

# Planning nursing teaching: educational purposes and clinical competence\*

PLANEJAMENTO DE ENSINO EM ENFERMAGEM: INTENÇÕES EDUCATIVAS E AS COMPETÊNCIAS CLÍNICAS

PLANIFICACIÓN DE LA ENSEÑANZA EN ENFERMERÍA: INTENCIONES EDUCATIVAS Y LAS COMPETENCIAS CLÍNICAS

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## ABSTRACT

Thinking about nursing education implies articulating this issue with the expressions of theoretical frameworks, from the perspective of a pedagogical aspect that includes both constructivism and competencies. The objective was to characterize, from a longitudinal view, the construction of care competencies that exist in the teaching plans of nursing undergraduate programs. This exploratory-descriptive study used a qualitative approach. Documentary analysis was performed on the nine teaching plans of undergraduate care subjects. The ethical-legal aspects were guaranteed, so that data was collected only after the study had been approved by the Research Ethics Committee. The data evidenced a curriculum organization centered on subjects, maintaining internal rationales that seem to resist summative organizations. Signs emerge of hardly substantial links between any previous knowledge and the strengthening of critical judgment and clinical reasoning. As proposed, the study contributed with reconsiderations for the teaching-learning process and showed the influence of constructivism on the proposal of clinical competencies.

## KEY WORDS:

Education, nursing.  
Competence-based education.  
Professional competence.  
Professional practice.

## RESUMO

Pensar a formação de enfermeiros pressupõe articular essa questão às expressões de referenciais teóricos, na perspectiva de uma vertente pedagógica que passe pelo construtivismo e por competências. O objetivo foi caracterizar, numa visão longitudinal, a constituição das competências assistenciais nos cursos de graduação em Enfermagem contidas nos Planos de Ensino. O estudo teve um caráter exploratório-descritivo, com abordagem qualitativa. Foi realizada uma análise documental dos 9 planos de ensino das disciplinas assistenciais da graduação. Os aspectos ético-legais foram garantidos, sendo os dados coletados após aprovação pelo Comitê de Ética em Pesquisa. Os dados evidenciaram uma organização curricular centrada em disciplinas, mantendo lógicas internas aparentemente refratárias às organizações somativas. Daí emergem sinalizações de uma aprendizagem com vínculos pouco substantivos entre os conhecimentos prévios e a potencialização do julgamento crítico e do raciocínio clínico. Como proposta, o estudo trouxe reconsiderações para o processo de ensino-aprendizagem e a influência da concepção construtivista na proposição das competências clínicas.

## DESCRITORES:

Educação em enfermagem.  
Educação baseada em competências.  
Competência profissional.  
Prática profissional.

## RESUMEN

Pensar en la formación de enfermeros presupone articular esta cuestión con las expresiones de marcos teóricos, en la perspectiva de una vertiente pedagógica que pase por el constructivismo y por competencias. El objetivo fue caracterizar, en una visión longitudinal, la constitución de las competencias asistenciales en el curso de Enfermería contenidas en los Planos de Enseñanza. El estudio tuvo un carácter exploratorio descriptivo, en un abordaje cualitativo. Fue realizado un análisis documental de los 9 planos de enseñanza de las disciplinas asistenciales del curso. Los aspectos ético y legales fueron garantizados, siendo los datos recolectados después de aprobados por el Comité de Ética en Investigación. Los datos colocaron en evidencia una organización curricular centrada en disciplinas, manteniendo lógicas internas aparentemente refractarias a las organizaciones sumativas. Emergen señalizaciones de un aprendizaje con vínculos poco substantivos entre los conocimientos previos y la potenciación del juzgamiento crítico y del raciocinio clínico. Como propuesta, el estudio trajo reconsideraciones para el proceso enseñanza y aprendizaje y la influencia de la concepción constructivista en la proposición de las competencias clínicas.

## DESCRIPTORES:

Educación en enfermería.  
Educación basada en competencias.  
Competencia profesional.  
Práctica profesional.

\* Extracted from the dissertation "A construção da competência clínica: da concepção dos planejamentos de ensino às representações da aprendizagem entre graduandos de Enfermagem". School of Nursing, University of São Paulo, 2004. <sup>1</sup>Nurse. Doctor Professor of the Nursing Department, Faculdade de Medicina de Botucatu, SP, Brazil. mqueiroz@fmb.unesp.br. <sup>2</sup>Nurse. Full Professor at School of Nursing at University of São Paulo, SP, Brazil. encana@usp.br. <sup>3</sup>Nurse. Full Professor at School of Nursing at University of São Paulo, SP, Brazil. cilenecostardi@globo.com

## INTRODUCTION

Bringing graduation studies to face the dilemmas of education, in the century that is now beginning, assumes approximating the worlds of education and work, mediated by competency measurements as instruments. Thus, a contribution is proposed to solve the major issues involved in nursing education as well as in the use of human resources in this specific area. Therefore, thinking about a graduation model that interacts with the current demands implies discussing competencies in health and in nursing.

The current context is one of an unstable and flexible work market, with growing demands regarding productivity and quality, increasing the requirements for workers' qualification. There has been an increased generalization of the implementation of education and work-force management models based on professional competencies. In addition to technical-instrumental flexibility, the new work demands require intellectual flexibility in order to continuously improve the production processes of goods and services<sup>(1)</sup>.

The work and education worlds should be a reference for developing possibilities of acknowledgment and approximation, with a view to making changes in both settings<sup>(2)</sup>.

In regards to competency, this approach addresses personnel education for the health sector since its first introduction by the Law of Basic Guidelines (*Lei de Diretrizes e Bases - LDB*)<sup>(3)</sup>.

It is possible that, when a competency-oriented curriculum is designed, the basis might be a certain idea of competency without previously determining what would characterize the professional education with this reference, since there is a lack of definition in this approach until today. Competency, in texts regarding education, is usually referred to as the concept of ability, and, in terms of work, it appears as a synonym for critical posture, reviewed knowledge, professionalism, professional improvement, updating, and others. Its meaning should be deeper analyzed because there is a risk of interpreting it according to common sense and thus lose the possibility of understanding the content with a clear and systematic analysis.

Competency is presented as being a capacity to act efficaciously in a given situation, based on knowledge, but without it being the limitation. Knowledge is one of many complementary cognitive resources, which permit to deal with a situation in the best possible way. It is an important tool of competency, but simply having knowledge does not guarantee a competent action; another part is the capacity (and courage) to innovate associated with other cognitive and behavioral abilities. The competencies expressed in different actions, like: design a hypothesis and verify it, argument on a text, solve a clinical problem, are not, per se, knowledge; they *use, integrate, or mobilize that knowledge*.

The clinical competencies, for example, go beyond a precise memorization of an opportune recollection of pertinent theories. Atypical situations demand making relations, interpretations, interpolations, inferences, inventions, in summary, complex mental operations whose conduction can only be done live, during that moment, due to one's knowledge and expertise, in addition to one's view of the situation<sup>(4)</sup>.

To the clinical setting is added a nurse capable of proposing and delivering care in a way that the service meets the real needs of the individual, in the biological sphere, but without losing sight of other dimensions, from the perspective of a human inserted in that reality.

The action of building competencies is attached to developing a scheme to mobilize knowledge with a discernment that benefits an effective action. The mobilization schemes of several cognitive resources in a situation involving a complex action develop and become stable in the practice. Scheme programs are not applicable to human beings through external intervention. Furthermore, subjects cannot build schemes by simply interiorizing procedural knowledge. Schemes are built by training renewed experiences, simultaneously redundant and structuring, and this construction becomes more effective when associated to a reflexive posture, considering the time to live the experiences and the possibility to analyze it<sup>(4)</sup>.

After having established the competency concept, it is necessary to present a synthesis of the theories that can provide the foundation for, mainly, the stages of human intellectual development, considering one's innate characteristics and those resulting from social relations. The constructivist theory is constituted by the principle that

Human beings have a predisposition to think, judge, on rational bases. In other words, men, human beings, have a mental ability that develops in the most different contexts, but is essentially founded on reason<sup>(5)</sup>.

This historical-social development theory is directed mainly to the study of superior psychological functions. Therefore, the psychological mechanisms permit to differentiate reflex actions, automated actions or actions of simple association among the elements. Learning permits to awaken the individual's internal processes that are associated to the development of the person in their relation with the socio-cultural environment in which they relate to others<sup>(6)</sup>.

The description of superior psychological function internalizations presents the concept that

the internalization process consisting of a series of changes: an operation that initially represents an external activity is reconstructed and begins to occur internally. An interpersonal process is transformed into an intrapersonal process.

The transformation of an interpersonal process into an intrapersonal process results from a long series of events that occurred during the development<sup>(7)</sup>.

This approach transported to the teaching-learning process demonstrates how intellectual development must be seen in a prospective way, i.e., the aim is the individuals' maturation from their psychic substrate, in a course of progressive complexity, with the reconstruction and re-elaboration of meanings that are also attributed by the cultural group<sup>(6)</sup>.

Having constructivist postulates as the guiding principle, it is suitable to think about including in the teaching plan the teaching methods and strategies to make those postulates operational.

An indicative of the tendency of care should relate to the new possibilities of professional work. This tendency assumes

the existence of a new education and work process that is apt to strengthen nurses' cognitive-symbolic-affective capital, recognized in their condition of people capable of performing their profession based on superior psychological processes; thought, language, and subjunctive behavior. A professional who is apt to think, feel, and act within a Health System, demands re-elaborations in view of the diversity and complexity of the care demands, comprising a new profile for professional competency with a particular construction characteristics<sup>(8)</sup>.

In view of these issues, we realize that the work world calls for competency, and education interposes in this process. Hence, we wonder: how will this graduation advance so as to meet these needs?

To face this challenge implies investing in education projects that, considering the experience of their subjects - professors and students identify the guiding principles of a new graduation founded on the development of competencies, based on the clinical perspective. Therefore, the study hypothesis is that nursing graduation does not have a sustainable concept about what competency is, using the competency referential as a synonym for ability and capacity, which shows that it is a concept that, in nursing, remains under construction. There is no convergence between clinical competency in nursing and this theoretical elaboration of competency, even if chaotic in the graduation, there is little talk with the practice of nurses in the field.

To verify the validity of this hypothesis and in view of these premises, it is suitable to ask:

What are the meaning constructions relative to competency in each health care discipline? How do they relate with each other? How does this synthesized construction relate with the other theoretical references for competency?

Bearing this in mind, the study objective is to characterize a longitudinal view of the constitution of health care competencies in the teaching plans in nursing graduation.

## METHOD

This is an exploratory-descriptive study using a qualitative approach. The purpose of an exploratory study is to provide a greater familiarity with the issue, with a view to make it more explicit. The purpose of descriptive studies, on the other hand, is to describe the characteristics of a certain population of phenomenon, or to establish relationships between the variables<sup>(9)</sup>.

In this construction, the study turned to the Document Analysis of the teaching plans, with a total of nine health care disciplines in graduation, with the aim to identify meaning matrices relating to the construction of clinical competency.

To do this, the document analysis technique was used, which is a method that is indicated in qualitative studies with the purpose to identify information in documents, based on questions or hypotheses. This analysis considers as documents every material in writing that can be used as a source of information about human behavior, including laws, regulations, norms, evaluations, letters, memorandums, and other sources<sup>(10)</sup>.

The study was performed at the Nursing Undergraduate Course, within the Botucatu Medical School, São Paulo State University, Brazil. This graduation course was created in 1989, and became a department at the College of Medicine in 1999. The minimum duration is four years, full-time, and offers 30 places per year. The study was designed within the validity of the former pedagogical political project, previous to the new one that started in 2006. Thus, it is considered the first year with students attending basic cycle disciplines, which are offered by the UNESP Biosciences Institute. Other pre-professionalizing disciplines are held by other departments at the College of Medicine, and as of the second year, the professionalizing disciplines begin.

The curricular organization until then is presented based on an inflexible linear program, with many class hours and very little formal free time in the curricular structure for the student to build knowledge. The coordination of the Nursing Course has worked together with the Graduation Course Council to implement the pedagogical project starting in 2006, according to the Basic Guideline Laws<sup>(3)</sup>.

It is based on the reality of the nursing education practice, which is inserted in a culturally and socially regulated context, linking work and education worlds, outlining possibilities of interaction between objectives, values, concepts, and actions prevalent in both, that we aim at identifying the expressions of competency that they mobilize, with a view to strengthening the decisions relative to the graduation student.

The theoretical frameworks used were the constructivist principles and the premises that guide the construction of competencies. The pedagogical intervention also has a before and an after in the educational practice that comprise

substantial parts, composed by the planning and evaluation of these educational processes. According to what was adopted in the study to oppose the data contained in the teaching plan, the concept about the learning processes go through

a form of determining the objectives or purposes of education and consist in executing it in relation to the capacities that are intended to be developed in the students; rating human being capacities and stating that *it establishes a group of cognitive or intellectual, motor, equilibrium and personal autonomy (affective) capacities, of interpersonal relation or of social insertion and action*<sup>(11)</sup>.

In this study, the documents were focused on the 9 teaching plans of the disciplines rated as health care disciplines.

As for the ethical aspects, the study was developed after being approved by the Nursing Graduation Course Council and the faculty responsible for the involved professionalizing disciplines. Afterwards, the project was forwarded to the Research Ethics Committee at Hospital das Clínicas de Botucatu – UNESP, and was approved according to Process OF. 468/2002-CEP. For the document analysis, the

present study was also based on the premises of content analysis, considering the essential differences<sup>(12)</sup>.

## RESULTS AND DISCUSSION

It can be considered that the qualification of the nursing educational practice goes through the deep understanding of the processes that support its configuration, dependent on the complex interrelation of the multiple factors that articulate in these teaching situations, including the following: type of methodological activity, material aspects of the situation, professor style, social relations, cultural contents, and others<sup>(11)</sup>. In this study, the privileged analysis mark was focused on the sequence of disciplines that found the clinical approach, including the analysis of the proposed objectives, the ranked contents, and the strategies recommended for the implementation of these contents, which have the clinic as a reference.

Considering teaching plans as the measurement, it was possible to identify, through document analysis, one consensual intention of training, founded on valuing evidence-based practice.

**Chart 1** - Health care disciplines in the graduation curriculum structure - São Paulo - 2004

Disciplines	Insertion	Year /Semester	Class Hours
Introduction to Nursing		1 <sup>st</sup> / 2 <sup>nd</sup>	Total: 45h (T=28h/P=17h)
Nursing Foundations		2 <sup>nd</sup> / 1 <sup>st</sup>	Total: 330h (T=180h/P=150h)
Medical-Surgical Nursing		2 <sup>nd</sup> / 2 <sup>nd</sup>	Total: 512h (T=121h/P=376h)
Nursing in Operation Centers		3 <sup>rd</sup> / 1 <sup>st</sup>	Total: 240h (T=120h/P=120h)
Nursing in Transmissible Diseases		3 <sup>rd</sup> / 1 <sup>st</sup>	Total: 240h (T=120h/P=120h)
Pediatric Nursing		3 <sup>rd</sup> / 2 <sup>nd</sup>	Total: 240h (T=120h/P=120h)
Gynecologic, Obstetric and Neonatal Nursing		3 <sup>rd</sup> / 2 <sup>nd</sup>	Total: 300h (T=150h/P=150h)
Psychiatric Nursing		4 <sup>th</sup> / 1 <sup>st</sup>	Total: 240h (T=120h/P=120h)
Preventive and Community Nursing		4 <sup>th</sup> / 1 <sup>st</sup>	Total: 240h (T=60h/P=180h)

The data from the Pedagogical Political Project confirm that the health care dimension would be the privileged education activity, since it takes up approximately 2500 of the total 4600 graduation hours, being preceded by a basic cycle aimed at the support of theoretical bases, focusing approximately 900 hours on hegemonically biological contents, as well as, since it is a group of disciplines that are composed throughout graduation, theoretically the social, psychological, methodological, and historical perspective for about 720 hours. On the other hand, the clinic precedes Nursing Administration, with approximately 480 hours, present in the last semester of the 4<sup>th</sup> year; it is not included in Chart 1 since it presents health care disciplines and appears to portray an education perspective that demonstrates that it is necessary to first learn to provide care to then learn how to administrate. This outline evidences an education concept that considers processes alone, and does not recognize the

specificity of clinical and administrative thought/action, bringing complex repercussions to student education.

As for the clinical training, it occurs in a fragmented fashion, complying with the criteria *technical domain* and *specific clinics*, presented at a different time and space, arranged in a way so as to found theoretical-practical approaches for each discipline alone. The internal logic of each discipline will be the basic framework for selecting and articulating contents; with the basic priorities being the discipline content and its learning per se. The idea of integration for a broad integrated clinic and organizational forms likely to trigger and articulate the different approaches were not identified. From this perspective, not even the Curricular Guidelines<sup>(3)</sup> were being considered since the suggested thematic areas are still not present. Therefore, the *Nursing Care at the individual and collective level provided to chil-*

*dren, adolescents, adults, women, and aged people*<sup>(3)</sup> would be contents implicit to the disciplines, without the approximations necessary for the conformation of macro themes.

As a common denominator to every discipline it is possible to identify a predetermined allocation of time and space, made feasible at two moments: the classroom time and the practice time, in a lab or in the field. The practical experience always takes up at least half the total hour load of the disciplines. In two of them (Medical-Surgical Nursing and Preventive and Community Nursing) it is three fold the theoretical class hours.

The teaching plan components, in terms of the objectives related to the capacities that are expected to be developed, and the contents, according to their typology<sup>(11)</sup> were learned from each discipline according to each analyzed document. In synthesis, they were presented according to the analysis.

Having the discipline sequences and the teaching plan components as the reference, they are described and analyzed, and it is possible to identify a construction of the meaning, as follows:

- An Introduction discipline, which, in addition to being short, has its hours divided with a decontextualized practice, already outlining a procedural emphasis.
- An early professional initiation, considering the lack of mediations between the basic disciplines and the practice, in a lab or in the field. There is precocity because some activities would precede specific content, evidencing possibilities of performing meaningless actions, *an action beyond what is possible*, such as bathing in ICU, vital signs without physiopathological correlations, among other personal techniques.
- A Nursing Foundations and Medical-Surgical Nursing sequence that apparently is directed toward technical repetition, taking up a significant number of course hours, preceding the specific disciplines. It is possible to identify an intention of making them propaedeutic to the others, with specific competencies.

In this formulation, the thematic Adult Health area, one does not learn, since it theoretically favors a care model that is based on morbid events. A sequence of different disciplines, each introducing the student in specific niches of education, transmitting a *new now-do* already constructed and the absence of relative investments on optional contents as well as on the curricular apprenticeship, but it is a privileged space for: students to make links to previous important clinical experiences, in addition to promoting differentiated approaches to the work market.

The validation of individual health care projects was not verified; which would promote creative work; the experience of coordinating the health care process as an initiative that would strengthen the development of the competency related to making judgments and clinical decisions,

considering the practice context, the intra and interpersonal interactions, and the group of patients/users under their responsibility; and acknowledging specificity; among the processes of providing care (in the dual practice and in coordination) and administrating, considering the dynamics of institutional work, both with their specific theoretical, methodological, and operational frameworks<sup>(13)</sup>.

This education culture repeats a practical tradition that is demonstrated by means of formulating objectives, selecting contents and teaching strategies, including evaluation criteria<sup>(14)</sup>.

As complementary data, it is important to consider the predominance of the expositive technique as a relevant strategy to present the contents regarding the development of privileged capacities.

Another common evaluation element in the different disciplines concerns the prevalence of evaluation by the judgment of a professor, based on a theory, practice, or theory-practice score, which aims to measure what the student knows and does.

Placing the focus on the ranked objectives, it is possible to consider that their proposition aims, mainly, at developing motor abilities, sustained by cognitive investments to present facts and concepts that are necessary to the practice and that evolved from common to specific, without necessarily composing broad and integrated conceptual schemes<sup>(5)</sup>.

The content organization expresses a strong link to the physiopathological code and the theory of basic human necessities as the guide for care, with few investments made in sociological themes that would provide the basis for expressing health care service policies and programs and on the psychosocial approach for proposing relational themes. This formulation would comprise: theoretical investments relative to the presentation of conceptual bases in Nursing, which would be dissociated from knowledge theories, philosophical frameworks and other contents necessary for learning the meanings of the phenomena inherent to the care practice; the presentation of techniques, instruments, and methods related to the stated theoretical framework at a higher or lower degree; the analysis of the hospitalization process that would demonstrate the specificities of a instituted and instituting practice, of full character.

- The investment in procedural contents that gradually evolved from a skill or ability to isolated performance (vital signs, dressings, baths), adding rules, techniques, and methods of protection (biosafety); more complex actions, diversified and systematized (integral care) until a specific care, considering new environments (Surgical Center), new subjects (children and adolescents, women), new clinical approaches (transmissible diseases, psychiatry), new levels of attention (preventive and community nursing). It would be possible to identify the confluence of different references for organizing the contents; and a differentiated and broad space for repetition, in a lab or practice field.

In summary, it is considered that the educational investments presented promote partial mobilizations of the different proposed abilities, since: the factual contents (data, codes, rules)<sup>(11)</sup> are presented without any guarantee regarding time and of strategies focused on personal elaborations and constructions of these constructs; the procedural concepts focused on privileging reiteration instead of guaranteeing an open organization, adequate for new action projects. The reflection about the activity itself, the consciousness of the action, as well as the application in differentiated, less controlled contexts are not enough; the attitude contexts, which are less explored except for the pertinent conduct. Its cognitive (knowledge and beliefs), affective (feeling and preferences) and conduct (actions and statements of intention) components<sup>(11)</sup> show they do not deserve to be referred in the domains of the different clinical disciplines, including: activities that permit to determine the previous knowledge in relation to the new contents; a significant and functional proposition; an adjustment to each students' level of development; a formulation that would represent achievable challenges for the student and that, at the same time, would cause a cognitive conflict, a favorable attitude, a recognized effort, autonomy, in other words, learning to learn<sup>(11)</sup>.

Considering this culture, it is evidenced that there is a dissonance between a clinical competency that is required as the nurse's professional identity to meet a service dynamics under transformation and a reduced technical ability, since autonomy, project development, and the responsibility for their own education, which are elements that strengthen competency, remain receiving little mobilization among nursing graduation students.

The obtained results also make it possible to reiterate a series of questions that are also adequate to the present study, offering clues to reconsider discipline planning. Therefore, it is appropriate to ask if this venture includes activities that: permit to determine each student's previous knowledge regarding the new learning contents? Are the contents proposed in a way that they make sense and are functional to students? Are they adequate to each student's development level? Do they represent an achievable challenge, i.e., take their current competencies into consideration and make them improve with the necessary help, and, therefore, permit to create proximal development zones and intervene? Cause a cognitive conflict and promote the necessary mental activity to establish relations between the new and previous contents? Motivate learning new contents? Stimulate self-esteem and self-concept regarding the proposed learning activities? Help the student to acquire abilities related to learning to learn, which permit them to become more and more autonomous in their learning experiences<sup>(11)</sup>?

These questions, though not yet formulated, already evidence that this project is not likely to be meet the principles of an important and comprehensive learning, except in the approach of factual concepts and concepts with little complexity.

## FINAL CONSIDERATIONS

### *Contribution for a reconsideration of the teaching-learning process*

First, it is important to evidence relevant aspects of the curricular organization, which proposition remained centered on disciplines with organizational modalities that go from generic (Nursing Foundations/Medical-Surgical Nursing) to the most specific/specialized (Surgical-Center Nursing, Transmissible Diseases Nursing, Pediatric Nursing, Gynecologic Obstetric, and Neonatal Nursing, Psychiatric Nursing, Preventive and Community Nursing), maintaining internal logics that are apparently opposite the summative organizations.

The style of organizing contents, with the proposition of disciplines, could hinder both the integration of concepts and practices aimed at clinical training, and transferring contents to new learning situations. These acquisitions are presented and lived as *new*, reiterating a student relation with the anterior knowledge as inexistent or inappropriate. Hence, it is realized that the didactic transposition is under used, which makes it more difficult for students to use their acquisitions in new situations, new contexts, seeking new solutions for complex problems. Most of all, it can hinder the practice of competencies in the following situations:

mobilizing declarative knowledge (that describe what is real), procedure knowledge (state the path to be followed) and conduct knowledge (tell in which moment an action must be performed). This practice is more than a simple application of knowledge; it contains a parcel of reasoning, anticipation, judgment, creation, synthesis, and risk. The practice of competency puts our habits into action, and, above all, our schemes of perception, thoughts, and mobilization of the contents and information that we have memorized... demanding education situations that are more creative and more complex than alternating classes and assignments<sup>(14)</sup>.

The link between teaching activities and real life occurs through field practices that timidly respond to the problems of reality, promoting few initiatives of conscious integration. The interventions appear to be privileged according to an external order, sometimes distant from the students' reality.

As a complementary result of this investment, signs emerge from a learning experience with insignificant links between previous knowledge and improving critical judgment and critical reasoning, which are not much mobilized toward increasing the schemes of thoughts and action as manifestations of building, changing, increasing and diversifying the expressions of clinical competency. In summary, it is possible to consider that these results reinforce the duty of change.

moving teaching from the production line to a network of relationships that turn building competencies into a true weapon to deal with and overcome problems. The articulated knowledge cannot be related to a fad because the revolution of technology and of work relation has certainly excluded more professionals than it has included. Considering the facts and aiming at reconstructing a professional

expression extremely dependent on norms and on the control of bodies and minds, the constructivist bases gain attention as a renewed focus in nursing<sup>(15)</sup>.

Facing these challenges towards transformation presupposes, therefore, the consciousness about the complexity of the mission, which includes obstacles regarding: the involvement of the group in the project of changing; the particularity of collective work, including the conflicts, shadow zones, the unsaid, among other interactive expressions that hide desires, games of power; the specificities of each practice, the difficulties, the tensions, the concepts, the challenges, which each group of professors attributes to the possibilities of resistance and the spaces of transformation.

Created symbolically, but with a sense of challenge, it is considered necessary to undress from the old clothes of domination interested in the wearisome nursing work, to think about the new without forgetting the trajectory of teaching in nursing<sup>(16)</sup>.

This observation was inserted in this analysis to explain the comprehension that initiatives aimed at proposing references would become naïve if they were to disregard the underlying complexity in processes of change, considering the dilemmas and interaction games. There is complexity involved in mobilizing professors toward new challenges, which presume: consensus to aggregate direction, professors, students, and health care professionals involved in the project development to the concepts and agreed practices; investment in the required competencies as necessary and sufficient for the clinic in nursing. In this construction, knowledge should be linked to competencies, instead of being considered ends per se; possibilities of didactic transpositions, health care project appropriation, elaboration, and validation as an indispensable condition for the development of autonomy; the insertion of cross-sectional dimensions of competency development as theoretical foundations and to deepen the knowledge about the process; exceeding its introductory character, of providing foundations; have clinical practice conditions as the principle of reality including the problem of performance, conflicts, dilemmas, the instituted games, seduction, disorder, order, power, coercion, etc; evidence the relation/use of research, ethical-juridical precepts of elements that also measure making decisions/ deny prescriptions, making it possible to understand the situations and the search/proposition of action projects with authorship; aggregate the critical involvement and the ethical interrogation as *elements of a professional judgment located in the intersection between the intelligence of the situations and the concern with the other*<sup>(14)</sup>.

Taking these premises into consideration, we propose references for the development of clinical competencies, adjusting nursing to the constructivist presuppositions.

### ***The influence of the constructivist conception on the constitution of clinical competencies***

Based on the study data and the strength of the theoretical framework, an investment can be made on a contribution to improving the process of clinical education, evidencing the following guiding principles of this construction:

the best way to organize the curriculum is by didactic projects. In this proposal, the professor abandons the role of knowledge transmitter to become a researcher, working with real life situations, establishing goals, seeking evidences, making decisions<sup>(6)</sup>.

the idea of a network constitutes an emerging image for the representation of knowledge. In this perspective, knowing is like making a net, building and sharing meanings. Meanings, on the other hand, are built by means of the relations established between objects, notions, concepts. One meaning is like an array of relations<sup>(17)</sup>.

#### **This construction**

develops knowledge, which are initially situated and contextualized, and, later, linked to the academic theories and to accumulated professional knowledge. Simultaneously, knowledge develops capacities of learning, self-observation, self-diagnosis, and self-transformation. No melhor das hipóteses, it forms professionals capable of learning and changing themselves, alone or in groups, in a group or institutional dynamics<sup>(14)</sup>.

*This knowing to analyze can be nourished by means of the initiation to research, but, above all, results in a training in analyzing complex situations*<sup>(14)</sup>.

To develop clinical competency, therefore, presupposes

to build the problem as well as its solution, reflect, observe the data in each and every sense, give them consistency, draft hypotheses and analyze them in detail through thinking<sup>(14,18)</sup>.

This ideal is essential to improve the dynamics of nursing education, despite it not representing a sufficient condition for developing the competencies that one intends to invest on.

In this process, there is an interaction of elements related to the intrapersonal dynamics of those involved, which consist of objective conditions of the practice that, as previously stated, induce actions that do not necessarily have the thinking and clinical decision-making as a reference. However, this relation is, in fact, dynamic and sensitive to the exercise of its major competency, which has a mobilizing power originated from a conscious, supported, responsible and ethical insertion in the context of clinical health practice.

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