Dialogue: network that intertwines the pedagogical relationship into the practical-reflective teaching

Diálogo: rede que entrelaça a relação pedagógica no ensino prático- reflexivo

El diálogo: una red que entrama la relación pedagógica en la enseñanza práctica-reflexiva

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ABSTRACT
Objective: to understand how dialogue occurs in the pedagogical relation in the practical reflective teaching in an undergraduate program in nursing. **Method:** qualitative research, case study. Data collection was conducted from May 2013 to September 2014 with eight professors of Nursing, by means of observation and interviews. Data analysis followed the operational proposal constituted by the exploratory stage and the interpretive stage. **Results:** point the dialogue established within the pedagogical relation as a challenge to be faced in practical-reflective teaching, so professor and student build a relationship that foster thought and action in the theoretical context and in the field of practice. **Conclusion:** in establishing a dialogic-reflective tone in the pedagogical relationship, the professor opens paths to new discoveries, enabling the creation of teaching-learning spaces that stimulate autonomy, abilities, and critical and reflective attitudes of students along their education.
Descriptors: Nursing; Higher Education; Education; Professors; Students.

RESUMO
Objetivo: compreender como ocorre o diálogo na relação pedagógica no ensino prático reflexivo em um curso de graduação em Enfermagem. **Método:** pesquisa qualitativa, do tipo estudo de caso. Coleta de dados realizada de maio de 2013 a setembro de 2014 com oito docentes de enfermagem, mediante observação e entrevistas. A análise de dados guiou-se pela proposta operativa constituída pela etapa exploratória e a interpretativa. **Resultados:** apontam o diálogo estabelecido na relação pedagógica como um desafio a ser enfrentado no ensino prático-reflexivo, para que professor e estudante construam uma relação que estimule o pensar e o agir no contexto teórico e no campo da prática. **Conclusão:** Ao imprimir um tom dialógico-reflexivo na relação pedagógica, o docente abre caminhos para novas descobertas, o que possibilita a criação de espaços de ensino-aprendizagem estimuladores da autonomia, das habilidades e das atitudes críticas e reflexivas dos estudantes no decorrer de sua formação.
Descritores: Enfermagem; Ensino Superior; Educação; Docentes; Estudantes.

RESUMEN
Objetivo: comprender de qué manera ocurre el diálogo en la relación pedagógica en la enseñanza práctica-reflexiva en una carrera de enfermería. **Método**: estudio cualitativo, de tipo estudio de caso. Se llevó a cabo la recolección de datos de mayo de 2013 hasta septiembre de 2014, con ocho docentes de enfermería, por intermedio de observación y entrevistas. En el análisis de datos se empleó la propuesta operativa constituida en la fase exploratoria e interpretativa. **Resultados**: el diálogo establecido en la relación pedagógica es el reto a enfrentarse en la enseñanza práctica-reflexiva, de modo que profesor y estudiante

puedan construir una relación que les estimule el pensar y actuar en el contexto teórico y práctico. **Consideraciones finales**: al emplear el diálogo y la reflexión en la relación pedagógica, el docente establece nuevos descubrimientos, lo que promueve la creación de espacios de enseñanza-aprendizaje que les estimule la autonomía, las habilidades y acciones críticas, reflexivas a los estudiantes durante su formación educativa.

Descriptores: Enfermería; Enseñanza Superior; Educación; Docentes; Estudiantes.

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INTRODUCTION

The teaching-learning process is complex and, over the years, has suffered the influence of various aspects related to institutional factors, professors and students. Such complexity has instigated the development of studies aimed at making this process effective[1]. In this sense, educational institutions need to rethink the epistemology of practice and the pedagogical assumptions that base the curricula, to train professionals with a view to practical-reflective teaching and committed to the demands of services[2].

Currently, the need for transformation in nursing education so students can participate in the educational process as a subject who builds and rebuilds their knowledge and no longer are mere receivers of information is evident. At the same time, students should be encouraged to reflect on the desired professional profile for the future, when experiencing the teaching-learning activities in the context of practice. This movement contributes to the education of critical, reflective professionals, able to propose changes for the problems of practice[3-4].

Establishing a pedagogical relationship based on reflective dialogue fosters the teaching-learning process with satisfactory results for professors, students and, above all, to the people who are cared by them.

The theoretical framework of the epistemology of the reflective practice of Donald A. Schön[2] adopted in this study argues that dialogue is conducted through words and actions, enabling professors and students to develop mutual reflection-in-action. Reflection-in-action occurs at the moment of execution of the action, without stopping it, even with brief moments of detachment that allow the reformulation of the action. Reflection on the action occurs in retrospect, when we rebuild the action mentally to try to analyze it. Reflection on reflection in action contributes so the professional progresses in the development and build a personal way of knowing, thus contributing to the understanding of future problems or discovery of new solutions[2].

In the education of nurses, the pedagogical relationship is marked by elements that involve behaviors, interaction, values, strategies and assumptions, modes of telling and listening, thinking and acting. In this perspective, both professor and student develop theories of action, from a particular type of behavior, acquired in the experiences and interaction with other persons[2]. In this context, our objective was to understand the dialogue in the pedagogical relationship in the practical-reflective teaching in an undergraduate program in Nursing.

METHOD

Type of study

Qualitative research, single case study, developed in an Undergraduate Program in Nursing. The case researched was the undergraduate program in nursing in a public University in southern Brazil, which seeks to develop critical, creative, and reflective education with students.

Context and participants of the study

This study had participation of eight professors of nursing that developed activities in the theoretical context and in the field of practice, in the courses of the integrator axis (educational actions aimed at the development of specific competencies of nurses) of the last four semesters of the 2004 curriculum. The choice for such courses is justified by the presence of two curricula in progress in the program and, in this sense, the pedagogical relationship in the current curriculum (still in the first semesters of the program) might not be well consolidated with the changes in the curricular matrix.

After the choice of the courses, we selected the participants by drawing lots for two professors per course. The number of participants was previously established for understanding that the comprehension of the case lies in its uniqueness, and relates to the depth of understanding required by a case study[5], and in a broad and integrated view of the pedagogical relationship, which can be obtained with eight professors. Inclusion criteria consisted of: formal employment in the chosen educational institution; more than two years of exercise in teaching; and institutional experience in theoretical and theoretical-practical activities.

Data collection and organization

The data were collected through non-participant observation of teaching-learning contexts and individual interviews with professors. It began in May 2013 with the observation and, subsequently, interviews were held, ending in September 2014. Two instruments were built: a guideline to guide the observations of educational activities developed in the program and another for the interviews. There were 85 hours of observation distributed in 28 teaching-learning moments, including theoretical activities, theoretical-practical activities, supervised internship, and mentoring of course completion paper. Observations were identified by letter O for observation, followed by letter P for professor, and by the number assigned to each participant, plus letters TC for theoretical context and PC for practice context (OP1TC, OP1PC ... OP8TC, OP8PC).

After the observations, the professors were interviewed to complement the information from observations. The interviews took place in the work environment of the participants, scheduled by e-mail, with pre-set date and time. They were recorded on digital media and transcribed in full. We decided to identify the interviews with the letters I for interview and P for professor, followed by identification number of each participant.

Data analysis

Process guided by the operational proposal[6], consisting of two operational moments. The first is related to the fundamental determinations of the research, mapped in the exploratory phase of the research; the second, called interpretive, is the starting point and the objective of the investigation, represented by the encounter with the empirical facts. The interpretive moment consists of data ordering and classification, final analysis, and report.

In the data ordering, information from the observations and interviews were arranged in a certain order to start a first re-reading of the materials, to promote the development of a horizontal map of the findings found in the context researched.

In the data classification, skimming over the material enabled the apprehension of the relevant structures and central ideas that gradually built the empirical categories of the research. Later, there was transversal reading of each subset and of the set in its entirety. There was a process of clipping information from the observations and from every interview into units of significance, according to structure of relevance and topics of information.

The central ideas were grouped into five major themes, which originated the first coding. Later, the second coding originated from the immersion and the deepening of information obtained in the first coding, seeking coherences and inconsistencies of the information and once again clipping the data, to structure the categories of analysis.

The data found gradually built the initial categories, which were enhanced by a reflection process and grouped into three categories: pedagogical relationship: the different manners of telling and listening, demonstrating and imitating in the context of nurse training; combining the telling/listening and the demonstrating/imitating in the pedagogical relationship; pedagogical relationship and technological tools in nurse training: behavioral universes and impasses in the teaching-learning process.

Ethical aspects

The project was approved by the Committee on Ethics in Research with Human Beings of the Federal University of Santa Catarina. All participants signed an informed consent form, to meet the ethical principles of research recommended by Resolution 466/12 of the National Council of Health of the Ministry of Health.

RESULT

Pedagogical relationship: the different manners of telling and listening, demonstrating and imitating in the context of nurse training

This category covers the different manners of communicating present in the pedagogical relationship of the undergraduate program researched. By means of dialogue, professors transmit specific guidelines about certain procedures to be performed by the student in the field of practice, criticize the care provided, and propose suggestions on how to improve one's knowledge, showing how to set priorities.

> *Dialogue established in the pedagogical relationship by means of which professors and students discuss the specific guidelines and priorities related to the activities in the unit and to the completion of the undergraduate thesis. (OP7TC)*

> *Professor criticizes a table and a schedule made by the students and gives suggestion by drawing a sketch of the ideal. (OP6TC)*

> *In the theoretical-practical activity, professor gives specific instructions to students, points priorities in the medical care, makes observations and directs criticism to the care provided by the student, after completion of the procedure, suggesting what can be done to improve performance. (0P2PC)*

Professors stated that they sought to instruct the student prior to the execution of a particular procedure, and never in front of the patient, so they did not show insecurity in the care provided. However, after that, they talked with the student about the procedure performed.

> *I always instruct the student: never say in front of the mother or the child you can't do or that you never did. [...] Even if we have talked, when you have to perform the procedure, you're still in doubt, not sure, don't do it, let me do it, review it again, I always try to help so the student is sure. (IP2)*

> *The student couldn't set the Speculum, she signaled me, I excused myself to the patient, set it and she made the collection, so that it wouldn't be evident to the patient that she couldn't have skill, competence, or ability. (IP4)*

> *During a visit to hospitalized patients, a professor, after observing the student who is talking with the patients, draws her attention as soon as she leaves a room, due to the manner the student talks. The professor says that she needs to consider the context of the hospitalized adult, that in Pediatrics it's ok to speak as if talking to a child, but that there she is dealing with an adult. After all visits, the professor talks again with the student about her behavior. The student says she prefers to receive instructions right away, in order to be corrected, and the professor complements that the student did well during the activity. (OP7PC)*

Dialogue between professor and student on specific care provided is not always conducted in the daily practical activities, as they believe the student already acquired certain skill and autonomy, thus this communication before and after the procedure would not be necessary. During the observations, some fertile moments for reflection on the action were not explored by the professor, causing deleterious effects to the professor's reflection and, mainly, to student's, who could have reflected on different possibilities of providing medical care.

> *We always have it at the end of the day, of the morning, a meeting for them to exchange their experiences and evaluate*

the issues [...] when it is a specific issue, I speak soon after the procedure. As the internship evolves and they're more confident, these meetings are gradually reduced, because they've already got more skill [...] we concluded faster. (IP4)

The professor monitors the passage of duty of the student. After completion, student is excused from the internship and the professor does not make observations on performance. (OP6PC)

Professor does not make observations on student performance after passing duty. (OP5PC)

In the field of practice, some rich moments for reflection in and about the action, as the nursing consultation provided to the woman and the correction of nursing developments made by the student, are not explored by the professor, who does not let a student know how the performance during the activity was evaluated. (OP4PC)

During the observations of theoretical-practical activities, we were able to identify only one teaching moment by demonstration and imitation, which stimulated reflection on the student action, as shown in the excerpt below:

Professor shows the student how to dilute a medication. Student tries to perform it as the professor demonstrated and reflects on the action, determining that the way she placed her finger on the tip of the syringe caused a waste of medication. (OP2PC)

Given this potentiality, and considering that it is the professor who sets the tone of the pedagogical relationship, the professor should stimulate the student to reflect both on the care provided and on the listening/imitating and the demonstrating/telling of the professor.

Combining the telling/listening and the demonstrating/imitating in the pedagogical relationship

This category covers the various modes of dialogue in the pedagogical relationship, from the perspective of a practical and reflective teaching, combining telling and listening and demonstrating and imitating. The professor, after having clear understanding of his/her role of fostering dialogue in the contexts of training, reflects on the conduct of the teaching-learning process and, at the same time, stimulates the students' reflection on their performance in academic activities.

After the internship activities, I think while driving home about what happened that morning, what could be done differently, improved, the way I conducted or not the activities, which student needs something else, what I failed to see and what needed to be seen. (IP4)

Professor praises performance of students in writing the course completion paper. The relationship established between professor and students stimulates reflection on reciprocal action, in which professor and students reflect on what they wrote. Professor uses words and actions when writing together with the students. (OP8TC)

In this dialogical relationship, the professor assumes the role of recognizing the particularities and frailties of every student, seeking to stimulate reflection on the process of training. In this sense, it is noteworthy that these findings are possible when professor and student are relatively sure of having built an adequate vision of the other's significance.

Dialogue is exchange, horizontal relationships, listening, in which persons participate and to which they contribute, feel co-responsible, protagonists of their knowledge. (IP3)

The professor often thinks the student is understanding and the student is not, strategies are needed to determine the student's level in the teaching-learning process. The professor should work with the student's abilities and difficulties because each student is unique. (IP8)

The dialogue established within the pedagogical relationship intertwines the telling and demonstrating of the professor with the listening and imitating of the student, generating reciprocal actions and reflections that foster initiative in relation to demands found in health services and in the other contexts of nursing training.

Pedagogical relationship and technological tools in nurse training: behavioral universes and impasses in the teaching-learning process

The results indicate that the behavioral impasses encountered are related to technological tools adopted by students during training. The computer and the cell phone, although indispensable nowadays, also contribute so students lose focus during the activities developed in the context of the classroom and in the field of practice. Thus, participating professors seek methodological alternatives to rivet the interest of the student for the content to be taught and establish pedagogical agreements for use of cell phone during the theoretical-practical activities in health services.

Pedagogical strategies might not be the most appropriate, we have worked with different teaching methodologies, with different issues, and the cell phone is a problem, all the time on the cell phone chatting [...] they are doing that all the time, the whole time on the laptop. (IP4)

One thing that bothers me a lot, especially in field activity of internship, is the use of a cell phone. [...] it distracts a lot and this generation is completely attached to technology. I establish a pedagogical contract [...] cell phone in the pocket of the coat, on mute. Getting a call, only if it is an emergency. Student needs to learn how to negotiate the use of the phone. [...] Sometimes we prepare the class and study, and students are not interested, they have their notebooks, cell phones, and then you sometimes feel frustrated [...]. (IP2)

It was possible to identify a reflective movement by the professors on the use of technologies during training, evidenced during a moment of observation of a professor in the field of practice, as shown in the excerpt below:

During theoretical discussion in the field of practice, professor talks about the provocation of the cell phone use carried out the day before and says he reflected on the conversation he had with the students. He questions about what we can do to enhance and to relate this communication technology in the educational process, so that the phone does not interfere with not blur the educational process itself. He explains that the professor is bothered because of the impression that the student is not paying attention. Students raise the question of the tools that the cell phone features (chronometer, programs, texts) *and which are helpful during class. How to include the technological tool into the educational process? So it's more in the sense of instigating, to put in discussion, but not in the sense of punishing. It is to reflect.* (OP3PC)

In summary, the reflection instigated by a professor originated from a demand of the training context in which the professor reflected on the provocation occurred the day before and encouraged students to continue to reflect on the use of the phone.

DISCUSSION

The dialogue established within the pedagogical relation is a challenge to be faced in practical-reflective teaching, so professors and students can build a relationship that foster thought and action in the theoretical context and in the field of practice. This relationship must provide reflection considering behavioral impasses that pervade the teaching-learning process.

In this perspective, professors has many ways to "tell" their students. Specific instructions can be given on how a given task should be performed, a student's product or process can be criticized, suggesting how this student can improve performance. The professor may, also, instruct them on how to set priorities and propose experiments that enable doing, analyzing, and reformulating problems or reflecting on the process demonstrated by the professor[2].

The different ways to communicate are present in the pedagogical relationship of the undergraduate program. Professors, by means of dialogue, provide specific instruction on certain procedures to be performed in the field of practice, criticize the medical care provided, giving suggestions on how students can improve their knowledge, and demonstrate how to set priorities.

Regardless of what the professor will tell the student, it is important that this dialogue occurs in the context of doing, while the students are performing a certain task or about to start a new one, leading to reflection about this task or instigating to imagine tasks that may be performed in the future[2]. This movement of reciprocal reflection between professor and student is a network that interweaves dialogue into the pedagogical relationship and enables breaking impasses in the teaching-learning process.

In the context of pedagogical relationship, the professor should find alternatives and raise awareness as for the conduct of the reflective process, making the opportunities of training and service a fertile soil for the acquisition of skills for the reciprocal reflection in nurse training. Bringing to the daily life of the training process the reflection on the impasses generated, as for example the technological tools, enables that

professors and students find alternatives so such impasses turn into fertile soil for the teaching-learning process and into reciprocal reflection-in-action.

It is undeniable that the changes in the contemporary world have generated transformations in the relations among individuals, mainly by the use of information technology, which caused changes in the living habits of the persons and, consequently, in human relations established in the social context and in the work context[7]. From the data presented, concerns emerge on how educating a professional to be critical and reflective can contribute to solving the problems of practice, taking as example the use of cell phones during the teaching-learning activities, which should be consistent with the curricular proposal and, consequently, with the knowledge generated and focused on the needs of society[8].

A study developed to know the conception of undergraduate students in nursing about their training points that we need to consider the importance of the humanist aspects in the training of nurses, because this professional will develop in society not only a role of carrying out, but of proposing humanized policies and practices[9]. As the student approaches the career as a nurse, it is important that he/she sees nursing as a profession that cares about aspects that are beyond technique, also considering the historical, social, cultural, and economical context, the family and community, with actions based on solidarity, sensitivity, and respect[10].

These practices should be experienced in the dialogue established within the pedagogical relationship during the teaching-learning process and, to this end, the training should emphasize the pursuit of knowledge and not just the transmission of information. In this sense, it is believed that the conception of knowledge assumes, among several factors, the subject-object relationship (student-content), in a dynamic and permanent exchange, which becomes richer and more effective according to the professor's position of mediator[11].

It is observed that the pedagogical relationship in the practical-reflective teaching is based on the premise that the field of practice is fertile soil for the reflection-in-action and on the action. In this perspective, the professor, being aware of the gamut of situations of the actual context of health services and of the training itself, creates opportunities for students to exercise reflection on their own training process, thus building a repertoire of knowledge that addresses the actual problems in the context of practice.

Stimulus for reflection is directly related to the professor's role and motivation in guiding the pedagogical process. However, the student must be open to the dialogic-reflective process, acting with responsibility, autonomy, and reflecting on the potentialities and weaknesses in the training.

In analyzing the pedagogical relationship, it was possible to perceive that the development of theoretical-practical activities and supervised internships is permeated by moments of professor demonstration and student imitation. The teaching and learning processes, present in the pedagogical relationship, occur naturally in the daily training, with professor and student not even realizing that a form of reflection-in-action is being developed.

The training, when focused on a reflective teaching, challenges, stimulates, and aids students in building skills and competencies that strengthen the professional commitment[12]. In that sense, fostering the student's curiosity, leading to questioning and doubting goes beyond the mere transmission of knowledge and advances to the development of critical and reflective capacity, favoring the teaching-learning process and allowing for the building of knowledge through significant experiences, founded on the professor/student relationship[13-14]. In addition, strengthening the dialogue stimulates the building of a relationship of trust between professional and client, through a serene, open, and dialogic attitude[15].

A research developed with professors about the meaning of the teaching-learning process points that teaching and learning are complex and do not depend solely on the will of the professor, as it involves the building of knowledge necessary for the training of the future professional. It is a process of shared responsibility, guided by the professor's pedagogical conceptions and the student's commitment to the training[16].

The professor, considering the situations occurred in the training of nurses, will determine the kind of relationship established with the student. Thus, the professor has the possibility of building a pedagogical relationship of trust, which allows for receptivity to dialogue, for approach to the student's reality, for listening of their personal and academic experiences. Adoption of this attitude by the professor is also supported by other authors that advocate that the strengthening of their pedagogical practice stimulates autonomy, leadership, communication, and prepares the student for team work[17-18].

The data indicate that the professor needs to be aware of the validity of the acquisition of knowledge, skills, and attitudes, that is, his/her relationship with the competencies needed, their practical value, their possibility of application, and their connection with knowledge acquired previously by the student. Thus, these aspects enable the solid building of knowledge. However, the professor's view cannot be focused only on the syllabus, but must also aim at raising the student's awareness as to human values[10].

The professor, by demonstrating parts or aspects of a given procedure to help the student understand what he/she believes to be necessary, gives the student an imitation capacity. This process of demonstration and imitation can, at first, deserve no special attention, but reconstruction by imitation is a type of process for solution of a given problem or situation. The imitators, in the case the students, build and test, in their own actions, the essential characteristics of the action observed, hence developing reflection in action. Reflection occurs at the moment a students seeks to perform the action demonstrated by the professor, reflecting in action both on the process observed and on his/her attempts to reproduce it[2].

During academic activities carried out in the daily life of health services, professor and student are closer to each other than in a theory class, because the student group is reduced[1]. In the context of training, both have the opportunity to establish a dialogue founded on a concrete reality of medical care, which favors the education of a critical and reflective professional, able to reflect on the practice to transform it[16].

In the practical-reflective teaching, the professor's acts of showing and telling are intertwined in the same way that the student's listening and imitating. By means of this combination, the student can learn that which would not be learned solely by imitation or by following the professor's instructions. Each process can help fill the communication spaces inherent in the other[2].

Combining the telling/listening and the demonstrating/imitating offers a great diversity of possible objects and modes of reflection that can be combined to fill the spaces inherent in each sub-process. These are connected so an intervention or response triggers or builds another one, connecting the acts of asking, answering, advising, demonstrating, observing, imitating, and criticizing[2].

The dialogue established between professor and student can be built by a chain of reciprocal actions and reflections, in which professors have the opportunity of reflecting on the message implicit in their own performance. Student, in turn, can also reflect on problems arising from their performance. This reflection on prior performance instigates the professor to provide a new demonstration, and allows for the student to find a new way of performing certain action[2].

In the context of training, students can reflect on their construction of knowledge and on the medical care process. The dialogic moment between those involved in medical care encourages students to act responsibly, evaluating and modifying their practices, exercising at the academic context their ability to exercise the profession of nursing with quality and respect for the client of health services[19].

Successful dialogue in the pedagogical relationship does not necessarily mean that the student will accept and agree with all the intentions of the professor. The more students understand what the professor is telling them, the greater the conditions to define whether or not they want to learn what the professor wants to teach. When a student has difficulty in understanding by an apparent inability or lack of will, the professor should consider that this failure may not be related to limitations of the student or to the instructions, but to refusal to give up something the student values[2].

The professor, when faced with these difficulties, can seek teaching-learning strategies that are more appropriate to the needs and particularities of a certain group or of a student and of society in general[20-21]. Feedback from professor to student, pointing out their fortes and weaknesses, as well as the combination of students with higher performance with those that have some difficulty also contribute so the training process become of excellence[20].

The teaching-learning process, during nurse training, aims to educate professionals so they are not only scientifically trained, but aims to educate nurses as human beings, by means of an approach in which professor and students are increasingly close, with a high degree of satisfaction, tranquility, and confidence as for the professional training[14].

The diversity of methodological options to which professors have access today enables them to organize their communication with students, to introduce a certain subject. Thus, each professor can find ways that are appropriate to their needs and to those of the students, seeking to integrate

various methodological procedures and technologies, through pedagogical planning[14]. This organization also involves the perception of students as a persons in training, their difficulties, facilities, and successes in the routine of classroom and in health services[21].

Establishment a pedagogical agreement is an alternative found by the professor so technological tools are used in a conscious way. However, this, by itself, does not comprise the complexity of factors that can aid or hinder the establishment of the pedagogical relationship considering these technologies. It is necessary to go beyond the agreement, establishing a reflective dialogue with students so they, with the professor, can find ways to enhance the use of these tools in the pedagogical relationship.

In the nursing care teaching-learning process, professor and student need to act in tandem, seeking, defining, and effecting new ways of teaching so, together, they carry out the action of learning[10]. When the dialogue between professor and student is effective, it becomes reflection-in-action and on mutual action[2]. The training of the professor fosters a constant revitalization in the context of training, by seeking methodological strategies to teach and learn which allow the transformation of educational practices, of the development of skills and competencies so the future nurse becomes critical and reflective to work in health services[22].

Teaching strategies are a key aspect of faculty action in the teaching-learning process; however, the success of each strategy depends on factors related to both professors and students, involving motivation, knowledge, and persistence in the act of teaching and learning[14].

FINAL CONSIDERATIONS

The development of this research enabled the identification of significant elements for the establishment of the pedagogical relationship in practical-reflective teaching. Dialogue between professor and student is the fundamental guide to stimulate reflection both in the theoretical context and in the field of practice. Activities carried out in the daily life of the services become more challenging for the pedagogical relationship, as demands arise from real and concrete needs. Professor and student need to reflect upon this demand so the answers provided to clients of the services can satisfy their needs of medical care. However, the proximity of professors and students promotes a more effective pedagogical relationship and allows for the professor to have a pedagogical and reflective practice.

The teaching-learning process in the program is founded on the professor's acts of telling and demonstrating and on the student's listening and imitating; however, these processes need to be more organized so reflection occurs in the four moments, and, especially, is formed by a chain of reciprocal actions and reflections.

Another relevant aspect in the pedagogical relationship is the impasses resulting from the use of technologies, both in the theoretical context and in the field of practice. In this sense, professors and students, in becoming receptive to the process of reflection-in-action and on reciprocal action, can eliminate the pedagogical impasses and find possibilities for negotiation and enhancement of these tools in nurse training.

We note that the professor, when establishing a dialogic-reflective tone in the pedagogical relationship, opens paths to new discoveries, enabling the creation of teaching-learning spaces that stimulate autonomy, abilities, and critical and reflective attitudes of students in the course of their education.

The pedagogical relationship intertwined by a reflective dialogue creates opportunities so the actual and concrete situations of health services and of the education itself become elements that foster reflection in the training of the nurse. In this sense, the professor must seek strategies that best meet the needs of different moments, contexts, and subjects involved in the training process.

FUNDING

REFERENCES

1. Guedes GF, Ohara CV, Silva GT. Intensive care unit: a significant space for the professor-student relationship. Acta Paul Enferm [Internet]. 2012[cited 2014 Ago 26];25(2):146-50. Available from: http://www.scielo.br/pdf/ape/v25nspe2/23.pdf

2. Schön DA. Educando o Profissional Reflexivo: um novo design para o ensino e a aprendizagem. Porto Alegre: Artmed; 2000. 256 p.

3. Paim AS, Iappe NT, Rocha DLB. [Teaching methods used by teachers of nursing: focus on questionable methodology]. Enferm Glob [Internet]. 2015[cited 2016 Mar 02];14(37):136-52. Available from: http://scielo.isciii.es/pdf/eg/v14n37/docencia2.pdf Spanish.

4. Oliveira GFN, Medeiros GR, Nogueira VC, Santos CM, Gurgel CA, Rêgo Pinto DPS. [Factors related to nurses professional identity: overview of students]. Enferm Glob [Internet]. 2013[cited 2016 Mar 02];12(29):130-7. Available from: http://scielo.isciii.es/pdf/eg/v12n29/docencia1.pdf Spanish.

5. Ludke M, Andrè MEDA. Pesquisa em educação: abordagens qualitativas. São Paulo: EPU; 2013.

6. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14ª ed. São Paulo: Hucitec; 2014.

7. Palhares GEM, Haueisen MS, Paolinelli RFC. Educação permanente em saúde: reflexões e desafios. Cienc Enferm [Internet]. 2010[cited 2016 Feb 17];16(2):25-33. Available from: http://www.scielo.cl/pdf/cienf/v16n2/art_04.pdf

8. Kinsella EA. Professional knowledge and the epistemology of reflective practice. Nurs Philos [Internet]. 2010[cited 2016 Feb 25];11(1):3-14. Available from: http://www.

ncbi.nlm.nih.gov/pubmed/20017878

9. Keiser DE, Serbim AK. [National curriculum guidelines: perceptions of academics about their training in nursing]. Rev Gaúcha Enferm [Internet]. 2009[cited 2014 Sep 19];30(4):633-40. Available from: http://www.scielo.br/pdf/rgenf/v30n4/a08v30n4 Portuguese.

10. Biasi LS, Pedro ENR. [Experiences of learning about nursing care]. Rev Esc Enferm USP [Internet]. 2009[cited 2014 Dec 19];43(3):506-11. Available from: http://www.scielo.br/pdf/reeusp/v43n3/a02v43n3.pdf Portuguese.

11. Prado C, Leite MM. [Understanding the intentions of actions of a multiprofessional teaching staff at a nursing undergraduate course]. Rev Bras Enferm [Internet]. 2010[cited 2014 Nov 15];63(4):548-54. Available from: http://www.scielo.br/pdf/reben/v63n4/08.pdf Portuguese.

12. Semim GM, Souza MCBM, Corrêa AK. [Professor as a facilitating agent of the teaching learning process: perspective of the nursing student]. Rev Gaúcha Enferm [Internet]. 2009[cited 2014 Nov 27];30(3):484-91. Available from: http://seer.ufrgs.br/index.php/RevistaGauchadeEnfermagem/article/view/9210/6969 Portuguese.

13. Kempfer SS, Prado ML. Reflecting about assessment by reflective-critical and creative thinking in nursing education in Brazil. J Nurs Care [Internet]. 2014[cited 2016 Feb 29];3(6):1-2. Available from: http://www.omicsgroup.org/journals/reflecting-about-assessment-2167-1168-3-e118.pdf

14. Moura ECC, Mesquita LFC. Moura ECC, Mesquita LFC. [Education-learning strategies according to nursing students' perception]. Rev Bras Enferm [Internet]. 2010[cited 2014 Oct 19];63(5):793-8. Available from: http://www.scielo.br/pdf/reben/v63n5/16.pdf Portuguese.

15. Lara JRL, Moral RR, García FG. Teoría en la acción sobre la relación con el paciente. Una perspectiva diferente de representar y entender el comportamiento del médico de familia en la consulta. Aten Primaria [Internet]. 2015[cited 2016 Feb 25];47(5):279-86. Available from: http://www.sciencedirect.com/science/article/pii/S0212656714002662

16. Ramírez MCM, Rivera DCO, Pulido CF, Aguilar LCG. El significado de enseñar y aprender para los docentes. Invest Educ Enf [Internet]. 2015[cited 2016 Feb 17];33(1):8-16. Available from: http://www.scielo.org.co/pdf/iee/v33n1/v33n1a02.pdf

17. Menegaz JC, Backes VMS. Education for the unified health system: what do good professors do from the perspective of students? Invest Educ Enferm [Internet]. 2015[cited 2016 Feb 15];33(3):500-08. Available from: http://www.scielo.org.co/pdf/iee/v33n3/v33n3a14.pdf

18. Lima MM, Reibnitz KS, Prado ML, Kloh D. Comprehensiveness as a pedagogical principle in nursing education. Texto Contexto Enferm [Internet]. 2013[cited 2014 Dec 15];22(1):106-13. Available from: http://www.scielo.br/pdf/tce/v22n1/13.pdf

19. Alves EATD, Cogo ALP. Nursing students' perception of the learning process in a hospital setting. Rev Gaúcha Enferm [Internet]. 2014 Mar[cited 2014 Oct 10];35(1):102-9. Available from: http://www.scielo.br/pdf/rgenf/v35n1/pt_1983-1447-rgenf-35-01-00102.pdf

20. Johnson-Farmer B, Frenn M. Teaching excellence: what great teachers teach us. J Prof Nurs [Internet]. 2009[cited 2014 Ago 20];25(5):267-72. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19751930

21. Waterkemper R, Prado ML, Prado ML, Medina-Moya JL, Backes VMS. From "being to the self" to "become to be": on development of autonomy construction in nursing students. Invest Educ Enferm [Internet]. 2014[cited 2016 Feb 16];32(1):33-40. Available from: http://aprendeenlinea.udea.edu.co/revistas/index.php/iee/article/view/18547/15955

22. Spagnol CA, Monteiro LAS, Paula CL, Bastos JM, Honorato JAG. [Experiencing conflict situations in the context of nursing: the use of sketch as a teaching-learning strategy]. Esc Anna Nery Rev Enferm [Internet]. 2013 [cited 2014 Nov 08];17(1):184–9. Available from: http://www.scielo.br/pdf/ean/v17n1/26.pdf Portuguese.