CUIDADO É FUNDAMENTAL

UNIVERSIDADE FEDERAL DO ESTADO DO RIO DE JANEIRO - ESCOLA DE ENFERMACEM ALFREDO PINTO

INTEGRATIVE REVIEW OF THE LITERATURE

DOI: 10.9789/2175-5361.rpcfo.v12.8023

FREIREANAS CATEGORIES IN NURSING UNDERGRADUATE EDUCATION: INTEGRATIVE LITERATURE REVIEW

Categorias freireanas no ensino de graduação em enfermagem: revisão integrativa da literatura

Categorías Freireanas en enfermería educación universitaria: revisión de la literatura integrativa

*Camila Rodrigues Barbosa Nemer*¹, *Marlucilena Pinheiro da Silva*², *Ingrid Souza Reis Santos*³, *Larissa Duarte Ferreira*⁴, *Raissa dos Santos Flexa*⁵, *Elizabeth Teixeira*⁶

How to cite this article:

Nemer CRB, Silva MP, Santos ISR, Ferreira LD, Flexa RS, Teixeira E. Freireanas categories in nursing undergraduate education: integrative literature review. 2020 jan/dez; 12:1157-1164. DOI: http://dx.doi.org/ 0.9789/2175-5361.rpcfo.v12.8023.

ABSTRACT

Objective: The study's purpose has been to identify the main publications relating to the use of Freirean categories in nursing undergraduate education. **Methods:** This integrative literature review was performed by searching publications in the following databases: *Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS)* [Latin American and Caribbean Literature in Health Sciences], Medical Literature Analysis and Retrieval System (MEDLINE), and *Base de Dados de Enfermagem (BDENF)* [Nursing Database]. A total of 482 studies were found, of which only 13 met the inclusion criteria. **Results:** The following categories were identified: "*Dialogue and Autonomy*"; "*Raising awareness with a view to the training of people focused on the development of critical, reflective and participatory skills*"; and "*Problematization methodology as a form of humanizing education for a humanized care*". **Conclusion:** It is concluded that the incorporation leads to humanizing education, making it possible for students/future professionals to deliver humanized care. **Descriptors:** Nursing education, teaching, learning.

- 4 Nursing Graduate by the UNIFAP, MSc student in Health Sciences at UNIFAP. https://orcid.org/0000-0001-7717-4891
- 5 Nursing Graduate by the UNIFAP. https://orcid.org/0000-0002-3417-2623
- 6 Nursing Graduate by the Universidade Federal do Rio de Janeiro (UFRJ), MSc in Education by the Universidade do Estado do Rio de Janeiro (UERJ), PhD in Sciences: Socio-Environmental Development by the Universidade Federal do Pará (UFPA), Visiting Professor at Universidade do Estado do Amazonas (UEA), Associate Professor at CEULM/ULBRA. https://orcid.org/0000-0002-5401-8105

DOI: 10.9789/2175-5361.rpcfo.v12.8023 | Nemer CRB, Silva MP, Santos ISR et al. | Freireanas categories in nursing undergraduate education...









¹ Nursing Graduate by the Universidade do Estado do Pará (UEPA), MSc in Nursing by the UEPA, PhD student in Public Health at Escola Nacional de Saúde Pública Sergio Arouca/Fundação Oswaldo Cruz (ENSP/FIOCRUZ), Professor at Universidade Federal do Amapá (UNIFAP). https://orcid.org/0000-0003-1252-3709

² Nursing Graduate by the UEPA, MSc in Collective Health by the Universidade de Fortaleza (UNIFOR), PhD in Education by the Universidade Federal de Uberlândia (UFU), Professor at UNIFAP. https://orcid.org/0000-0002-8662-9621

³ Nursing Graduate by the UNIFAP, MSc student in Pharmaceutical Sciences at UNIFAP. https://orcid.org/0000-0002-8131-8795

RESUMO

Objetivo: Identificar as principais publicações relacionadas às categorias Freireanas no ensino de graduação em enfermagem. **Método:** Revisão Integrativa de literatura a partir da busca nas bases Literatura Latino-Americana e do Caribe em Ciências da Saúde, Sistema *Online* de Busca e Análise de Literatura Médica, Base de Dados de Enfermagem. Obteve-se 482 estudos, destes apenas 13 atendiam aos critérios de inclusão. **Resultados:** As categorias emergentes foram: diálogo e autonomia; tomada de consciência com vistas a formação de sujeitos críticos, reflexivos e participantes; metodologia da problematização para uma educação humanizante e um cuidar humanizado. **Conclusão:** Conclui-se que a incorporação das categorias Freireanas no ensino de enfermagem é fundamental para um ensino com travessias dialógicas. Tal incorporação tece uma educação humanizante, caminho para o cuidado humanizado do discente/futuro profissional.

Descritores: Educação em enfermagem; Ensino; Aprendizagem.

RESUMÉN

Objetivo: identificar las principales publicaciones relacionadas con las categorías Freireanas en la docencia de licenciatura en enfermería. **Método:** revisión Integrativa de la literatura a partir de la búsqueda en las bases de la literatura latinoamericana y caribeña en Ciencias de la salud, sistema online de búsqueda y análisis de la literatura médica, base de datos de enfermería. Se obtuvieron 482 estudios, de estos sólo 13 cumplieron los criterios de inclusión. **Resultados:** las categorías emergentes fueron: diálogo y autonomía; Sensibilización con vistas a la formación de sujetos críticos, reflexivos y participantes; Metodología de cuestionamiento para una educación humanizadora y un cuidado humanizado. **Conclusión:** se concluye que la incorporación de las categorías Freireanas en la enseñanza de enfermería es esencial para una enseñanza con cruces dialogales. Esta incorporación teje una educación humanizadora, el camino hacia el cuidado humanizado del estudiante/futuro profesional. **Descriptores:** Educación en Enfermería; Enseñanza; Aprendizaje.

INTRODUCTION

Paulo Reglus Neves Freire (1921-1997), a Brazilian educator and philosopher, is considered one of the most remarkable education thinkers in the world. His most famous book (Pedagogy of the oppressed) has been published in several languages (English, Spanish, Hebrew, etc.). The contributions of the author's works have a wide scope of applications, such as in popular education, literacy, and raising political awareness among young people and adults. This work is also important in other fields, such as nursing.

Freire reflects on the educator-student relationship, with emphasis on the practice of political-pedagogical dialogue between these two people and on ethical virtues, with the purpose of enabling autonomy and citizenship with responsibility so that educators and students acquire and critically recreate knowledge.¹ For the author, students must view themselves as subjects capable of producing knowledge. Teaching is not transferring knowledge but creating possibilities of producing it or constructing it.

In the teaching-learning process, subjects are not each other's objects. Those who teach learn by teaching and those who learn teach by learning. Teaching does not exist without learning. The author makes a critique of "banking" knowledge, showing the importance of what he calls "epistemological curiosity", in which the subject becomes critical and reflective, and goes in search of knowledge.¹

Historically, it is known that Brazilian education is marked by traditional teaching, in which the transmission of knowledge occurs in a repetitive, unilateral way from educator to student. This fact is no different in the history of nursing education.²

In nursing, although there have been changes in the curricula of undergraduate courses and discussions of new pedagogical proposals, the medical-hospital model is predominant. The purpose of this model is to train nurses focusing on healing and hospital care.³

Reinforcing the need for changes in the nurses' training, with emphasis on the traditional formative paradigm, and encouraging innovation movements in the teachinglearning process, the *Diretrizes Curriculares Nacionais* (*DCNs*) [National Curricular Guidelines] for the nursing undergraduate courses were instituted in 2001.³

The DCNs states that nursing professionals should have generalist, humanist, critical, reflective, and qualified skills based on scientific and intellectual rigor. They should be guided by ethical principles, having the capacity to use knowledge and implement intervention measures in the face of the most prevalent health problems in the national epidemiological context, emphasizing its workplace and identifying the bio-psycho-social dimensions of its determinants. Having a sense of social responsibility, they should be committed to citizenship with a holistic vision of human beings' health. Finally, they should be capable of working in Basic Education and Professional Education in Nursing.⁴

The author's ideas contributed to changing the traditional formative paradigm in nursing education. He proposes "a liberating and problematizing pedagogy, which is an important philosophy for education to be understood as a political action so that social reality can be potentially transformed".^{2:276} Therefore, this study identified the main publications relating to the use of Freirean categories in nursing undergraduate education.

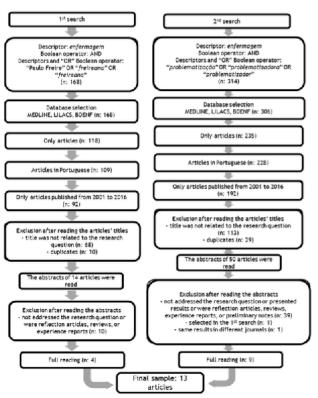
METHODS

This is an integrative literature review, a type of methodological approach that has been used in nursing research for the development of reviews since the 1980s.⁵ It allows summarizing the available evidence on a given subject, pointing out the current state of knowledge and gaps that can be addressed by new studies. Consequently, the understanding of the subject can be deepened.⁶

The review was based on six phases.⁷ According to the first phase, the following theme was defined: "Freirean categories in nursing undergraduate education". The following guiding question was also developed: "what Freirean categories can be found in publications on nursing undergraduate education?"

The literature search was conducted in the second phase using the following databases: *Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS)* [Latin American and Caribbean Literature in Health Sciences], Medical Literature Analysis and Retrieval System (MEDLINE), and *Base de Dados de Enfermagem (BDENF)* [Nursing Database]. Furthermore, the following nursing descriptors and keywords were used combined with "AND" and "OR" Boolean operators: Paulo Freire, *freireana, freireano, problematizadora*, and *problematizador*. The inclusion criteria were online articles in Portuguese addressing the Paulo Freire's contributions nursing undergraduate education. Only articles published from 2001 to 2015 were considered because the DCNs for the nursing undergraduate courses were instituted in 2001.

A total of 482 articles were initially found. After applying the inclusion criteria, 284 articles remained. Of them, 220 were excluded because they were duplicates or their titles were unrelated to the search question. After reading the remaining 64 articles, 51 were excluded because they did not answer the search question; they were reflection articles, reviews, experience reports, or preliminary notes; they were part of the sample determined by the two searches; or their results were found in different journals. Hence, a final sample of 13 articles was determined. **Figure 1** illustrates how the two searches were carried out in this stage. Figure 1 - Flowchart of the two searches that were carried out in this review.



In the third phase, information from the selected studies was extracted through the proposed data collection tool. In the fourth phase, the articles were analyzed critically by each author. In the fifth phase, the results were interpreted and synthesized to determine the categories. Then, the articles were summarized, and the results are both presented and discussed as follows.

RESULTS

Table 1 presents the 13 articles selected for this review. They are organized according to the following variables: title, authors, year of publication, and evidence level. The articles were sorted by year of publication and labeled using letters and numbers (A1, A2, A3, etc.) in order to facilitate identification. The classification of the evidence levels followed the literature.⁸

| Article code | Title Authors | | Years | | Years E | |
|-----------------|---|--|-------|----|---------|--|
| A1 | Virtual learning object for nursing diagnostic reasoning applied to the tegumentary system | Cecília Passos Vaz da Costa, Maria Helena Barros Araújo Luz. | 2015 | VI | | |
| A2 | Teaching first aid from the perspective of a problem-oriented curriculum | Mariana Dolce Marques Luís, Carlos Lopes Júnior, Emiliana de Omena Bomfim, Carla Pedrosa Marega Luciano Gomes, Shirlene Pavelqueires. | 2014 | VI | | |
| A3 | Student participation in the development of the pedagogical project of the nursing undergraduate course | Natália Maria Freitas e Silva Maia, Benevina Maria Vilar Teixeira Nunes, Maria Eliete Batista Moura. | 2013 | VI | | |
| A4 | Expressions of the didactic knowledge of an experienced nursing educator's content | Vânia Marli Schubert Backes, Jose Luis Medina Moya, Marta Lenise do Prado, Jouhanna do Carmo Menegaz, Alexandre Pareto da Cunha, Bruna de Souza Francisco. | | VI | | |

Table 1 - Distribution of the selected studies according to article code, title, authors, year of publication, and evidence level (EL).

| Article code | Title | Authors | | EL |
|-----------------|--|---|------|----|
| A5 | Ethical problems experienced in a supervised nursing internship with an integrated curriculum | Juliane Cristina Burgatti, Luzmarina Aparecida Doretto Bracialli, Maria Amélia de Campos Oliveira. | 2013 | VI |
| A6 | Approaches to Popular Education in Nursing: a reality? | Monique Santos Santana, Douglas Leonardo Gomes Filho, Neuranides Santana. | 2012 | VI |
| A7 | Autonomy in the process of building the nursing students' knowledge: educational chats as teaching tools | Ana Paula Scheffer Schell da Silva, Eva Néri Rubim Pedro. | 2010 | VI |
| A8 | Potentialities of Freirean Problematization in Teaching "Nursing Didactics" | Rodrigo Otávio Moretti-Pires, Any Karoline Bezerra de Alencar, Elusa Rafaela Hentges Campos, Hadelândia Milon de Oliveira. | 2010 | VI |
| A9 | From research practice to training practice for nursing care: a case study | Lina Márcia Miguéis Berardinelli, Iraci dos Santos, Mariana Nepomuceno Giron, Verônica Cordeiro dos Santos, Diana da Silva Marinho. | 2009 | VI |
| A10 | Educator-student relationship in Nursing and problems while training for the Brazilian Unified Health System | Rodrigo Otávio Moretti-Pires, Sônia Maria Villela Bueno. | 2009 | VI |
| A11 | Problematizing pedagogy: the interpersonal relationship of nursing interns within the hospital context | Norma Valéria Dantas de Oliveira Souza, Maristela Freitas Silva, Élissa Jôse Erhardt Rollemberg Cruz, Milene Silva dos Santos. | 2007 | VI |
| A12 | Diagnosis of the teaching-learning process identified by nursing undergraduate students and educators | Marcos Hirata Soares, Sônia Maria Villela Bueno. | 2005 | VI |
| A13 | The critical-reflective teaching-learning process | Mara Quaglio Chirelli, Silvana Martins Mishima. | 2004 | VI |

As can be seen in **Table 1**, three articles were published in 2013, which was the predominant year of publication. Concerning the evidence level, all articles (13) had level VI, which are in line with evidence from a single descriptive or qualitative study.8

During the reading phase, it was identified that five articles (39%) were carried out in the Southeast Region of Brazil, three (23%) in the Northeast Region, two (15%) in the South Region, two (15%) in the North Region, and one (8%) did not specify the region. Regarding the journals, 13 were identified as follows: *Revista gaúcha de enfermagem; Revista de pesquisa cuidado é fundamental online; Investigación y educación en enfermería; Texto e contexto enfermagem; Revista da escola de enfermagem da USP; Revista baiana de enfermagem; Revista latino americana de enfermagem; Cogitare enfermagem; Online Brazilian Journal of Nursing; Acta paulista enfermagem; Revista de enfermagem da UERJ; Ciência, cuidado e saúde; and Revista Brasileira de Enfermagem.*

Table 2 shows the sample characterization according to research and approach types, data collection, and analysis, and study participants. It is noteworthy that 12 (92%) articles employed a qualitative approach, eight (61%) used the interviews for data collection, and five (39%) used content analysis. A total of 497 people participated in these studies, of which 388 (78%) were nursing students.

Table 2 - Characterization of the articles according to article code, type of research and approach, data collection, data analysis, and study participants.

| Article code | Research and approach types | Data Collection | Data analysis | Study participants |
|-----------------|--|--|--|--|
| A1 | Applied, methodological study of technological production | Virtual learning object | None | None |
| A2 | Cross-sectional, analytical study (a quasi-experiment) with pre- and post- tests and a quantitative approach | Questionnaire | Descriptive and Parametric Statistics | Undergraduate students (n: 110): 35 nursing students and 75 medicine students |
| A3 | Descriptive-exploratory study with a qualitative approach | Interviews | Textual analysis | Nursing students (n: 22) |
| A4 | Descriptive, exploratory-analytical study with a qualitative approach | Non-participant observation and interviews | Constant comparisons | Nursing professors (n: 3) |

| Article code | Research and approach types | Data Collection | Data analysis | Study participants |
|-----------------|--|--|---|---|
| A5 | Exploratory study with a qualitative approach | Interviews | Discourse Analysis | Nursing students (n: 10), Nursing professors (n: 10), Nurses (n: 8) |
| A6 | Descriptive-exploratory study with a qualitative approach | Interviews | Content analysis | Nursing students (n: 10), Nursing professors (n: 4) |
| A7 | Retrospective, documentary study with a qualitative approach; case study | Analysis of educational chat records | Content analysis | Nursing students (b: 185), Nursing professors (n: 3), Monitors (n: 2) |
| A8 | Documentary analysis with a qualitative approach | Analysis of portfolios and reports | Dialectical Hermeneutics | Nursing students (n:34) |
| A9 | Descriptive study with a qualitative approach; case study | Interviews | Content analysis | Nursing students (n: 6) |
| A10 | Qualitative study | Focus group and interviews | Dialectical Hermeneutics | Nursing students (n: 6) |
| A11 | Qualitative, descriptive study | Questionnaire | Content analysis | Nursing students (n: 26) |
| A12 | Descriptive-exploratory study with a qualitative approach | Participant observation and interviews | Not specified | Nursing students (n: 13), Nursing professors (n: 4) |
| A13 | Qualitative study | Interviews and focus group | Collective Subject Discourse and thematic content analysis | Nursing students (n: 41) |

Paulo Freire's contributions to nursing undergraduate education found in the selected articles were grouped into three categories. The category "*Dialogue and Autonomy*" is composed of 4 articles (A4, A7, A10, and A11), which regarded problematizing pedagogy as dialogic and mediator tool for autonomy, contributing to the training of future nursing professionals.

The category "*Raising awareness with a view to the training of people focused on the development of critical, reflective and participatory skills*" is composed of 8 articles (A1, A2, A3, A5, A6, A11, A12, and A13), which show the importance of the students' practice at communities as well as the importance of valuing and recognizing the knowledge and experiences of both in relation to interaction, which encourages critical-reflexive thinking.

The category "*Problematization methodology as a form* of humanizing education for a humanized care" is composed of 4 articles (A8, A9, A10, and A11), which address more interactive and humanized relationships between educators and students, which can cause future professionals to offer more humanized care as well. They also address the importance of research on student education.

DISCUSSION

The articles addressing the relationship between education route and expressions of didactic knowledge of the content highlighted the lack of pedagogical qualification during the initial professional education and the importance of working according to the Freirean perspective, as well as according to other theoretical perspectives. Educators need to seek continuing education; socialization with their peers; professional, teaching, and life experiences; and theoretical and methodological references that enable emancipation by teaching, exercise the relationship with the content domain, and "more dialogical, problematizing and critical-creative attitudes toward themselves and their students.^{9:804}

The study A7 evaluated whether educational chats could be used as teaching tools and was conducted with 190 subjects. Of them, 185 were students, 3 were professors, and 2 were monitors. Its findings showed that educational chats allowed the educators to use the students' knowledge and incorporate it into the discussion, improving problematization. The dialogical relationship among students and between educators and students contributes to the production or construction of knowledge. The students interact with each other and the educator only interferes at the end, elucidating some points that were not clear to the students.¹⁰

"The discussions that took place in the educational chats allowed content problematization, enabling the construction of new knowledge".^{10:78} It also allows students to show responsibility, management, and make decisions, indicating that their autonomy is maturing while they acquire knowledge.

The article A10 addressed the professor-student relationship in nursing with the use of a focus group composed of six nursing undergraduate students. It revealed how the lack of autonomy is detrimental to their training. "The relationship between educator and student was presented as stressful. They point out that the students lacked autonomy during the teaching-learning process, which would promote dependence and lack of security in nursing practice".^{11:647}

The study A11 addressed the implementation of Problematizing Pedagogy in the teaching and learning process experienced by nursing interns within the hospital setting. It was conducted with 26 interns and showed that when the students' autonomy and individualities were respected, an environment favorable for them to improve their decision-making skills is created, indicating a path for training subjects to develop critical and reflective skills as well as promote changes. "The process of assisting, teaching and learning is integrative, dialectical and expanded according to Problematizing Pedagogy".^{12:30}

Freire says that dialogue is the path by which human beings gain meaning and it is an existential and liberating need.¹³ In the dialogic theory of action, subjects meet to transform the world together. Problematizing is analyzing problems critically. Problematizing education is based on the dialogical relationship between students and educators, enabling them to learn together through an emancipatory process.¹⁴

The author emphasizes that it is necessary to respect each person's autonomy and dignity not as a favor but because it is an ethical imperative, using common sense for decision making.¹

Article A1 addressed the use of a virtual learning object based on problematizing education. Twenty-one students participated in the study. Its findings pointed out that the virtual object allowed learning to have individual repercussions by engaging students, culminating in a new way of thinking and doing. Moreover, contextualized knowledge interconnection, reflection on how to gain new knowledge, self-reflection on students' knowledge, participation in the teaching-learning process, and critical actions while making the nursing diagnosis were encouraged.¹⁵

Article A2 addressed the first aid training using problematizations and Problem-Based Learning (PBL). Carried out with 110 students (35 nursing undergraduate students and 75 medical undergraduate students), its results revealed that the participants learned dramatically during the training, evidencing that the strategies adopted were valid.¹⁶

Article A3 addressed the students' participation in the development of the Pedagogical Project (PP) of a nursing undergraduate course. Twenty-two students participated in the study. It was evidenced that the students did not effectively participate in the development of the PP. It is believed that adopting problematizing education could reverse this situation as nursing students would understand the totality of their education, become active and reflective about it, and problematize it while associating it with reality. Thus, such students, besides participating in the development of the PP, would consciously use it in practice, re-signifying their knowledge about this project.¹⁷

Article A5 addressed the experiences of students, professors, and nurses in the supervised internship of an integrated curriculum. Ten students, 10 professors, and 8 nurses participated in the study. Its "results may indicate that the use of active learning methodologies triggered critical reflections within broad health contexts, extrapolating the technical dimension".^{18:941} In nursing education, a critical understanding of prior experience is essential; therefore, it is necessary to make it possible for students to develop morally. Integrated curricula using problematization can promote critical reflection of professional practice, services, and the health system.

Article A6 assessed popular health education in a nursing undergraduate course. Carried out with four professors and 10 students, the study evidenced that the performance of health education activities based on popular health education allows raising awareness among students and educators, as well as raising critical reflection on their actions. The students and professors believed in the contributions of popular health education to the establishment of the Brazilian Unified Health System. The students, however, needed a more theoretical understanding of popular health education. The study also highlighted that the students need to maintain constant contact with the community as soon as possible for them to become closer to users' reality and experience it. Popular health education can be provided throughout the theoretical and practical academic trajectory and should not be restricted to Basic Care.19

Article A11 showed that banking education, in which the educator is the "owner of knowledge", loses meaning when problematizing pedagogy is used. Knowledge is built through the interaction between the subjects involved in the process and through continuous questioning arising from a collective consciousness.¹² The students feel recognized by their clients, strengthening their self-esteem and stimulating them to value ethical attitudes while building relationships with patients. They need to build dynamic relationships based on exchange in a participative way, evidencing a personal transformation.

Article A12 addressed the teaching-learning process in undergraduate education, emphasizing the importance of the professor-student relationship in the classroom aiming at professional training. The study was conducted with 13 undergraduate students and 4 professors. Its findings pointed out that the best way of teaching requires that professors stimulate students by engaging them in practical classes, valuing their experiences, and letting them be part of the class planning.²⁰

Article A13 addressed the construction of the education process in a nursing undergraduate course. A total of 41 students participated in the study, which pointed out that traditional and banking education can influence and limit the future nurses' ability to search for original and adequate solutions to many problems, besides limiting their critical-evaluation capacity. Regarding the critical-reflexive education process, the students' statements revealed that the educator has a fundamental role in promoting and conducting activities with the aim of developing the students' critical thinking. The partnership between educators and health services also determines the movement of actionreflection-transformative action.²¹

Freire says that there is no man without a world, and there is no world without a man. This relationship among people, the world, and reality imply transformation, in which products affect actions and reflections. It is through experience that people develop their action-reflection.²²

"Problematization Methodology imposes on us the critical knowledge of reality, providing the exercise of the praxis, which includes action- reflection-new action (which is intentionally transformative). It is a path to teaching and effective research in the pedagogical practice, whose essence is dialogue, open mindedness, and curiosity regarded as a liberating practice, as recommended by Paulo Freire^{*}. ^{23:137}

Paulo Freire's studies originated the concept of problematization, emphasizing that the problems to be studied need to use a real scenario. Education and thematic research are part of the same process: the content must always be updated, expanded, and critically based on reality; it should be continuously transformed considering its various facets. It should create permanent cognitive challenges for educators and students. For Freire, the more the educators stimulate their students to perceive themselves as beings of and in the world, the more these students will be motivated to respond to and overcome new challenges.¹⁴

Concerning the fine line between theory and philosophy of education, Paulo Freire's theories have deeply influenced the construction of a reflexive nursing education.²⁴

Article A8 addressed the nursing undergraduate students' perceptions of Freirean problematization applied in classes of a discipline. It was carried out through a documental analysis of 34 students' reports. According to its findings, problematization applied while teaching didactics to nursing students promotes humanizing education. "The methodology used in the discipline was a form of humanization, in the sense of giving the nursing student the possibility of strengthening their connection with the world, their relationships, and university teaching.^{25:311}

Study A9 addressed research practice in nursing care and was carried out with 6 undergraduate students. It showed that research practice is in line with nursing care, making it possible to carry out actions grounded in science. By undertaking actions and putting themselves in the other's place, students validate the knowledge. The students "discovered themselves and valued the learning process and how much the acquired knowledge can influence their relationship with people".²⁶

Article A10 pointed out the need to reorganize the course, as stated by the undergraduate students. The reason is that they regarded learning through practice as the most human path to be followed. Moreover, they pointed out that there is no coherent coordination between theory and practice in the course's pedagogical model. The results highlighted the offer of technical education without disciplines that favor humanization, as reported by the participants.¹¹

Study A11 indicated that educators are more valued and respected when they assume an ethical posture with a unique approach and act as a facilitator of the students' psycho-cognitive growth. "It is verified that the educators adopt a more humanized attitude, which is more accessible to the students".^{12:29}

Freire, besides viewing education as a form of intervening in the world, list the following teaching demands: methodical rigor, requiring educators and students to be restless, rigorously curious, creative, critical, humble and persistent; research, as there is no teaching without research and research without teaching; respect for students' knowledge, which is socially constructed through community practice, taking advantage of their experience; promotion of critical thinking, in which a difficult and necessary task is used for developing critical, unsatisfied, rebellious curiosity. Naive curiosity can be overcome and transformed into epistemological curiosity without losing its essence.¹

The convergence between Paulo Freire's emancipatory educational practices and nursing care can stimulate the development of a new vision by students, thus enabling a more humanized, affective, and effective practice.

Research can be further improved by using Freire's theoretical and methodological ideas, making it possible for students to problematize and deal with themes as well as intervene in reality. By using these ideas in health and nursing research, challenges can be overcome. The main challenge is to use problematizing education to initiate liberating dialogue.²⁸

CONCLUSION

Bearing in mind the aforementioned, it is concluded that the use of Freirean categories in nursing undergraduate education is fundamental because it strengthens the construction and exchange of knowledge, enhances the educator-student and student-community relationships, encouraging the exchange of experiences and acknowledgment of peoples' experiences. Consequently, it is possible to teach through dialogue and dialogical pedagogy.

Such incorporation is shown, for instance, when students participate in the development of the course's pedagogical project so that they can reflect on the education process. It is imperative to encourage students to become critical and reflective subjects while dealing with experiences during undergraduate education. A humanizing education is urgently needed, which is a path to humanized care delivered by students/future professionals.

Conducting more studies to seek and deepen the educators' perception and knowledge since they are the mediators of the process of constructing the students' knowledge.

Herein, it was possible to identify the contributions of the Freirean categories towards the nursing undergraduate education. Nonetheless, discussions and reflections involving all people that are responsible for or participants in nursing education should be advanced. Critical and creative care, with emphasis on care/education based on the Freirean categories, should be permanent.

REFERENCES

- 1. Freire P. Pedagogia da autonomia: saberes necessários à prática educativa. 47ª ed. São Paulo: Paz e Terra; 2011.
- Szewczyk MSC, Lopes FL, Cestari MEC, Santos SSCS, Lunardi VL. Refletindo sobre a educação e o trabalho da enfermagem à luz das ideias de Paulo Freire: a possibilidade de um novo olhar para a educação. Ciênc cuid saúde [Internet]. 2005 [cited 2018 Jul 20];4(3):276-283. Available from: http://eduem.uem.br/ojs/index.php/CiencCuidSaude/ article/viewFile/5209/3363
- Silveira CA, Paiva SMA. A evolução do ensino de enfermagem no Brasil: uma revisão histórica. Ciênc cuid saúde [Internet]. 2011 [cited 2018 Jul 20];10(1):176-183. Available from: http://www.periodicos. uem.br/ojs/index.php/CiencCuidSaude/article/view/6967/pdf

- 4. Conselho Nacional de Educação (Br), Câmara de Educação Superior. Resolução CNE/CES nº. 3, de 7 de novembro de 2001. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Enfermagem. Diário Oficial da União. Seção 1. 2001. Available from: http://portal.mec.gov.br/cne/arquivos/pdf/CES03.pdf
- Ganong LH. Integrative reviews of nursing research. Res Nurs Health [Internet]. 1987 [cited 2018 Jul 20];10(1):1-11.
- Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto & contexto enferm [Internet]. 2008 [cited 2018 Jul 20];17(4):758-764. Available from: http://www.scielo.br/pdf/tce/ v17n4/18.pdf
- Souza MT, Silva MD, Carvalho S. Revisão integrativa: o que é e como fazer. Einstein (São Paulo) [Internet]. 2010 [cited 2018 Jul 20];8(1):102-6. Available from: http://www.scielo.br/scielo.php?pid=S1679-45082010000100102&script=sci_arttext&tlng=pt
- 8. Melnyk BM, Fineout-Overholt E. Making the case for evidence-based practice. In: Melnyk BM, Fineout-Overholt E. Evidence-based practice in nursing & healthcare. A guide to best practice. Philadelphia: Lippincot Williams & Wilkins; 2005. p.3-24.
- Backes VMS. Expressões do conhecimento didático do conteúdo de um professor experimentado de enfermagem. Texto & contexto enferm [Internet]. 2013 [cited 2018 Jul 20];22(3):804-810. Available from: http://www.scielo.br/pdf/tce/v22n3/v22n3a29.pdf
- 10. Silva APSS, Pedro ENR. Autonomia no processo de construção do conhecimento de alunos de enfermagem: o chat educacional como ferramenta do ensino. Rev latinoam enferm [Internet]. 2010 [cited 2018 Jul 20];18(2):72-78. Available from: http://www.scielo.br/pdf/ rlae/v18n2/pt_11.pdf
- 11. Moretti-Pires RO, Bueno SMV. Relação docente-discente em Enfermagem e problemas na formação para o Sistema Único de Saúde. Acta Paul Enferm [Internet]. 2009 [cited 2018 Jul 20]; 22(5):645-651. Available from: http://www.scielo.br/pdf/ape/v22n5/08.pdf
- Souza NVDO, Silva MF, Cruz EJER, Santos MS. Pedagogia problematizadora: o relacionamento interpessoal dos internos de enfermagem no Contexto hospitalar. Rev enferm UERJ [Internet]. 2007 [cited 2018 Jul 20];15(1): 27-32. Available from: http://www. facenf.uerj.br/v15n1/v15n1a04.pdf
- 13. Freire P. Pedagogia do oprimido. 50ª ed. São Paulo: Paz e Terra; 2011.
- 14. Cyrino EG, Toralles-Pereira ML. Trabalhando com estratégias de ensino-aprendizagem por descoberta na área da saúde; a problematização e a aprendizagem baseada em problemas. Cad Saúde Pública (Online) [Internet]. 2004 [cited 2018 Jul 20];20(3):780-788. Available from: http://www.scielo.br/pdf/csp/v20n3/15.pdf
- 15. Costa CPV, Luz MHBA. Objeto virtual de aprendizagem sobre o raciocínio diagnóstico em enfermagem aplicado ao sistema tegumentar. Rev Gaúch Enferm (Online) [Internet]. 2015 [cited 2018 Jul 20];36(4):55-62. Available from: http://www.scielo.br/pdf/rgenf/ v36n4/pt_1983-1447-rgenf-36-04-00055
- 16. Marques MD, Lopes Júnior LC, Bomfim EO, Gomes CPML, Pavelqueires S. O ensino de primeiros socorros sob a ótica de um currículo de orientação problematizadora. Rev pesqui cuid fundam (Online) [Internet]. 2014 [cited 2018 Jul 20];6(4):1485-1495. Available from: http://www.seer.unirio.br/index.php/cuidadofundamental/ article/view/3240/pdf_847
- Maia NMFS, Nunes BMVT, Moura MEB. A participação discente no desenvolvimento do projeto pedagógico do curso de Enfermagem. Invest Educ Enferm [Internet]. 2013 [cited 2018 Jul 20];31(2):183-190. Available from: http://www.scielo.org.co/scielo.php?script=sci_ arttext&pid=S0120-53072013000200003&lng=pt&nrm=iso&tlng=pt
- Burgatti JC, Bracialli LAD, Oliveira MAC. Problemas éticos vivenciados no estágio curricular supervisionado em Enfermagem de um currículo integrado. Rev Esc Enferm USP [Internet]. 2013 [cited 2018 Jul 20];47(4):937-942. Available from: http://www.revistas.usp. br/reeusp/article/view/78045/82067
- Santana MS, Gomes Filho DL, Santana N. Abordagens da educação popular na Graduação em enfermagem: uma realidade? Rev baiana enferm [Internet]. 2012 [cited 2018 Jul 20];26(1):363-373. Available from: https://portalseer.ufba.br/index.php/enfermagem/article/ view/6442/5986
- 20. Soares MH, Bueno SMV. Diagnóstico do processo de ensinoaprendizagem identificado por alunos e professores de graduação em Enfermagem. Ciênc cuid saúde [Internet.] 2005 [cited 2018 Jul 20];4(1):47-56. Available from: http://eduem.uem.br/ojs/index.php/ CiencCuidSaude/article/view/5369/3427

- Chirelli MQ, Mishima SM. O processo ensino-aprendizagem crítico-reflexivo. Rev Bras Enferm [Internet]. 2014 [cited 2018 Jul 20];57(3):326-331. Available from: http://www.scielo.br/pdf/reben/ v57n3/a14v57n3.pdf
- 22. Freire P. Educação e Mudança. 31ª ed. São Paulo: Paz e Terra; 2008.
- 23. Colombo AA, Berbel NAN. A metodologia da problematização com o arco de maguerez e a sua relação com os saberes de professores. Semina Ciênc Soc Hum [Internet]. 2007 [cited 2018 Jul 20];28(2):121-146. Available from: http://www.sgc.goias.gov.br/upload/links/ arq_390_ametodologiadaproblematizacaocomoarcodemaguerez.pdf
- 24. Miranda KCL, Barroso MGT. A contribuição de Paulo Freire à prática e educação crítica em enfermagem. Rev latinoam enferm [Internet]. 2004 [cited 2018 Jul 20];12(4):631-635. Available from: http://www. scielo.br/pdf/rlae/v12n4/v12n4a08.pdf
- 25. Moretti-Pires RO, Alencar AKB, Campos ERH, Oliveira HM. Potencialidades da problematização freiriana no ensino de "didática em enfermagem". Cogitare enferm [Internet]. 2010 [cited 2018 Jul 20];15(2):308-313. Available from: https://revistas.ufpr.br/cogitare/ article/view/17866/11658
- 26. Berardinelli LMM, Santos I, Giron MN, Santos VC, Marinho DS. Da prática de pesquisa à prática de formação para o cuidado de enfermagem: um estudo de caso. Online Braz J Nurs [Internet]. 2009 [cited 2018 Jul 20];8(3). Available from: http://www.objnursing.uff.br/ index.php/nursing/article/view/j.1676-4285.2009.2509/546
- 27. Chagas NR, Ramos IC, Da Silva LF, Monteiro ARM, Fialho AVM. Cuidado crítico e criativo: contribuições da educação conscientizadora de Paulo Freire para a enfermagem. Ciencia y Enferm [Internet]. 2009 [cited 2018 Jul 20];15(2):35-40. Available from: https://scielo.conicyt. cl/pdf/cienf/v15n2/art05.pdf
- 28. Heidemann IBS, Boehs AE, Wosny AM, Stulp KP. Incorporação teórico-conceitual e metodológica do educador Paulo Freire na Pesquisa. Rev Bras Enferm [Internet]. 2010 [cited 2018 Jul 20];63(3):416-20. Available from: http://www.scielo.br/pdf/reben/ v63n3/a11v63n3.pdf

Received in: 27/08/2018 Required revisions: 17/01/2019 Approved in: 15/02/2019 Published in: 31/08/2020

Corresponding author

Camila Rodrigues Barbosa Nemer Address: Universidade Federal do Amapá Campus Marco Zero, Bloco de Enfermagem Rodovia Juscelino Kubitschek, km 2, Jardim Marco Zero Macapá/AP, Brazil Zip code: 68903-419 Email address: camilarodriguesb08@botmail.com

Email address: camilarodriguesb08@hotmail.com Telephone number: +55 (93) 99123-5291

Disclosure: The authors claim to have no conflict of interest.