

AUTONOMY CONSTRUCTION AMONG NURSING STUDENTS IN DISTANCE EDUCATION

Porto Alegre – RS – 04/2010

Ana Luísa Petersen Cogo

Doutora em Enfermagem; Professora da Escola de Enfermagem da Universidade Federal do Rio Grande do Sul – analuisa@enf.ufrgs.br

Conteúdos e Habilidades (B)

Educação Universitária (3)

Relatório de Pesquisa (A)

Investigação Científica (1)

ABSTRACT

The aim of this qualitative case study is to evaluate the process of autonomy construction among nursing students in the course “Introduction to Anamnesis and Physical Examination”, offered in distance education mode, based on an epistemological constructivist and interactionist approach. Twenty students enrolled in the fourth semester of the undergraduate program in nursing participated in the study. The data were collected at Moodle (forums and chats) and in focus group, and were analyzed through the thematic analysis technique. The research project was approved of by the Ethics in Research Committee of Universidade Federal do Rio Grande do Sul (UFRGS). Four themes were identified: understanding the other, visibility of ideas, rules of living together and sense of duty. We concluded that cooperative groupwork stands up as a possible educational methodology to nursing teaching which results from the development of learner’s autonomous moral. Also, distance education managed to rescue an active educational practice, often explored poorly in presential classes.

Key Words: distance education; education technology; learning.

1 - Introduction

Lately the applicability of computing has been intensified in nursing teaching, both in presential and distance education. Nursing students from Universidade Federal do Rio Grande do Sul (UFRGS) demonstrate some knowledge in computing and, nearly all of them, have access to the Internet at their homes [1], [2]. Despite their access to these resources, they report not having had the opportunity to participate in undergraduate or extension courses in distance education [2].

The range of online activities offered in different levels of nursing education (undergraduate, graduate and enhancement programs) doesn't meet the present needs of the field [3]. It has been noted that, as a whole, the activities mediated by computers in nursing education are still professor-oriented, without the exploration of students' autonomy and use of problem solving groupwork activities, thus neglecting students' creative development. Therefore, presential classes are often straightforwardly transposed to the virtual environment.

Educational practices must raise curiosity, enhance creativity and instigate problem solving. These practices often correspond to a fragmentation of knowledge. They fraction content in different kinds of expertise, making it difficult for students, and even for professors, to articulate their knowledge [4]. This can be observed in nursing educational actions both in presential and distance education.

Autonomy, according to Genetic Epistemology Theory, is seen as a kind of moral opposed to heteronomous moral. While autonomy results from social relations of reciprocity, heteronomy results from coercion actions. Coercion relations are connected to the idea of mandatory rules and, therefore, imposed to individuals externally, creating in them a sense of duty. Cooperation relations seek to construct ideal rules on the ground of reciprocity and mutual respect among individuals [5]. Thus, we understand that the construction of autonomy must be the objective of educational actions, promoted by the development of techniques such as cooperative groupwork.

As a nursing educator, I have been reflecting on how we are organizing and developing our teaching actions. I have been noting that learning activities are still content-oriented; they keep disrespecting individual rhythm and depending on memorization and not on the experience of multiple possibilities to solve a problem. Present groupwork methodology does not develop students' autonomy and cooperation skills. Often these activities do not arouse their curiosity and end up becoming unappealing to them.

Curricular guidelines of undergraduate programs in nursing praise content integration, active participation of learners and the use of computing and communication technologies [6]. However, we note that educational activities are, in their majority, still developed in accordance with traditional educational assumptions.

We developed an extension course, "Introduction to Anamnesis and Physical Examination in Nursing", to nursing undergraduates from UFRGS, enrolled in the fourth semester of the program. The objective was to develop a Genetic Epistemology-

oriented learning project in a virtual environment, based on a constructivist and interactionist perspective. The purpose of this project was to enhance active participation of subjects throughout this process, and promoting autonomy and cooperation, two important tools for the construction of essential knowledge in nursing caretaking.

2 - Objective

To evaluate the process of autonomy construction among nursing students enrolled in the constructivism and interactionism-oriented distance course “Introduction to Anamnesis and Physical Examination in Nursing.”

3 - Methodology

This article presents a qualitative case study carried out with 20 nursing students enrolled in the 60-hour extension distance course “Introduction to Anamnesis and Physical Examination in Nursing”, offered by the Nursing School of Universidade Federal do Rio Grande do Sul (UFRGS), from April to June, 2008.

The 20 participants voluntarily enrolled in the course. The only requirement was that they should be in the fourth semester of the undergraduate program in Nursing from UFRGS.

The course, carried out in the virtual learning environment (VLE) known as Moodle, was divided in five stages – “working with Moodle”, “theoretical references of anamnesis and physical examination”, “data collection”, “propedeutical techniques for physical examination”. The educational structure proposed was based on groupwork. It offered access to hypertexts, videos, digital educational objects, wikis, forums, chats and the development of conceptual maps with the resources of the software Cmap Tools.

The data were collected throughout the course, through forums and chats at Moodle, and during the focus group technique. Six meetings were carried out with the use of this technique. Students were divided in two groups of ten and we met each group three times.

The data were processed with the support of NVivo8® software. Students’ dialogues were identified with fictitious names. After that, the data were analyzed through thematic analysis. The following stages were adopted: organization of the data collected; construction of initial descriptive categories; interpretation of implicit and contradictory meanings; regrouping of categories with the purpose of identifying

tendencies and patterns; and the search for relations and inferences at the highest level of abstraction [7].

This study reports the subcategory “social exchange dynamics” which is part of the doctoral dissertation “Cooperative construction of knowledge in technologies of nursing care: anamnesis and physical examination in virtual environment”, advised by Dr. Eva Néri Rubim Pedro, presented at the Graduate Program in Nursing from UFRGS.

The research project was approved by the Ethics in Research Committee of UFRGS (# 2007811). Students signed a Free and Acknowledged Concession Term. Therefore, they had their identities preserved, anonymity guaranteed, in accordance with Resolution 196/96 [8]. Students’ output developed received fictitious names, chosen by themselves.

4 - Data submission and Evaluation

The 20 participants were between 20 and 28 years old. There were no dropouts. This was their first experience involving exclusively distance education. Eight students had already attended courses that used a VLE, for nursing undergraduate program from UFRGS offers a number of presential courses in which bibliographic resources are made available and students communicate through virtual environment.

We noted that students belong to a generation that interacts with technological resources from the digital era since childhood. This gives them certain features that deserve to be highlighted: they share information rapidly, do multiple tasks simultaneously, experience hypertextual reading, work in groups and expect to be rewarded every time they reach accorded goals [9].

The subcategory “social exchange dynamics” corresponds to actions that revealed the construction of reciprocity relations through mutual respect rules agreed to among students. These feelings are constitutive of autonomy. Nevertheless, in some situations, autonomy was not present and heteronomy took place. Thus four themes were constituted: understanding the other, visibility of ideas, rules for living together and sense of duty.

4.1 - Understanding the other

Understanding the other refers to decentering, which means to put one’s self in the perspective of their nursing colleagues. Students accomplished it in various moments throughout the course. In their first chat, they discussed an article that

introduced the progressive evaluation of conceptual maps developed by nursing undergraduates. They explored this text and reflected about how it would be for them to design a conceptual map, an activity that had been previously established for that stage of the course, as we can see in the dialogue below:

Professor: now that the student is in the fifth semester, what are the differences?

Catarina: it is a lot less troubled.

Catarina: It is clearer.

Géferson: They are better at articulating their ideas

Professor: the conceptual map was sophisticated.

Tiago: less words to describe the concepts.

Professor: it is a very well structured CM

Tiago: His knowledge and comprehension of the patient and his case is becoming easier for his study.

Catarina: which facilitates the work.

Géferson: His has developed his knowledge and so he can connect the ideas better

Tiago: the knowledge

Professor: The quality of the work increases.

Tiago: he has a clinical eye, it gets more accurate.

Júlia: they can view it in a clear and concise way and thus identify priorities

Patrícia: so they started to articulate their thoughts better

[...]

Catarina: I believe that if we make one now, it will be better than the first one.

Géferson: I think we will have to try

Julia: [...] I just don't know if I'll be able to make one identical to that of the article... I found it very complex and complete

(Source: Chat I, April 04th, 2008, 7h-8h p.m.)

Throughout the course, we noted in different moments that students were practicing cognitive decentering. This refers us to the active nature of knowledge construction as a process, with students building new relations throughout the learning process [10]. In it, students put themselves into the perspective of nurses when analyzing hospital practices. In addition, they were able to exchange their points of

view in forums at VLE, sometimes sharing opinions with classmates they did not even talk in presential classes.

4.2 Visibility of ideas

This theme evidenced the sense of mutual respect and reciprocity developed among students throughout the course. The communication at VLE gave students the opportunity to work together and respect different points of view, as we can see in the following dialogue:

Carolina: And I think it's quite surprising, because some classmates, like Julia who is very shy in class, but, for example, at the chat she comes and gives her opinion, and so that's when we get surprised. Now I know her better, because we're also at the same internship group. So we're closer, but other classmates are also surprising me a lot. I, for example, I can be very polemical sometimes, I have my opinion and, sometimes, I want to convince the others with my opinion, I'm not very flexible. Then, at the chat, I'm impressed, because I see people that, I think, are very shy, holding their position firmly. I think it is cool (Source: Focus Group I, April 28th, 2008, afternoon).

Cooperation relations, as they occurred in the course, emerge from intra-group relations of being aware of rules adapted to those accorded before and that are only possible through an autonomous rationality among peers [5].

4.3 Rules of Living Together

The theme introduces the norms of living together, which sometimes are not made explicit to students, but are present in all social relations. We observed a conciliatory attitude assumed by the students in discussions at the forum, as we can evidence in the dialogue below:

Patricia: [...] nobody says straightforwardly that they disagree. They go on and post a different idea and when they agree, they say "I agree". But I think it exists.

Natalia: I think that's exactly what happens, you don't say "I disagree with her": you just go there and write: "I think this and that".

Catarina: [...] written language is completely different from spoken language. You approach the person to say "I disagree", and write to her "I don't agree. I disagree with what you've done" may sound, I don't know, weird. The person will think "So I won't write no more". (Source: Focus Group II, May 09th, 2008, afternoon)

The students explored the forum features as a textual genre that differs from orality. In order to develop a respectful coexistence, they condemned certain actions, being careful, when writing, so that their interactions were neither harmed nor misinterpreted. The forum distinguishes itself for being a digital textual genre that provides space for thematic and argumentative debates, in which criticism is characterized by subtler comments.

4.4 Sense of duty

It refers to those heteronomous moral actions, pointed by students in two situations that merge into one another: control at VLE and at relations among classmates. The students established a difference between attending to a presential course and participating in a distance learning course, as one can see in the following dialogue:

Tiago: I think that in the distance learning course, when a text is assigned, the professor knows how many students he has, and everybody will have to post something about that content. I mean, the student will be forced to read the text, you see? Because the professor will be following him. Now, in presential classes, the professor, very often, will assign a text to be read at home and discussed in the following class. Many students don't read this text, because they know the professor won't ask for their opinion next class. One or two students who read it will be the most participative. So, this makes those who prefer presential classes more accommodate, I mean, they'd rather be in a presential class because, how can I say that, they, the person thinks he/she is not being assessed in distance education courses. At least, that's how I see things. We see things happening just like that (Source: Focus Group I, April 28th, 2008, afternoon).

The virtual environment provides the professor with an opportunity to follow the activities in which students are engaging, what may give the learners a sense of

“control”. The observations made throughout this study allow the professor to identify difficulties, and even characteristics, of the participants. It should be considered that the VLE offers the opportunity of creating an online community that, through social interactions among students, constitutes a political space and defines the *virtual community* [12].

Conclusion

In social exchange dynamics, we highlighted the construction of autonomy in the learning process of students. This gave them the opportunity to establish relations of reciprocity when decentering themselves from their personal perspectives and trying to understand their classmates' points of view. They not only tried to understand their classmates' feelings and behaviors as they also have already showed to understand the process of nursing care based on their experiences in hospital internships.

We found evidence of reciprocity and mutual respect, fundamental feelings in the development of students' autonomy. The opportunity of listening, reading and respecting the ideas posted by their classmates at VLE was highlighted by the students. When comparing the distance learning experience to presential expositive classes, students brought up the dynamics of the course as one of the aspects that differentiate the two modes of education. This supports the evidence I found in earlier experiences with distance education activities in nursing. According to the students, the course provided an space for qualitatively more significant interactions than the ones they had experienced at the undergraduate program, both because they had the chance to know each other's opinions and to become closer to the professor.

As a conclusion, I believe cooperative groupwork stands up as a possible educational methodology to nursing teaching which results from the development of learner's autonomous moral. Also, distance education managed to rescue an active educational practice, often precarious in presential classes.

References

- [1] Severo, Carolina L.; Cogo, Ana L.P. Acesso e conhecimento dos acadêmicos de enfermagem acerca de recursos computacionais. *Revista Gaúcha de Enfermagem*, v. 27, n. 4, p. 516-23, 2006.
- [2] Cogo, Ana LP. Construção coletiva do conhecimento em ambiente virtual: aprendizagem da anamnese e exame físico de enfermagem. 2009.160f. Tese (Doutorado em Enfermagem). Escola de Enfermagem, Universidade Federal do Rio Grande do Sul, Porto Alegre, 2009.

- [3] Rodrigues, Rita C.V.; Peres, Heloísa H.C. Panorama brasileiro do ensino de enfermagem *on-line*. Revista Escola Enfermagem da USP, v. 42, n.2, p. 298-304, 2008.
- [4] Morin, Edgar. Reformar o pensamento: a cabeça bem feita. Lisboa: Instituto Piaget, 1999. 137p.
- [5] Piaget, Jean. O juízo moral na criança. 2 ed. São Paulo: Summus, 1994. 302p.
- [6] Brasil. Conselho Nacional de Educação. Câmara de Educação Superior. Resolução nº 3, de sete de novembro de 2001. Institui diretrizes curriculares nacionais do curso de graduação em Enfermagem. Diário Oficial da União, Brasília,DF, 9 de nov. 2001. Disponível em: <<http://portal.mec.gov.br/cne/arquivos/pdf/CES03.pdf>>. Acesso em: 18 set 2008.
- [7] Lüdke, Marli; André, Menga E.D.A. Pesquisa em educação: abordagens qualitativas. São Paulo: EPU, 1986. 100p.
- [8] Brasil. Conselho Nacional de Saúde. Resolução 196 de 10 de outubro de 1996. Diretrizes e normas regulamentadoras de pesquisa em seres humanos. 9p., 1996.
- [9] Prensky, Marc. Digital natives, digital immigrants. On the horizon, v.9, n.5, 2001. Disponível em: <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf> Acesso em 26 mar 2009.
- [10] Montangero, Jacques; Maurice-Naville, Danielle. Piaget ou a inteligência em evolução: sinopse cronológica e vocabulário. Porto Alegre: Artmed, 1998. 242p.
- [11] Paiva, Vera L.M.O.; Rodrigues-Júnior, Adail S. O *footing* do moderador em fóruns educacionais. In: ARAÚJO, Júlio C. (org.). Rio de Janeiro: Lucerna, 2007. p. 144-64.
- [12] Anderson, Bill. Writing Power into online discussion. Computers and Compositions, v. 23, p.108-24, 2006.