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Identifying social presence in a teacher training distance course for technology-mediated education

Alessandra Fracaroli Perez ¹ Dyjalma Antonio Bassoli ²

Edson Walmir Cazarini ³

José Dutra de Oliveira Neto 4

ABSTRACT

This paper aims to investigate the characteristics of social presence in a teacher training course offered in a distance learning mode. Four instances of evaluation were conducted by online surveys at the end of the first stage of the course: personal acting, content, learning experiences and network learning. Results showed that course participants were able to recognize the characteristics of social presence in the learning process and also that teachers positively evaluated the experience of performing as students. As a reference to conduct this analysis, we used the social presence Standard Matrix scale, developed by Kim (2011). Conclusions were that social presence is an important factor to understand the student's perception about his/her learning and satisfaction within the course, guiding the planning of new actions both for the subject matter and the course, as a whole.

Keywords: social presence, distance education, teacher training, forum

RESUMEN

Este artículo busca investigar características de la presencia social en un curso de capacitación docente, en la modalidad a distancia. Cuatro instancias de evaluación fueron realizadas, por investigación online, al final de la primera etapa del curso: actuación personal, contenidos, experiencias de aprendizaje y aprendizaje en red. Con el resultado, se observó que, además de reconocer las características de la presencia social en el proceso establecido, los estudiantes de la capacitación docente evaluaron positivamente la experiencia de presentarse en el proceso partiendo del papel del estudiante. Como referencia para realizar éste análisis, se utilizó la Matriz Estándar de escala de la presencia social, desarrollada por Kim (2011). Se concluye que la presencia social es un factor importante para

¹ University of Ribeirão Preto. E-mail: aperez@unaerp.br

² University of Ribeirão Preto. E-mail: dbassoli@unaerp.br

³ University of São Paulo. E-mail: cazarini@sc.usp.br

⁴University of São Paulo. E-mail: dutra@usp.br

entender la percepción del alumno sobre su aprendizaje y satisfacción con el Curso, en esta modalidad de enseñanza, siendo un rector de nuevas acciones en la planificación de la disciplina o del Curso.

Palabras clave: presencia social, educación a distancia, capacitación docente, foro.

RESUMO

Este artigo visa pesquisar características da presença social em um curso de capacitação docente, na modalidade a distância. Quatro instâncias de avaliação foram realizadas, por pesquisa online, ao final da primeira etapa do curso: atuação pessoal, conteúdos, experiências de aprendizagem e aprendizagem em rede. Com o resultado, observou-se que, além de reconhecer as características da presença social no processo estabelecido, os estudantes da capacitação docente avaliaram positivamente a experiência de se apresentar no processo partindo do papel discente. Como referencia para realizar esta análise, foi utilizada a Matriz Padrão de escala da presença social, desenvolvida por Kim (2011). Conclui-se que a presença social é um fator importante para entender a percepção do aluno sobre a sua aprendizagem e satisfação com o Curso, nesta modalidade de ensino, sendo um norteador de novas ações no planejamento da disciplina ou do Curso.

Palavras-chave: presença social, educação a distância, capacitação docente, fórum.

INTRODUCTION

Since distance learning was implemented, there has always been a major concern of teachers / tutors about the search for new learning strategies, that is, try to resignify the way of teaching, so that students could acquire knowledge through information and communication technologies.

Instead of acquiring knowledge in a classroom where everyone is at the same time listening and interacting with the teacher, in Distance Education (DE) students seek knowledge having as starting point the instructional materials, classroom lessons, videos, researches and discussion forums about a particular subject. The student of this learning modality, mostly coming from a traditional education, tends to feel alone, often resulting in dropouts.

This paper aims to present two major factors that contribute with this new reality of teaching and learning: teacher training and social presence, both with different ramifications, since the first one seeks to train the teacher and the last one, to understand how the student feels belonging to the course. However, both have a common impact on the final result: to contribute with the distance learning modality student so he could have the best training and that these factors contribute effectively with the process of teaching / learning.

A survey was conducted with teacher training course students, specially evaluating one of the course's forums, a questionnaire to evaluate four dimensions has been applied and, from this, it was possible to identify issues related to social presence, having as a

reference a matrix developed with focus on distance higher education.

1. SOCIAL PRESENCE IN DISTANCE LEARNING

In 1976, "social presence" concept emerges, elaborated by Short, Wiliams & Christie, who defined the degree of importance between two communicators using a particular mean of communication. They proposed that the media differ in their degree of social presence and that these differences have an important role on how people interact. They have conceptualized "social presence" primarily as a quality that can determine the way people interact and communicate.

However, over the years and with the need for further studies, the idea of social presence was progressing, thanks to authors like Gunawardena & Zittle (1997) e Byam (1995), who observed that social presence in online interaction suffered variations and that it depends more on each participant in the online environment than on itself.

Over time, the theme of "social presence" was gaining research space in the area of higher education mediated by technology. The Community of Inquiry (CoI) is a theoretical model developed by Garrison, Anderson & Archer (2000) for technology-mediated education and it was later developed by Garrison & Anderson (2003) education. This proposal is considered to be the most complete and integrated regarding the role of the teacher in the virtual learning environment (VLE), as the Community of Inquiry brings an approach that takes into account both the constructivist perspective of

learning and of knowledge. This community embraces the concepts of social presence, cognitive presence and learning presence. Some researchers have focused especially on social presence, aiming to overcome the limitations in the online environment, having a direct result on the interaction of the participants.

According to Gunawardena (1995), the way people realize their own presence or their colleagues has a weight greater than the environment itself. For the author, technology-mediated community has no lower level of social cues, being, instead, a stimulating, interesting and interactive environment that can, through its tutors, the ones responsible for mediating the VLE, promote to the students the feeling of belonging to the community and also encouraging and promoting collaborative learning among them.

Shih e Swan (2009) conducted a study about the perception of social presence in asynchronous discussions carried out on VLE and concluded that it could and should be promoted taking into account discussions careful planned, students and tutors awareness about how their speech can increase or decrease their presence and involvement in the group to which they belong. These authors emphasize that forums promote much interactivity and assist students to adapt to the teaching / learning process at distance.

Other authors have also researched the real meaning and the importance of the forum on VLE. Moran (2002, 2003, 2006), Almeida (2003), Belloni (2001), Palloff and Pratt (2004) have stated its importance in context of Distance Learning, and the

analysis of interactions that happened in discussion forums were based primarily on thes sociointeractive concept from Vigotsky (2000), Brousseau (1996) and Chevallard (2001).

To measure social presence and to be able to guide future actions, many tools have been developed, but few focused on higher education and Distance Learning modality.

This work brings as a search tool the matrix developed by Kim (2011). The author developed and validated a reliable instrument, which aimed to overcome the limitations of other instruments designed to measure social presence, focusing on the modality of higher education. The author confirmed the multidimensionality of social presence and relied on four factors to build this matrix: emotional attachment, sense of community, open community and mutual attention and support.

À luz disso, este trabalho irá medir a presença social de alunos de um curso de capacitação docente em uma Instituição de Ensino Superior, na modalidade a distância, por entender que a presença social é um fator importante para compreender a percepção do aluno sobre a sua aprendizagem e sua satisfação, de modo geral.

Because of this, this paper will measure social presence of the students from a teacher training course from a Higher Education institution on distance modality, understanding that social presence is an important factor to comprehend the students' perception about their learning and satisfaction in general.

2. THE INSTITUTION AND THE TEACHER TRAINING PROCESS IN DISTANCE LEARNING

The studied institution performs every six months a teacher training process for Distance Learning modality. Given the major changes in the contemporary educational process, teacher training programs for Distance Learning has become one of the instruments of permanent institutional program to train teachers to increase the discussions about these changes, and, especially, the changes in the technologymediated education scenario. During the first implemented processes, teachers were welcomed to perform studies to develop their teaching role for this modality. At the end of the process, the feeling of an incomplete work was shown and, in practice, teacher still found it difficult to make their incursions in their subjects when embodied virtual processes. Likewise, failures were also attributed to the students, who did not respond the way expected by the teacher.

In this scenario, the teacher training project coordination team was interest in enrolling the teacher initially by the student role, progressing, in a second stage, to the usual teacher role. As there was always a very significant effort so that teachers could understand how expressive the process of how a subject in Distance Education should be planned and carried out, the attempt would be considering that, having participated of a part of the course as student, playing the role in a guided way and being evaluated for that, teachers were able to understand more fully how to make a more appropriate planning suit for learners expectations and have more

success in conducting the educational process to implement.

The evaluated course was presented for voluntary registrations, it has received 42 entries. At this point, teachers from different courses, from the three major fields of knowledge (exact sciences, humanities and health), of the institution were received.

About exact sciences, four courses were represented, with a total of 10 registrations: Biotechnology (7), Chemical Engineering (1) Information Systems (1) and Sugaralcohol Industry Production (1). In the humanities field, there were eight courses represented, with a total of 17 registrations: Administration (9) Law (1) Environmental Management (1) Journalism (1) Education (2) Pedagogy (1) International Relations (1) and Social Assistance (1). Besides those, from the health field, five courses were represented, with a total of 15 registrations: Physical Education (4) Nursing (4) Physical Therapy (1) Nutrition (4) Psychology (2). It is noteworthy that some of the enrolled teachers were course coordinators (Administration, Biotechnology, Physical Education, Nursing, Nutrition, International Relations and Sugaralcohol Industry Production).

From the total number of teachers, only 10 had any experience with disciplines in Distance Learning modality: Management (3) Psychology (1) Nursing (2) Information Systems (1) Law (1) Pedagogy (1) and International Relations (1).

In order to comply with the objective of "promoting and encouraging teacher to participate on training activities, improvement and redefinition of Distance Learning through reflective practices aimed at improving the quality of non-classroom educational process", the course formatting predicted 40 hours load for 8 weeks expecting content development, proposals for distance learning and performing final classroom evaluation. Two meetings were carried out in 12 hours and non-classroom activities scheduled to be completed in 28 hours online.

It was envisaged to discuss that the teacher could recognize some concerns that often are unnoticed in traditional teaching, and that, in this type of education, have paramount importance for learning. Students had at their disposal a detailed plan of the whole process (course guide) in order to provide means to understand the whole environment surrounding the educational process mediated by technology, by receiving a pedagogical proposal developed especially to assist good performance when studying. As already mentioned, in this course, in the beginning, teacher took the role of student, understanding the necessary effort to follow a discipline. In a second stage, students performed the role of teacher, selecting content and producing learning experiences, setting them up in VLE. The intention was that this experience could be the entrance door to initiatives that prepare them to produce their courses, partially or entirely, mediated by technology, attending teachers and students expectations. At the end of the course, it was expected that teachers would be able to use the tools and basic concepts involving technology-mediated learning, serving as a basis for future offers of Distance Learning courses.

The covered subjects were general considerations on Distance Learning, the learning process in distance education using technology, the student (characteristics and development of the learner profile) and the use and configuration of the VLE.

The proposed evaluation criteria consisted of two notes related to the learning process evaluation: a grade concerning the continued evaluation, held at the VLE, and another concerning the final classroom evaluation. Both evaluations were graded from 0 to 20 points each. The final course average is the sum of these two grades (continuous and classroom assessments) divided by four, and the final grade for approval is seven or higher.

As evaluation criteria, a tool called Rubrics was used, it corresponds to a grading tool that lists the criteria for the construction of an academic paper and how it will be evaluated. Besides helping students from the teacher training course to discover how their project will be evaluated, specifies the level of performance expected related to the various quality levels, with which students reflect if they are able to achieve these objectives in their own work before handing them over.

3. CHARACTERIZING THE RESEARCH

The studied criteria to recognize social presence in the teacher training course was directed specifically to the activity carried on the forum in the first step of the course, when teachers assumed the role of students.

Besides presenting this important tool for collaborative construction to the teachers enrolled in the course, it was also the intention to make use of a proposal that could

create opportunities for discussion about contemporary higher education, its current range of approaches and challenges, especially for the private institutions scenario.

Thus, the effective proposal on the forum was provocative enough to allow teachers to position themselves freely about the subject matter. Specifically, the proposal provided a reflection on teaching practice since graduation time and on his performance at the contemporary moment and in a near future.

It was expected to discuss the main barriers related to teaching work, trying to identify problems and suggest possible contributions in order to eliminate them and, in this scenario, consider the changes on new student profile in higher education (the current Y Generation and soon Generation Z) and the impacts caused by the insertion of technology in this educational context. We attempted also to discuss the usual speech that the student is always the one who owes a better commitment and the one who has main responsibility for the failures on the teachinglearning process. Also should we search for a new way of teaching practice during the information or knowledge era, or if the form is consolidated and approved and it would be the student who should adapt to the already well-established process.

To follow up this work, was established the rubric for a criterion-referenced assessment. This condition was intended to give subsidies to proposed objectives for this learning experience, as well as to recognize at the end the conditions that could highlight social presence expected characteristics. To this end, the guidelines for activity

evaluation have considered if the students argued and positioned themselves coherently and with clear ideas about their perceptions from the subject; if the student started the discussion on the forum on the week it was released and if they interacted with three or more participants; and if the students have contributed with other references that helped contextualize the subject.

Grading considered proper or improper service according to three or five requirements, when three requirements were properly attended, until zero, if none requirement was attended. The time interval for this forum was 15 days, respecting the gap between the first and second course meetings.

4. ANALYSIS AND DISCUSSION

Participation in the discussion forum was very representative. Tutors interference was necessary to the end of the activities, since teachers should start new ones in the course. When forum is closed and the discussions are finished, tutors, by the students' request, creates a PDF file of the debates, that resulted in 85 pages, with 303 posts (259 from the students, or 85.5%, and 44 from the tutors, or 14.5%).

Once the tabulation of the number of days the student has communicated in this forum and the number of posts was made, it was possible to realize that 9 of these students limited to attend the forum in just one day, posting 2 or 7 posts (average of 3,5 posts); 14 students participated in two different days ranging from 3 to 9 individual posts (average 5,3), 9 others participated in up to 3 different days in the period (average 6,8) and 10 interacted in 4 days or more (average 4,7). The largest number of postings was made by a

student with 16 posts in 8 different days, and the lowest number of postings was 2 inserts made in a single day, fact occurred with 4 participants.

Considering the proposed rubric in the assessment, grades ranged from zero to 5 points, in which the zero was attributed to only one student (2,4%) who did not attend the proposed discussion in the forum. Most students (29 people, or 69%) of 42 enrolled in the course obtained 5 as a grade. Other 7 students (16,7%) received 4 as grade, and 5 students (11,9%) had 2 as grade for the assignment.

At the end of the final stage of the course, an online assessment was made, using specific criteria, divided in four instances (Personal Performance, Developed Content, Learning Experiences and Networked Learning). Elaborate Content, learning experiences and networked Learning). For each instances, statements were presented, total of 36, which should be answered by a single alternative, distributed in a Likert scale (0- totally disagree, 1- disagree, 2 - neither agree nor disagree, 3-agree, and 4-totally agree).

Specifically to recognize the characteristics of social presence in distance learning in the course, it was identified in each of the four instances described earlier, 20 questions with different contexts. In this paper we will present only those instances that were described strictly to discern this condition, in recognition of the students' impressions about the course and the proposal to assess whether the expected social presence connections were established. From 42 students enrolled in the course, 41 (97,6%) have done the first stage of the course (forum) and 31 (76,1%) have answered the proposed form at the end

of this activity. This number of 31 people who have answered the question will be the focus to study the obtained results.

The first stage of the questionnaire investigated personal performance. Particularly about the proposed questionnaire at the end of the first stage of the course, it was possible to get students impression about the course and the social presence connections that were intended to achieve. When questioned if the level of personal motivation was the maintained constant during the course, 27 people (87,1%) agreed. The majority of the

The majority of respondents (67,7%) also considered that exploration beyond the recommended essential references was performed, and also that the recommended references encouraged them to look for new references to share with the group (74,2%). Only two participants (6,5%) disagreed that they have contributed and three others (9,7%) have shown indifference.

Even though the rubric was available to the interaction proposal, there were also those who were not satisfied with the results presented in the discussions. From the total of respondents, 25,8% (8) were neutral, and one (3,2%) disagreed to have explored it. It is deemed appropriate to consider that this individual is part of the contingent of people who have limited their participation in the forum in just one day.

It was also questioned whether colleagues and tutor opinions contributed to the process of network learning. The majority of respondents (71%) answered yes, 19,4% were neutral and 9,7% (3) disagreed with this statement.

Since part of the group did not have contact with processes mediated by technology yet, it was investigated if the discussions and debates in the VLE were important for make decision about the themes; 61,3% (19) of the respondents showed positive feedback and 80,6% (25) said they are motivated to apply in their work the knowledge obtained in this course, and 9,7% (3) did not want to incorporate this knowledge into their teaching activities.

The second part of the questionnaire was about the course content. In this paper, we are going to mention only one issue of this roll that could show signs of social presence. When questioned if the presented concepts were enough to do the proposed activities in a collaborative way, 93,5% (29) answered positively. In order to support this thesis, in the last part of the questionnaire (network learning), it was questioned if the collaborative work methodology used by the teacher have contributed to provide comprehension of the discussed concepts: 26 (83,9%) answered yes, while 4 people (12,9%) have positioned themselves neutral and only 1 person (3,2%) stated to disagree.

The most significant quantity of questions that pointed out to social presence evidences were the questionnaire two last stages that intended to understand learning experiences in the VLE and network learning. The learning experiences proposed focused on interactivity and discussion. It was possible to see that 80,6% of the group (25) agreed that activity has provoked and encouraged reflection on the raised themes, and the same percentage indicated that these proposals encouraged collaborative networking.

Because it is a course predominant virtual, it intended to recognize whether different forms of interaction VLE would be sufficient so the need for more personal meetings (a total of three) would not be missed. In this sense, 71% of respondents (22) signaled that there was no need for more meetings, 6 (19,4%) were indifferent and only 9,7% of the group (3) thought that the number of meetings was insufficient.

To consider the necessary presence and online teaching intermediation, it was asked about the directions given by the teacher in order to perform activities and work on the appropriateness and sufficiency: 90,3% (28) were satisfied and 9,7% (3) felt indifferent. It was also investigated if the return offered by the tutor in the activities was adequate enough and contributed to the understanding of the studied content; 77,4% (24) of respondents were positive and only 7 people (22,6%) were neutral on this question. The same coefficient was reached when asked if students were able to establish a relationship with the tutors.

When students were questioned about the tutors'effort to clarification, 87,1% (27) were positive. From the total respondents, 26 people (83,9%) considered that, despite the physical distance, they could realize presence of people following their work and who were willing to help them when they needed. Only one individual (3,2%) disagreed and 4 others (12,9%) were indifferent to this tutor behavior. Investigating whether the teacher kept a friendly relationship with the group, constantly trying to stimulate the participation of the group and of students on their own, 93,5% (29) answered positively and only 6,5% (2) disagreed with this possible evidence.

Finally, it was necessary to recognize among the students if the teacher's participation in the debates and discussions in the virtual environment was essential for these interactions to have a good result. No student disagreed this assertion, 4 people (12,9%) were neutral and the majority (27 people or 87,1%) appointed it as a determining factor.

The study of these answers from the questionnaire was based in the proposal of presence Standard Matrix scale, developed by Kim. In this proposal, four dimensions are presented as essential to the identification: attention and mutual support; affective connection; sense of community; and open communication.

It was possible to recognize, through the behavior observed and the questions individually answered in the questionnaire at the final stage, that the dimensions of this matrix could be understood from the answers of the form and from the students' behavior in the VLE. Attention and mutual support, the first of the four points highlighted by Kim (2011), could be seen during the course, because it was evident that the group respected the each other's opinions to make decisions. During the discussions development, it was also evident that peoples' participation affected the activities. There was a concentration in the discussion and group activities helped them learn efficiently.

The affective connection, the second point part highlighted by Kim (2011), was also present on the course. It was possible to observe that the participants were able to reach out to others from the group. In the presentation of each participant (VLE profile and forum presentation), many even shared

personal stories. In the assessment forum, students were called by their names, and it was clearly understood the possibility of learning more about the other participants from the group. In some moments of discussion, it was realized the influence on individual posts by the mood of the other participants.

One of the most evident points was the fourth element from Kim's matrix, the sense of community. Even though the group is not physically together in a traditional classroom, the feeling of belonging into the group was evident, developing a sense of community with the group of students and tutors. This can also be observed in the course face-to-face meetings.

Finally, it is worth highlighting the obvious advantages of open communication, which makes up the last element of the matrix. Participants were clearly able to recognize another's point of view, most of the opportunities with clear individual opinions. There was involvement to exchange ideas with other participants and effort so others could understand the comments made.

FINAL CONSIDERATIONS

It is unquestionable the importance of teacher training for admission of the teacher in distance education modality. This is moment in which it is possible to offer new opportunities to know different learning experiences to future teacher / tutor of a semi distance course. On this occasion, in the teacher training in which the research mentioned in this paper was proposed, the teacher was able to experience in real conditions, the role of the student, and to have

the experience to know their problems and also their opportunities with the new teaching and learning modality, which was evidenced by the answers collected in the questionnaire at the first stage of this course.

Through this questionnaire, it was also possible to explore how social presence, a theme that conquers more space every day in the distance learning modality researches, could contribute to the issues related on how the student can "feel" like belonging to the course and this is a crucial element support for achieving the intended goals, a priori, when planning the course.

The research allowed to measure social presence with discussions based on the matrix developed by Kim (2011), which allowed corroborate on how much social presence is important to understand the perception of students, not only about feeling of belonging to the course, but also about its concrete learning and satisfaction with the course. This experience regarding social presence as fundamental element strengthen the requirements for considering collaborative learning in VLE, in future initiatives of these teachers.

The results presented in this study will also guide new proposals within the institutional teacher training course, increasing further challenges to the teacher / tutor, since it stress the crucial need to be limited not only by a traditional bureaucratic and content based learning process, highlighting the importance of considering teachers in their actions, whether in planning or conducting the course / discipline, mechanisms that increase the perception of social presence, since it is an aspect that is

relevant and shows that results in important indicators such as critical success factors actions for teaching / learning courses or subjects that are offered in semi distance modality.

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