. Therefore, the referential concerning education and the evaluation of practices need a collective discussion because they link the institutional decision to the curriculum's organization for nursing education.

FINAL CONSIDERATIONS

The construction of the profile of competence is inserted in a context of constant change. The ideas and proposals move through collective imaginary, changing in the interaction with the managers' actions when the CPP is made operational, manifesting beliefs and values of the subjects who are acting on the project, according to the theoretical and philosophical bases defended and that support the practices employed, linked projects of emancipation and human development, or destined to the reproduction of hegemonic practices.

In the reconstruction of profile of competence, evaluation proved itself to be a structuring and transversal axis in nursing training, for being a fundamental tool for CT's constitution in human development and for presenting social quality for practice transformation. The transforming practice goes through the rescue of training as the right to education into the construction of citizenship, and its quality is expressed when active subjects are formed who may interfere in the destiny of the social organization fulfilling an emancipating role and generating social quality. This movement needs to be agreed upon in the institution's collective, expressed in the CPP, and built daily. This movement has essential elements and processes that constitute the professional's formation as a person in the world, someone who has attitudes of co-responsibility with themselves and the others, an individual who is allowed to have a situational analysis for decision making, based on values of ethics as a human condition in established relationships.

There is a gap in training and monitoring professors and students' evaluation practice in the scenario studied. This challenge is fundamental for those who propose changes since professors are the subjects who enhance or disaggregate value in daily routine with the students and service professionals because the professors make the "curriculum in action" possible. Therefore, there is a proposal to make permanent education the strategy for critical reflection and reconstruction of pedagogical practice, addressing the skills for the constitution of emancipatory evaluation.

REFERENCES

1. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet*. 2010;376(9756):1923-58. [https://doi.org/10.1016/S0140-6736\(10\)61854-5](https://doi.org/10.1016/S0140-6736(10)61854-5)
2. Organização Pan-Americana da Saúde; Organização Mundial da Saúde (OPAS/OMS). Diretriz estratégica para a Enfermagem na Região das Américas [Internet]. Washington, DC: OPAS; 2019 [cited 2019 Feb 2]. 60 p. Available from: <http://iris.paho.org/xmlui/handle/123456789/50956?locale-attribute=pt>
3. Mattia BJ, Kleba ME, Prado ML. Nursing training and professional practice: an integrative review of literature. *Rev Bras Enferm*. 2018;71(4):2039-2049. <https://doi.org/10.1590/0034-7167-2016-0504>
4. Frota MA, Wermelinger MCMW, Vieira LJES, Ximenes Neto FRG, Queiroz RSM, Amorim RF. Mapping nursing training in Brazil: challenges for actions in complex and globalized scenarios. *Ciênc Saúde Coletiva*. 2020;25(1):25-35. <https://doi.org/10.1590/1413-81232020251.27672019>
5. Ximenes Neto FRG, Lopes Neto D, Cunha ICKO, Ribeiro MA, Freire NP, Kalinowski CE, et al. Reflections on Brazilian Nursing Education from the regulation of the Unified Health System. *Ciênc Saúde Coletiva*. 2020;25(1):37-46. <https://doi.org/10.1590/1413-81232020251.27702019>
6. Püschel VAA, Oliveira LB. Red Iberoamericana de Investigación en Educación en Enfermería: Región Brasil. *Rev Cubana Enferm* [Internet]. 2015 [cited 2019 Feb 4];30(3). Available from: <http://scielo.sld.cu/pdf/enf/v30n3/enf09314.pdf>
7. Freitas LC. The education entrepreneurial reformists and the dispute for the control of the pedagogical process in schools. *Educ Soc*. 2014;35(129):1085-114. <https://doi.org/10.1590/ES0101-73302014143817>
8. Alfaro-Lefevre R. Critical Thinking Indicators (CTIs): 2016 evidence-based version [Internet] 2016[cited 2020 Feb 2]. 10 p. Available from: <http://www.alfaroteachsmart.com/2016CTIsRich.pdf>
9. Ceolin S, González JS, Ruiz MCS, Heck RM. Theoretical bases of critical thinking in ibero-american nursing: integrative literature review. *Texto Contexto Enferm*. 2017;26(4):e3830016. <https://doi.org/10.1590/0104-07072017003830016>
10. Kahlke R, White J. Critical thinking in health sciences education: considering "Three Waves". *Creative Education*. 2013;4(12A):21-29. <https://doi.org/10.4236/ce.2013.412A100>
11. Kosik K. *Dialética do concreto*. São Paulo: Paz e Terra; 2007. 248 p.
12. Freire P. *Pedagogia da autonomia: saberes necessários à prática educativa*. São Paulo: Paz e Terra; 2019. 144 p.
13. Ribeiro ECO, Lima VV, Padilha RQ. Formação orientada por competência. In: Lima VV, Padilha RQ. (org). *Reflexões e inovações na educação de profissionais de saúde*. Rio de Janeiro: Editora Atheneu; 2018. p. 25-36.
14. Moscovici S. *Representações sociais: investigações em psicologia social*. Petrópolis: Vozes; 2007. 408p.
15. Lüdke M, André MEDA. *Pesquisa em Educação: abordagens qualitativas*. São Paulo: Editora Pedagógica e Universitária; 2018. 128 p.
16. Faculdade de Medicina de Marília. Projeto pedagógico do curso de Enfermagem [Internet]. Faculdade de Medicina de Marília. Marília, 2018[cited 2018 set 6]. Available from: http://www.famema.br/ensino/cursos/docs/Projeto%20Pedag%C3%B3gico%20da%20Enfermagem%202018_Final.pdf
17. Instituto de Ensino e Pesquisa Hospital Sírio-Libanês. Processo de construção de perfil de competência de profissionais[Internet]. 2014[cited 2018 Sep 6]. Available from: <https://iep.hospitalsiriolibanes.org.br/Documents/LatoSensu/nota-tecnica-competencia-profissionais.pdf>
18. Lima VV. Competence: different approaches and implications in the training of healthcare professionals. *Interface Comunic Saúde Educ*. 2005;9(17):369-79. <https://doi.org/10.1590/S1414-32832005000200012>
19. Faculdade de Medicina de Marília. Caderno de avaliação: cursos de medicina e enfermagem [Internet]. Faculdade de Medicina de Marília. Marília, 2018. [cited 2020 Jan 6]. Available from: http://www.famema.br/institucional/avaliacao/docs/CADERNO%20DE%20AVALIACAO%202018_FINAL%20TIMBRE%20NOVO.pdf
20. Faculdade de Medicina de Marília. Unidade educacional 4: unidade de prática profissional. [Internet]. Faculdade de Medicina de Marília. Marília, 2020[cited 2020 Jan 15]. Available from: <http://www.famema.br/ensino/cursos/docs/Caderno%20de%20S%C3%A9rie%20-%204%C2%AA%20Enfermagem%202020%20-%20retificado%20FINAL.pdf>
21. Minayo MCS. *O desafio do conhecimento: pesquisa qualitativa em saúde*. São Paulo (SP): Hucitec; 2014. 416 p.
22. Lefevre F, Lefevre AMC. *Discurso do sujeito coletivo: um novo enfoque em pesquisa qualitativa (desdobramentos)*. Caxias do Sul (RS): Educs; 2005. 255 p.
23. Secretaria de Gestão do Trabalho e da Educação na Saúde. Glossário temático: gestão do trabalho e da educação na saúde[Internet]. Brasília, DF: Ministério da Saúde, 2012[cited 2020 Jan 16]. Available from: http://bvsm.sau.gov.br/bvs/publicacoes/glossario_gestao_trabalho_2ed.pdf
24. Chirelli MQ, Nassif JV. Avaliação critério-referenciada: acompanhamento do estudante no currículo orientado por competência. *Rev Pesqui Qualitativa*. 2019;7:169-92. <https://doi.org/10.33361/RPQ.2019.v.7.n.14.264>
25. Bertagna RH. Dimensões da formação humana e qualidade social: referência para os processos avaliativos participativos. In: Sordi MRL, Varani A, Mendes GSCV. (Orgs). *Qualidade(s) da escola pública: reinventando a avaliação como resistência*. Uberlândia: Navegando Publicações; 2017. p. 31-46.

26. Sordi MRL. A qualidade social da escola pública em confronto com a lógica dos reformadores empresariais. In: Sordi MRL, Varani A, Mendes GSCV. (Orgs.) *Qualidade da Escola Pública: reinventando a avaliação como resistência*. Uberlândia: Navegando Publicações, 2017. p. 83-100.
 27. Sordi MRL, Bertagna RH, Silva MM. The Participatory Institutional Evaluation and the participation of political spaces constructed, reinvented, and achieved at school. *Cad CEDES*. 2016;36(99):175-92. <https://doi.org/10.1590/CC0101-32622016160503>
 28. Zeichner KM. *A formação reflexiva de professores: ideias e práticas*. Lisboa: Educa; 1993. 131 p.
 29. Dias Sobrinho J. Assessment: institutional and political dilemmas and conflicts. *Avaliação*. 2018;23(1):1-4. <https://doi.org/10.1590/s1414-40772018000100001>
 30. Dias Sobrinho J. Educational evaluation: the production of meaning with educational value. *Avaliação*. 2008;13(1):193-207. <https://doi.org/10.1590/S1414-40772008000100011>
 31. Fernandes D. Towards a theory of formative assessment. *Rev Port Educação*[Internet]. 2006 [cited 2020 Jan 15];19(2):21-50. Available from: <http://www.scielo.mec.pt/pdf/rpe/v19n2/v19n2a03.pdf>
 32. Fernandes D. Teaching and assessing in higher education: reflections based upon research done within the AVENA project. *Cad CEDES*. 2016;36(99):223-38. <https://doi.org/10.1590/CC0101-32622016160370>
 33. Bryk AS, Schneider B. Trust in schools: a core resource for improvement. *Educ Leadership*. [Internet]. 2003 [cited 2020 Jan 15];60(6):40-5. Available from: <http://www.ascd.org/publications/educational-leadership/mar03/vol60/num06/Trust-in-Schools@-A-Core-Resource-for-School-Reform.aspx>
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