

Educational chat in nursing: possibilities of interaction in the virtual environment*

CHAT EDUCACIONAL EM ENFERMAGEM: POSSIBILIDADES DE INTERAÇÃO NO MEIO VIRTUAL

CHAT EDUCATIVO EN ENFERMERÍA: POSIBILIDAD DE INTERACCIÓN EN EL MEDIO VIRTUAL

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ABSTRACT

This documental case study was performed using a qualitative approach, and analyzed the dialogues of Nursing students in a context mediated by an educational chat in a Virtual Learning Environment (VLE). The data consisted of eight discussions among students, professors and monitors of the Rio Grande do Sul Federal University College of Nursing on the TelEduc® VLE chat on the activity called *Virtual Client*. The data were categorized using NVivo® software; and the information was analyzed using the Content Analysis technique. The results revealed feelings such as anxiety, fear and motivation towards hospital practice, as well as the dichotomous position of students regarding the proposed activity: some enjoyed the virtual discussions, while others preferred having discussions in person. This article presents recommendations for using educational chats in Nursing education.

DESCRIPTORS

Education, nursing
Education, distance
Educational technology
Internet

RESUMO

Pesquisa documental com abordagem qualitativa do tipo estudo de caso, que analisou os diálogos produzidos por alunos de Enfermagem em um contexto mediado por *chat* educacional em Ambiente Virtual de Aprendizagem (AVA). Os dados constituíram-se de oito discussões promovidas por alunos, professores e monitores da Escola de Enfermagem da Universidade Federal do Rio Grande do Sul no *chat* do AVA TelEduc® sobre a atividade denominada *Cliente Virtual*. Para a categorização dos dados, utilizou-se o software NVivo®; e para a análise das informações, a técnica de Análise de Conteúdo. Os resultados revelaram sentimentos como ansiedade, medo e motivação perante a prática hospitalar, bem como o posicionamento dicotômico dos alunos frente à atividade proposta: alguns gostaram das discussões virtuais, enquanto outros preferiram as presenciais. O artigo apresenta recomendações para o uso de chat educacional no ensino de Enfermagem.

DESCRITORES

Educação em enfermagem
Educação a distância
Tecnologia educacional
Internet

RESUMEN

Investigación documental de abordaje cualitativo del tipo estudio de caso, que analizó los diálogos mantenidos por alumnos de Enfermería en un marco contextual de chat educativo en Ambiente Virtual de Aprendizaje (AVA). Los datos se constituyeron a partir de ocho discusiones promovidas por alumnos, profesores y monitores de la Escuela de Enfermería de la Universidad Federal de Río Grande do Sul, en el chat del AVA TelEduc® sobre la actividad denominada *Cliente Virtual*. Para la categorización de datos, se utilizó el software NVivo®; y para analizar las informaciones, la técnica de Análisis de Contenido. Los resultados revelaron sentimientos como ansiedad, miedo y motivación delante de la práctica hospitalaria, así como el posicionamiento dicotómico de los alumnos frente a la actividad propuesta: algunos gustaron de las discusiones virtuales, mientras que otros prefirieron las presenciales. El artículo presenta recomendaciones para el uso de chat educativo en enseñanza de Enfermería.

DESCRIPTORES

Educación en enfermería
Educación a distancia
Tecnología educacional
Internet

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INTRODUCTION

In Brazil, the increase observed in the use of technological resources in nursing education is justified by the National Curriculum Guidelines for Nursing Courses, which refers to mastering and adequately using Information and Communication Technologies (ICTs) as one of the competencies expected of nurses⁽¹⁾. Furthermore, the Ministry of Education, establishes by Law 4059, that higher education institutions *can include, in the pedagogical and curriculum organization of higher education courses the option of class subjects that use hybrid learning modality* taking up a maximum 20% of the total course load, and with all evaluations on-campus. A hybrid modality is characterized as any didactic activity, teaching module or unit centered on self-learning that is mediated by didactic resources organized in different information support systems, including remote communication technology⁽²⁾.

There has been a significant increase in the use of computer and internet tools in nursing education. This fact created a need to develop studies that address the interaction between students and professors and the relationship that is established between them in the many virtual environments. It is necessary to obtain support from Linguistics to study communication in this context that, despite using writing, shows a certain level of informality and verbal communication in their statements.

The text genres (e.g. phone calls, articles, telegrams, live news) are historical phenomena composed by everyday communications and their needs. In the context of digital technology, the following genres have been highlighted: e-mail (or electronic mail), open chat, educational chat (or chat class or online chat), videoconference, discussion list, and weblog (or blog). These genres are characterized by the production of shorter sentences, abbreviation of words, the use of emoticons (a combination of characters that denote feelings), and a repetition of letters and punctuation marks⁽³⁻⁴⁾.

The educational chat, in particular, whether or not integrated to Learning Management Systems (LMS), is a digital communication tool useful in teaching, as it aims to discuss on certain content, solve doubts, and serve as a meeting point for students to work together. It works by keeping students, monitors, tutors and professors connected at the same time⁽⁵⁾, which characterizes synchronous communication. The educational chat is different from the open chat in that its basic feature consists on the fact that the participants of the chat already know each other, and identify themselves by their real names (rather than using an alias, as it would occur on an open chat), and only those enrolled in that specific class or course are allowed to join^(3-4,6).

One specific feature of chats is the construction of the *spoken* text in writing because of the electronic means that is being used. In that environment, participants feel as if they were talking face-to-face. The writing from the Internet conversations confers characteristics very specific to the environment; therefore, the interaction on the online chat is conceived as being *spoken*, because they are dialogical in essence. The processual and dynamic nature of the chat is what brings internet conversation close to face-to-face conversation and this appears in the strategies for developing the articulation on chats, which should not be confused with a typical spoken text because there is no production of phonics⁽⁷⁾.

On the chat, each intervention is referred to as speaking turns, a concept from Conversation Analysis. Its meaning depends on the relationship and interchange with the previous and posterior turns, and are characterized when seen in the context in which they occur^(4,7). Participants of the online chat must pay close attention to the discussion that is taking place so they are able to identify the relationship between the speaking turns. The phenomenon that occurs in a chat when a user is unable to identify which previous speaking turn is being referred to in the present turn is named *co-text loss*⁽⁸⁾.

When using ICTs in teaching, knowledge is no longer centered on teachers, who are no longer seen by the students, but rather begin to observe them with the aim to characterize their individual differences and strengths. In the educational chat, students do not need to ask for permission to speak, neither does the virtual chat room need to be in silence for the mediator or a colleague to be able to speak. Participants can freely expose their ideas and debate on the content, therefore teacher mediation is important to maintain

an organization in the virtual environment⁽⁶⁾.

Virtual Client Activity

In 2005 and 2006, the 4th-year Human Care Foundations III (ENF02001) class of the Nursing Course at Federal University of Rio Grande do Sul (UFRGS) developed an activity called *Virtual Client* on the TelEduc® LMS⁽⁹⁾.

In this project, students formed groups of four to six to perform the Anamnesis and Physical Nursing Exam of a hypothetical patient, developed for at least six images provided by the professors (pictures of body segments). Based on those images, students created a fictional individual, with a respective identification, anamnesis and physical exam, describing how they observed those signs and what propedeutic techniques were used for their identification. To perform the activity, the professors provided bibliographic material and suggested reading texts that were available in the UFRGS Nursing School Library.

The students accessed the LMS using computers at home, work, or at the UFRGS Nursing School technology lab.

The activity was developed as follows: first the professors introduced students to the TelEduc® LMS, the proposed activity, the resources to be used (software to structure their work performed using Microsoft® PowerPoint and Word), and then divided them into working groups. After completing the activity, the students were supposed to publish the anamnesis and physical exam with the images selected by the group on their LMS group portfolio, so that all professors and students of that class subject could access and comment on the material produced by their colleagues.

The activity lasted three days and was ended with a two-hour educational chat on the TelEduc® LMS that was coordinated by one or two professors with the support from one monitor. On the chat, students discussed about the group works, asked questions and reported how the task was performed. The professors conducted the evaluations and posted it through comments on the groups' portfolio. The aspects observed regarded the coherence between the images, anamnesis and the physical exam of the virtual patient, as well as their participation on the chat.

The educational chat, developed after completing the *Virtual Client* activity, offered the students a space for them to expose their doubts regarding how the use of technology tools in nursing education, and it was also their first experience with patient care at the hospital – which was close to actually taking place after the activity. Therefore, researchers realized the need to rate and analyze the convergences and divergences in the participants' dialogues on the chats.

OBJECTIVE

To analyze the dialogues produced by nursing students in a context mediated by an educational chat in a Learning Management Systems, after completing the *Virtual Client* activity.

METHOD

This is a retrospective documental study using a qualitative case study approach⁽¹⁰⁾.

The study was developed in the Human Care Fundamentals III (ENF02001) class of the UFRGS Nursing Course with the registers (dialogues) of eight educational chats produced on the TelEduc® LMS by students, professors and monitors from the 1st semester of 2005 to the 2nd semester of 2006, adding up to 16 hours and 44 minutes of conversation.

The study counted with 190 participants, 185 of which were students (160 female and 25 male), three professors

(two female) and two monitors (both female). To ensure the confidentiality of the participants' identity, students were represented by the letter *S*, student groups by *G*, Professors by *P*, and Monitor by *M*.

The information was organized using NVivo® 7.0 software and analyzed with the help of Content Analysis⁽¹¹⁾ following the steps of pre-analysis, material exploration, treatment of the results, inference and interpretation. The conversations from the chat sessions were grouped, read and reorganized. The originated categories were named according to the data that emerged from reading the material, by similarities or differences. It should be noted that we considered the digital genre features of the educational chat while organizing and analyzing the information.

The research project was approved by the UFRGS Research Ethics Review Board (number 2007825). A Data Use Compromise Form was adopted as per the recommendations of the review board, which was signed by all researchers, and established the commitment to the privacy and confidentiality of all data used, integrally preserving the subjects' anonymity⁽¹²⁾.

RESULTS AND DISCUSSION

During the analysis of the information, the following categories emerged: *Nursing students in view of their first experience of hospital practice* and *Students' evaluation of the chat*.

Nursing students in view of their first experience of hospital practice

This analysis category was divided into two subcategories: *Expectations towards the care practice* and *Opinions about the Virtual Client activity*.

Expectations towards the care practice

This topic, in the context of the present study, is considered as manifestations of feelings such as anxiety, fear and uncertainty in view of the hospital practice that was about to occur. These feelings are justified because it is the first experience that 4th year undergraduate students of the UFRGS Nursing Course have in the hospital, which is new to most of them, except for those who already have a technical course in the area.

Feelings are the way individuals perceive themselves and understanding those feelings allows them to understand their reaction to the world that surrounds them. Subjects become open and free, i.e., it him or herself when in touch with his or her feelings. Anxiety can be conceptualized as the fear of being hurt or losing something, and it shifts from the feelings of being scared, frightened, nervous, worried, unquiet, and unsafe⁽¹³⁾.

A study performed with 2nd-year nursing students raised their expectations in relation to the beginning of the supervised training, and showed that students were anxious about the procedures, especially in terms of performing techniques, because they were afraid of causing harm to a patient, like pain for example. The students also appeared anxious towards having contact and communicating with patients, also with the professor's evaluation about the goals to be achieved during the training and with their own reaction to different situations, such as caring for a terminally ill patient⁽¹⁴⁾. Those same feelings and apprehensions were observed in the dialogues as shown below:

(10:05:16) P1 says to All: How do you see your going out to the field at the hospital?

(10:06:27) G16 says to P1: We are thrilled and crazy about starting, but also a little scared.

(10:07:51) S70 says to All: Bah, I really want to start the training!!

(10:07:58) G15 says to P1: we are anxious to start the training. Actually putting all the knowledge we've learnt so far into practice

(10:12:00) G13 says to P1: Now in the beginning of the training it's not so good because there's some insecurity, but later with practice I think it improves, that's what everyone says.

(10:21:36) S67 says to All: I think the issue is exactly that of learning to deal with and control our fears and insecurities, after all new an unexpected situation will always happen.

(10:23:48) G13 says to All: I'm afraid I won't manage to do all the right procedures and hurt the patient because of that.

(10:24:28) G14 says to All: we're afraid because we shake too much!!!!!!

(10:24:57) S66 says to All: I agree with G13 that an error in nursing may hurt someone and cause even more serious consequences. This is preoccupying, it won't be a simple mistake.

The excerpt shows how anxious the students feel when the time for hospital practice is approaching them. This occurs because of their fear to the unknown, their will to practice the knowledge they have acquired in the course and the fear of harming a patient because they still lack the necessary technical skills to perform the procedures. However, despite their insecurity, students have high expectations about the practice and seek information with colleagues who are in further stages about how their first training experience was. It is observed that the students see the training as a time to learn to deal with their fears and insecurity, and that nurses have to be prepared for the unexpected, because they are aware that it is what happens in the hospital routine. They also showed

they worried about a possible error, because they know they are working with lives and that implies developing a feeling of responsibility towards the patient.

The following extract shows some characteristics of the chat conversation such as the use of *u* (for you) and *bc* (because), the repetition of punctuation marks to emphasize a statement such as in *we're afraid because we shake too much!!!!!!*, and also a slang common in Southern Brazil, the *Bah*. Writing in a digital environment acquires specific characteristics, because there is a need to bring writing close to speech, i.e., phonic intonation, and making synchronous communication faster while the interlocutors *speak-write* because the environment requires fast communication^(4,7).

Opinions about the Virtual Client activity

This analysis subcategory appeared while observing that the mediators would usually ask students, in the beginning of the chat, what their experience of performing the *Virtual Client* activity had been like, what were the easy and difficult aspects they found, and how they would evaluate the activity, i.e., if it had been useful or not for learning the investigative phase of the Nursing Process (NP). The following extract exemplifies that analysis:

(09:48:14) P1 and P2 says to All: 1st question: what was doing this activity like to you?

(09:49:09) S88 says to All: I thought it was very interesting and surprising, in the beginning I thought it would be a piece of pie, but I realized it is already very complicated without the patient, picture that it will be like when there is one.

(09:49:38) S73 says to All: I thought it was cool and interesting, but it's not that easy to describe what u see.

(09:51:05) S90 says to All: I didn't think the activity was difficult but it was interesting, we researched a lot of things we didn't know.

(10:08:02) S87 says to P1 and P2: Prof, do you think that an activity like this helps us a lot?? Because I thought it wasn't enough to have an idea...

(10:08:59) G20 says to S87: I think this activity helped us a little, but we have to be in real practice to feel safer...

The body-segment images used to create the *Virtual Client* stimulated the students' perceptive ability, which allowed them to describe the observed signs in detail, and also relate this information with the history they created for that patient. The activity promoted information and knowledge exchange between the groups, in a way that each student became involved with completing the work⁽⁹⁾.

From reading the previous extract, it is inferred that some students enjoyed the activity, despite the fact that it demanded making efforts to find information in the bib-

liography to describe what they saw on the images. One student stated that doing the activity was not enough preparation for performing the Nursing History with a real patient, while another student said it was useful but only real practice will allow them to master in performing anamneses and the nursing physical exam.

It is believed that creating a *Virtual Client* anticipated the reality that they will experience in the hospital environment, which may reduce the fear and distress that such experience causes on nursing students. During the activity students may make rights and wrongs, relate what they created with theory, develop creativity and realize the interaction with the classes they had already taken, generating a feeling of security in them^(9,15).

Furthermore, it was observed that students developed awareness about their own learning and about the learning they developed with the working group:

(11:25:40) S114 says to All: I'd like to highlight the importance of group work. Many times the work is divided, each one does one part, and it is all fragmented. In this activity we did everything as a group. The exchange of experiences is very valuable. Whenever one person didn't know something, the other helped and that's how it went.....it was really interesting!

(11:26:58) S119 says to All: yes! I agree with you S114, it was the most interesting activity I've ever done, because I helped do the whole work!

(11:28:35) S123 says to All: like, when we talk, interview, exams... I mean, a patient it won't be fragmented (each person doing one part). So, I believe that team work begins since our undergraduate nursing studies.

(11:29:38) S122 says to All: I also agree... I think there were a lot of fragmented group work until now, lack of time, I mean... it was nice to do it together.

(11:29:54) S121 says to All: sometimes, what we are missing r activities that make us THINK!

(11:30:13) S122 says to All: there is a lot of group work, but we don't always do them as a group.

(11:30:57) S123 says to All: sometimes it's just not challenging... it's just all the same!!!

The previous extract shows that students value doing the group work, because they truly worked as a group, exchanged experiences and helped each other with the doubts that appeared. The students also realized that they have not been doing group work during their course, because the activities are fragmented between them and each one becomes responsible for a part of the work. Students emphasize they feel they need more activities that are more challenging and make them think. Therefore, we also question if the professor is able to realize that students are accommodated in the learning process and how much they actually challenge the nursing students.

Another clear awareness awakening among the students occurred when they realized that when they evaluate a patient they will not do it in parts, fragmented, but will have to see the patient as a whole and also that team work should begin during their undergraduate studies. The learning that occurs with group interaction becomes more significant when combined with personal knowledge, so the student has time to reflect, synthesize deepen, consolidate what was realized, felt and understood. Furthermore, professional knowledge is intensified by a process of active learning that includes the effective collaboration between peers, with the contextualization of the real everyday nursing problems⁽¹⁶⁻¹⁷⁾.

Student's evaluation of the chat

This category was divided into *Opinions about the chat* and *Using the chat tool*.

Opinions about the chat

This subcategory was revealed, during the analysis, when it was realized that the mediators sought to find out the students' opinion about their experience using the education educational chat as support for the discussions. Different opinions emerged. The following is a spontaneous manifestation of the students about the tool:

(10:48:53) S30 says to All: I LOVED THIS CHAT.

(10:49:47) S35 says to All: I also loved this chat, just the fact that I don't have to leave home with this kind of weather.

(10:53:15) S30 says to All: I THOUGHT IT WOULD BE A PAIN!!!

(10:53:19) S42 says to All: I really liked it too!

(10:53:31) S35 says to All: I'm really enjoying it, I wish we had some virtual classes.

(10:53:43) P1 e P2 says to All: Do u have any suggestions?

(10:54:20) S39 says to All: I thought the innovation was great, because going to class, sitting in a circle, that's the routine, and sometimes we feel low-spirited about it. This way because it is a different form of discussion, it's more interesting.

(10:54:40) S30 says to All: We could check the record at the Hospital during the training and bring back the difficulties we found to discuss here. How's that?

(10:55:22) S42 says to All: this way of talking is interesting...but I also enjoy the circle in the classroom...it's also very valuable.

(10:55:29) G11 says to P1 and P2: We enjoyed the experience today, but we prefer human contact. Although here everyone communicates well at the same time.

(10:59:17) S30 says to All: Girls I also agree, *human contact is very good, I'm going to miss it....but I think it might be a bit easier to talk here.*

(10:59:43) G11 says to P1 and P2: We agree because here the shyness disappears, and everyone can be heard.

(11:00:31) S45 says to All: Absolutely, for me, for example, it's much easier to speak here.

(11:01:55) G12 says to All: It is very interesting Profs, but I think there is a lot of chatting in small groups and very little in a large group, it needs more organization....Not that it's impossible, but it gets dispersive sometimes!!

A study showed that nursing graduates were satisfied or very satisfied with the online experience because of the flexibility they had to organize their study time⁽¹⁸⁾. Another study performed with nursing undergraduates compared synchronous (chats) and asynchronous (forums) online discussions with traditional face-to-face discussions and found that there were no significant differences between the control (traditional discussions) and the experimental (discussions at a distance) groups. Most students of both groups considered the discussion productive and encouraging, as they were able to express their feelings, experiences, thoughts and ideas throughout the discussions. Some students of the experimental group mentioned that using the LMS in teaching activities resulted in a smaller contact with other students, and they felt more isolated and as if they were not part of a group⁽¹⁹⁾.

The excerpt presented shows that some students enjoyed the experience of using the chat to discuss contents and found it interesting. A student calls attention to the chance that distance education (DE) offers students: because of the rainy weather on the day of the chat, she did not have to leave home to go to the university *to be* in class. Another student had a pre-conceived idea about the experience, thinking that the activity would be useless, i.e., unchallenging or unproductive, but she actually found the opposite.

The mediators, realizing the interest of the students in the modality, asked them if they would like to make any suggestions so the tool would continue being used, and one of them suggested the possibility of discussing the difficulties they found in understanding the technical terms on the medical records of the teaching hospital at the UFRGS School of Nursing. Others, yet, stated they preferred face-to-face discussions and human contact, but stressed that they enjoyed the educational chat activity, because it permitted them to overcome their shyness and offered the possibility for everyone to speak and be *heard*. Other students also pointed at the organization of the chat, emphasizing that simultaneous conversations between participants harm the general understanding of the discussion held by the larger group.

Using the chat tool

This analysis subcategory emerged because of the difficulty that some student had when using the LMS and the chat. The many individuals talking at the same time on the virtual chat can cause confusion, because the turn of

speech are not necessarily in a chained sequence because the answers are not immediate and there could be some time in the data transmission, i.e., there is no linear conversation^(4,8). The following excerpt is an example of the confusion that may occur:

(10:21:45) S81 says to All: I'm completely loss

(10:22:02) G21 says to All: It's really hard to understand, each person is talking about different things. What a mess.

(10:22:07) S87 says to S81: everyone's lost S81.. try to find yourself.. or talk to me, hehe.

(10:22:31) M2 says to All: Let's get organized... a question was made... everyone should answer...to everyone

(10:22:47) S87 says to All: I think it's too many people talking at the same time... we should mix topics, or else it becomes a mess....

(10:22:47) S88 says to All: I can't understand anything anymore, when I read a statement there's another 10, I don't even know what to answer first and end up forgetting the others.

In this extract it is observed that many students find themselves lost as to what was being discussed on the chat. This occurred because of the number of people interacting, and also because there were many topics being discussed at the same time, as observed in the statement by monitor 2 (M2) and a student (S87). The fact generated co-text loss, which is observed by the statement by student A88.

A study investigated the interaction and support of collaborative argumentation among students using a synchronous computer mediated tool⁽²⁰⁾ and found that 28% of the messages exchanged between students and teachers were not in agreement with the discussion topic proposed in the educational chat. In a study performed with undergraduates⁽⁴⁾, 20% of educational chat time were spent managing operational problems of the tool, such as logins, crashes and slowness of the machines, which disturbed the rhythm of the conversations.

In the present study, the total time loss with side conversations was five hours and seventeen minutes or 31.56% of the analyzed chat time. The students in the referred studies^(4,20) were experienced with the tool. In this study, however, it is inferred that most of the time spent was due to the inexperience of students with conversation on an educational chat, though many of them had already used the tool for informal online chats.

CONCLUSION

The objective of this study was to analyze the dialogues produced by nursing students in a context mediated by an educational chat in a Learning Management Systems after completing the *Virtual Client* activity. The

activity was performed by students with professor mediation and permitted to deepen the study about using the educational chat in nursing education, as it was observed which strategies students and professors used for communication and interaction in a specific time of learning for students. In this study, the TelEduc® LMS chat was used in an on-campus class, which stimulated the conversation between mediators (professors and monitors) and students.

During the chat conversations it was identified that feelings experienced feelings of fear and anxiety because of how close they were to their practice in the hospital, something unknown in the 4th year of nursing undergraduate studies at UFRGS. However, students see the activity as an opportunity to deal with their distress and feel encouraged to be in touch, as soon as possible, with this care scenario.

The students, in general, enjoyed the *Virtual Client* activity, and stated that it offered them the chance to exchange experiences, help each other, do group work, contextualize the everyday of the profession, and see patients as a whole. It was through the educational chat that this exchange of experiences and knowledge between students was possible.

Two specific opinions emerged about the educational chat: while some students were satisfied with the new way to discuss the contents, others preferred the on-campus classes and discussions, thus confirming that teaching can be done in many ways, with different and creative methods and many possibilities of awakening the student to their commitment with learning.

There was consensus about the students feeling more outgoing to *speak* and about how easy it is to promote a meeting on the chat, considering that in this phase students are subdivided in several small training groups and meetings with the larger group do not occur as often.

As to the use of the educational chat, students often commented that they were lost as to what topic was being discussed. That occurred because of the number of participants and because the topic that was being addressed at the time was not respected, or by side conversations or by the overlap of questions out of the topic, similar to what happens in the regular classroom. Side conversations took up 31.56% of the total time of the eight analyzed chats, and resulted in several co-text losses that disturbed the flow of conversation.

Because of the literature review and the analyses that were performed, as well as the practice of the researchers, we observed some useful aspects of using educational tasks in nursing education. They include:

- Stimulates a period of informal conversations before beginning the discussions on the proposed topic, which will help those who are falling behind or with connection issues;

- The session opening time, duration, the material to be studied and whether participation is compulsory or optional should be clearly defined and be disseminated in time so everyone can prepare for the activity;
- The mediator should always work with a monitor, who will be in charge of answering doubts related to technology and solve any problems that may occur;
- With the purpose to avoid side conversations and co-text loss, students should be previously prepared by establishing the rules for online interaction. Mediators should always interfere when a discussion becomes confusing. It is suggested that each session has no more than 10 to 15 students, considering that the statements appear on the screen so fast when there are many participants, and that could discourage those who find it hard to *link* their own thoughts to others because of the roll bar.
- The mediator should be prepared for the chat session with predefined questions to conduct the conversation, which may be open, comparative, exploration, or content synthesis questions. Monitors should also always encourage and motivate students who are not participating;
- At the end of the chat session, the mediator should perform an evaluation of the activity with the students, with the purpose of rising criticisms and suggestions for the next online meetings.

The educational chat offers the chance to discuss on topics related to nursing, such as the nursing process, doubts regarding clinical cases, procedures, among others. Obviously, the interpersonal face-to-face contacted promoted by practice cannot be seen in the virtual environment, but, certainly, the exchange of ideas, the discussions and the debates are possible online, and will surely contribute to enhancing ideas, developing interview skills through simulation and accepting others' opinions, thus affecting the action of the future nurse. It should be noted that the nursing process is already computerized in many places that provide hospital care, which demands nurses to be skilled in informatics in order to use the system.

The potential of computer tools in nursing education is highlighted. In addition, there is a need for more studies addressing the use of ICTs with pedagogical grounding, considering the growing use of internet-mediated virtual and hybrid distance learning modalities in all sorts of courses, be that in undergraduate or graduate studies, as well as in the permanent education of students and nurses.

REFERENCES

1. Brasil. Ministério da Educação. Conselho Nacional de Educação. Câmara de Educação Superior. Resolução n. 3, de 7 de novembro de 2001. Institui diretrizes curriculares nacionais do curso de Graduação em Enfermagem [Internet]. Brasília; 2001 [citado 2009 jul. 24]. Disponível em: <http://portal.mec.gov.br/cne/arquivos/pdf/CES03.pdf>
2. Brasil. Ministério da Educação. Portaria n. 4059, de 10 dez de dezembro de 2004. Introdução na organização pedagógica e curricular dos cursos superiores reconhecidos a oferta de disciplinas integrantes do currículo que utilizem modalidade semi-presencial, com base no art. 81 da Lei nº 9.394, de 1.996 [Internet]. Brasília; 2004 [citado 2009 jul. 24]. Disponível em: http://portal.mec.gov.br/sesu/arquivos/pdf/nova/acs_portaria4059.pdf
3. Abreu-Tardelli LS. O chat educacional: o professor diante desse gênero emergente. In: Dionísio AP, Machado AR, Bezerra MA. Gêneros textuais e ensino. 5ª ed. Rio de Janeiro: Lucerna; 2007. p. 87-94.
4. Marcuschi LA. Gêneros textuais emergentes no contexto da tecnologia digital. In: Marcuschi LA, Xavier AC. Hipertexto e gêneros digitais: novas formas de construção do sentido. 2ª ed. Rio de Janeiro: Lucerna; 2005. p. 13-67.
5. Prado C, Martins CP, França L, Leite MMJ, Peres HHC. Metodologia de utilização do chat na enfermagem. *Rev Bras Enferm.* 2009;62(4):594-8.
6. Leal VPLV. O chat quando não é chato: o papel da mediação pedagógica em chats educacionais. In: Araújo J. Internet & ensino: novos gêneros, outros desafios. Rio de Janeiro: Lucerna; 2007. p. 48-63.
7. Hilgert JG. A construção do texto "falado" por escrito: a conversação na Internet. In: Preti D. Fala e escrita em questão. São Paulo: Humanitas/FFLCH/USP; 2000. p. 17-55.
8. Pimentel MG, Sampaio FF. HiperDiálogo: uma ferramenta de bate-papo para diminuir a perda de co-texto. In: 12º Simpósio Brasileiro de Informática na Educação: Educação a Distância Mediada por Computador; 2001 nov. 21-23; Vitória, ES, Brasil [Internet]. Vitória; 2001 [citado 2009 jul. 24]. Disponível em: <http://www.br-ie.org/pub/index.php/sbie/article/view-File/118/104>
9. Cogo ALP, Pedro ENR, Severo CL. Construindo o aprender enfermagem: exame físico e anamnese a partir de imagens. In: Anais 56º Congresso Brasileiro de Enfermagem; 2004; Gramado, RS, Brasil [Internet]. Gramado: Associação Brasileira de Enfermagem; 2004. [citado 2009 jul. 24]. Disponível em: <http://www.bstorm.com.br/enfermagem/index-p2.php?cod=75044&popup=1>
10. Stake RE. Qualitative case studies. In: Denzin NK, Lincoln YS. The sage handbook of qualitative research. 3rd ed. California: Sage; 2005. p. 443-66.
11. Bardin L. Análise de conteúdo. Lisboa: Edições 70; 1977.
12. Universidade Federal do Rio Grande do Sul. Comissão de Pesquisa e Ética em Saúde. Resolução normativa 01/97, de 9 de janeiro de 1997. Utilização de dados de prontuários de pacientes e de bases de dados em Projetos de Pesquisa [Internet]. Porto Alegre; 2009 [citado 2009 jul. 24]. Disponível em: <http://www.bioetica.ufrgs.br/res197hc.htm>
13. Viscott D. A linguagem dos sentimentos. São Paulo: Summus; 1982.
14. Carvalho MDB, Pelloso SM, Valsecchi EASS, Coimbra JAH. Expectativas dos alunos de enfermagem frente ao primeiro estágio em hospital. *Rev Esc Enferm USP.* 1999;33(3):200-6.
15. Silva APSS, Cogo ALP. Aprendizagem de punção venosa com objeto educacional digital no curso de Graduação em Enfermagem. *Rev Gaúcha Enferm.* 2007;28(2):187-92.
16. Moran JM. A educação que desejamos: novos desafios e como chegar lá. São Paulo: Papyrus; 2007.
17. Posey L, Pintz C. Online teaching strategies to improve collaboration among nursing students. *Nurse Educ Today.* 2006;26(8):680-7.
18. Sit JW, Chung JW, Chow MC, Wong TK. Experiences of online learning: student's perspective. *Nurse Educ Today.* 2005;25(2):140-7.
19. Jacobsen HE. A comparison of on-campus first year undergraduate nursing students' experiences with face-to-face and online discussions. *Nurse Educ Today.* 2006;26(6):494-500.
20. Mcalister SRA, Scanlon E. Combining interaction and context design to support collaborative argumentation using a tool for synchronous CMC. *J Comput Assist Learn.* 2004;20(3):194-204.