Distance education from the students' perspective

Simone de Souza^l Valdeni S. Franco^l Maria Luisa F. Costa^l

Abstract

This article presents reflections developed during PhD research that sought answers to the question: what do the discourses of senior students in undergraduate Physics and Education courses of Universidade Estadual de Maringá, in Paraná state, on distance education and specifically on each course reveal? Twenty-six undergraduate students gave interviews, which were audiorecorded, transcribed and assessed according to the French discourse analysis. This enabled unveiling the meanings that emanated from the discourses of the research participants, without the pretense of generalizations. Our objective was to understand discourses of the students on their personal experience in distance education undergraduate courses, as well as their structural, organizational and educational aspects. The most relevant findings have been: strong influence of images constructed throughout schooling in face-to-face education; easy access to higher education via distance education and its adaptability to the living conditions of students; student preference for printed books and video classes to support learning; resistance, technical failures, and limited use of information and communication technology as mediators of teaching and learning, as well as weaknesses in the communication between tutors and students.

Keywords

Distance education – Discourse analysis – Physics students – Education students.

■ Universidade Estadual de Maringá, Maringá, PR, Brasil. Contacts: ssouza2@uem.br; vsfranco@uem.br; luisafurlancosta@gmail.com

Educação a distância na ótica discente

Simone de Souza^I Valdeni S. Franco^I Maria Luisa F. Costa^I

Resumo

Este artigo apresenta parte das reflexões desenvolvidas durante uma pesquisa de doutorado que buscou respostas à questão: o que revelam os discursos de estudantes veteranos dos cursos de licenciatura em física e em pedagogia da Universidade Estadual de Maringá, Paraná, a respeito da modalidade de educação a distância e, mais especificamente, dos elementos constitutivos de cada curso? Para tanto, vinte e seis acadêmicos concederam entrevistas, que foram gravadas em áudio, transcritas e compreendidas segundo a teoria da Análise do Discurso de linha francesa, o que permitiu desvelar os sentidos que emanaram dos dizeres dos participantes da pesquisa, sem pretensão de generalizações. O objetivo foi compreender os discursos de estudantes quanto às suas experiências pessoais em cursos de graduação, na modalidade a distância, nos âmbitos estrutural, organizacional e pedagógico. Do resultado das análises, destacaram-se: a forte influência das imagens construídas ao longo da história pela escolarização na modalidade presencial; a facilidade de acesso ao ensino superior via educação a distância (EaD) e sua adequação às condições de vida dos alunos; a preferência dos estudantes pelo livro impresso e pelas videoaulas como suportes à aprendizagem; as resistências, as falhas técnicas e o uso limitado das tecnologias de informação e comunicação (TIC) como mediadores do processo de ensino e de aprendizagem; a presença de fragilidades no processo de comunicação entre tutores e alunos.

Palavras-chave

Educação a distância — Análise do discurso — Estudantes de física — Estudantes de pedagogia.

I- Universidade Estadual de Maringá, Maringá, PR, Brasil. Contatos: ssouza2@uem.br; vsfranco@uem.br; luisafurlancosta@gmail.com

Introduction

We will present some of the reflections arising from a PhD research whose main analysis scope was the distance education (DE) student. Our assumption was that there is no doubt that the student is the main actor in the learning process in this kind of education, understood as active and autonomous, responsible for building his/her knowledge, formerly governed almost exclusively by the teacher.

In this context, Belloni (2006) points out the fact that educational theories and practices know little about the way the DE student learns; the author adds that such student is an abstraction of the face-to-face education student, who is distant just geographically.

Considering the assumption that the student is not heard, the research problem was outlined as follows: what do the discourses of senior students from the Physic and Teacher Education at the State University of Maringá (UEM) reveal about Distance Education and, more specifically, about the constitutive elements of each course?

This broad question made way for other issues: do the students' expectancies meet the model of distance education proposed by UEM? Do the discourses of Physics and Teacher education students share common things and divergences? Which are they? What do students think about the support to distance learning based on ICT and about the relations between students, professors and tutors?

We assumed that the students who made a choice for online education are not aware of the relevant mechanisms and think that it is easier to go through this kind of learning, partly because what they have in mind is the face-to-face type of teaching, which collide with a different professor profile, with the use of communication technology as learning mediators, with a teaching materials using scientific language and with the responsibility of being the managers of their own knowledge. These factors are scary and raise conflicts.

We also considered that there are anxiety, demotivation and difficulties that come up along the course, mainly because students are required to be autonomous and self-controlled.

In this scenario, field research – of qualitative, exploratory, and descriptive nature – provided adequate support to the investigation, by collecting the opinions of groups of students, not intending that their speeches would be generalized but rather aware of the possible influences on the ideas of other people (MARCONI; LAKATOS, 2006).

The methodological path

We started off with a documental research about the topic, followed by a questionnaire with multiple choices whose purpose was to select participants, according to the criteria of having taken *vestibular* (a public exam to access university) in order to be admitted to the course, and not the previous experience as an undergraduate in distance education. As, during the data collection took place in 2012, there were only thirteen senior Physics students, we defined the same number of students from the teacher education course. Thus the twenty-six participants freely accepted to be interviewed; interviews were audio-recorded, transcribed to the letter and then analyzed.

It was a semi-structured interview with a script of questions, but flexible to include adaptations, if necessary. We inquired the students: which were the reasons that took him/her to choose distance education? Tell us which were your former expectancies about the course and your current expectancies. Along the course, what needs did you have? Were they met? Were there hurdles to your learning due to the fact that it was distance education? How do your organize your learning activities? Give your opinion about the methodology adopted in distance education. Explain how you utilize the learning and technological resources supplied by distance education, such as: printed materials, Moodle, video classes, web conferences, face-toface activities at the student support center. How is your relationship with the face-to-face tutor? And with the online tutors? How do you get along with your online colleagues?

Data analysis was based on Discourse Analysis (DA) of French strand. Categories and its unfolding consequences arose from within the students' speeches in response to these questions, which required an effort to understand the meanings produced by the words expressed by participants and their possible effects. In summary, DA comprehends that the discourse is not limited to its interpretation nor is in search of the truth. It is recognized that there are constraints and mechanisms that make up the purport and, in order to understand it, there is no handbook, no key. It is necessary to consider, in the analysis process, the intelligibility, the interpretation and the comprehension.

Intelligibility refers to the literal meaning; it is enough to read and identify what is evident, to perform the codification. To interpret something, one needs to go beyond perception and look for the contexts where the individual is a part of and which permit to qualify him, to give him a name, to characterize him. However, when interpreting, the analyst "[...] merely reproduces what has already been produced there, [...] since it just mirror his position as a reader in the reading he is doing" (ORLANDI, 2008, p. 117). Comprehension is more far-reaching - at it has to de-mystify how interpretation works -, it is to get to know how meanings are produced; that is, analyzing discourse requires to focus on comprehension in order to make other meanings explicit as they are present in the statement.

According to Orlandi (2010, p. 62), "delimiting the *corpus* does not follow empirical (positivist) criteria but rather theoretical criteria". The author understands discourse as a process in which it is possible to cut out and analyze different states, and the analyst is responsible for such construction. In her words:

[...] since the question is asked by the researcher, it is this responsibility that

organizes his/her relationship with discourse, taking it to construct "his/her" analytical device, choosing to mobilize these or those concept, this or that procedure, with which he or she commits him/herself in solving the question. (ORLANDI, 2010, p. 27).

The procedures utilized in this study where sorted out as follows: firstly, discursive episodes were read and selected e data was interpreted in a literal manner. Secondly, selected episodes were comprehended and analyzed, guided by the questions: what is the meaning produced by the student's discourse? What is the effect of such discourse?

The State University of Maringá and its Physics and Teacher Education courses

The State University of Maringá (UEM) is located in the north-east area he the state of Paraná, Brazil, and provides undergraduate and graduate courses through face-to-face and distance education. Regarding the distance courses, UEM is a member of the system called Open University of Brazil (UAB), in compliance with the directions and references set forth by the Ministry of Education (MEC) in defining its management model.

The online Physics undergraduate course started its activities in 2008, by means of *vestibular* (the exam for college admission). There were 150 openings for students, spread among the cities of Assaí, Bela Vista do Paraíso, Goioerê, Jacarezinho and Umuarama, in the state of Paraná. The second *vestibular* took place in 2010, when openings were raised to 210, and a new city – Cidade Gaúcha, also in Paraná – was included, and in 2013, 300 openings were offered for the six cities above.

In organizational terms, the course is provided by the Physics Department (DFI) and is intended to provide teaching licenses, that is, it is aimed at educating Physics teachers. It varies from four to eight years in length and is conducted in a blended format (with both face-to-face and online activities) and curriculum is the same of the face-to-face course. It has classrooms, laboratories and libraries at the host institution and in the support centers, in addition to the Virtual Learning Environment (VLE) that utilizes the Moodle platform. The teaching/learning materials utilized are available not only online but also as a printed textbook, freely handed to students.

The methodological and technological resources include a variety of teaching sequences, depending on the professor's personal model and are available from the Moodle. Communication is both synchronous (chat, web conference and face-to-face events) and asynchronous (forums, e-mail, video classes) and at least two evaluations. Supervised internship is mandatory, must be done in person under the supervision of the face-to-face tutor in the support center.

The Teacher Education course selected its early students via *vestibular* that occurred in 2008, when 550 openings were offered to the cities of Assaí, Bela Vista do Paraíso, Engenheiro Beltrão, Faxinal, Flor da Serra do Sul, Goioerê, Itambé, Jacarezinho, Nova Santa Rosa, Sarandi and Umuarama in the state of Paraná. In 2009, there was another *vestibular* with 700 openings offered to the support centers in Astorga, Cruzeiro do Oeste and Nova Londrina. In 2013, 850 openings were provided to the support centers previously mentioned, and included the cities of Ubiratã and Paranavaí.

It is a Teacher Education undergraduate course which provides professional training for those who want to serve in education (preschool, high-school and pedagogical formation for teaching workers) and in the management of pedagogical work in formal and nonformal education. It utilizes the same physical facilities, material formats and online support, methodological and technological resources as the Physics course. Its curriculum is different from the one adopted in the face-to-face Teacher Education course.

The distance education student

due to the changes resulting from the use of technologies along the history of humankind, and especially those arising from the impacts that the development of information and communication technologies (ICT) have caused to reconfigure the Distance Education teaching and learning processes, the roles of the actors involved in this context have been adjusted and, in some cases, transformed as for example the student's role.

No matter if the name given is universal student (MAIA; MATTAR, 2007), learning student (TAROUCO; MORO; ESTABEL, 2003), virtual learner (MAIA; MATTAR, 2007), new learner (GUIMARÃES, 2012), or if he/she is called by other terms, the fact is that we argue: that the student is an individual who is now a part of a distinctive educational community; and that choosing the online training based on virtual technological resources implies some pre-requirements. Such requirements concern the competences and skills in dealing with the new tools that provide support to his/ her learning as well as the adequacy of his/ her personal organization, motivation and objectives towards the demands of the course he or she has chosen.

It is worth noting that, in the current context, the effects of the decades-long schooling are still present, while simultaneously ICT-based innovations were introduced in education. About it, Gouvêa and Oliveira (2006, p. 107) say that:

The subjectivity constructed along centuries of the face-to-face educational system, in which the teacher played the role of controlling the information flow, the ways of apprehending the contents and the ways of understanding of what was in circulation in the school ambience (or, let's say, it was believed that the teacher had this controlling power), is now undermined by the distance

that places the student far from the teacher's eyes, speech and direct influence.

Pointing out the *new learner*, Guimarães (2012) relates the increase in the number of higher-education registrations to the rise of the purchase power of a great part of the Brazilian population, who now abandons a unfavorable situation to reach another, with the support of education. Thus, "[...] there is remarkably a new socioeconomic profile of the Brazilian students, who learn in a different way and challenge the elitism that has always been a mark of college education" (GUIMARÃES, 2012, p. 126).

The author lists a series of characteristics that make up the profile of this new student, including: late registration in higher education; part-time or full-time job; evening school; financial independence or a great share in the family's income; the existence of spouses, children and relatives. The knowledge acquired in basic schooling are different from those of the regular college students; they are young adults, adults or older and have clear goals to achieve, as for instance, higher salaries or change of profession (GUIMARÃES, 2012).

Other authors also describe Distance Education students as adults, gerenally between 25 and 50 years old, who are workers and in search for practice-oriented learning, who hold life and professional experience, who like to be in control of their actions and see this type of education as a rich possibility of study, an opportunity they did not have access to when they were younger (PETERS, 2006; DIAS; LEITE, 2010; MOORE; KEARSLEY, 2011).

To this list of characteristics, Moore and Kearsley (2011) add a set of subjective factors, especially anxiety. Lack of experience with distance education and the fear of not fulfilling the course and personal expectancies may contribute to increase drop-out. We also have to consider other profiles when thinking about the technology-using student: Silva (2012), for example, utilizes the expressions

digital natives and digital immigrants to outline the main behaviors of adults.

In general, digital natives were born after 1980, have technological knowledge, assign credibility to the web and utilize it for virtual dates and to help each other. In addition, they are multi-task, they see the world of knowledge as something public, demand transparency and do not trust the authorities. In contrast, digital immigrants were born before 1980 and are learning how to deal with technology. They do justo ne thing at a time, in a linear and sequential manner. They see knowledge as private, they would rather meet personally and then access the web, accept lack of transparency and are subject to hierarchies, as they believe the authorities.

The difference in behavior of both groups is a confirmation of the impact caused by ICT onto human cognition, as they substantially alter the way they learn. A paradox comes up when a digital native cannot break up with the passive role of the traditional student. According to Tarouco, Moro and Estabel (2003, p. 37), students who enjoy the relations provided by technologies quickly learn how to browse the internet, they work in teams and do not find it difficult to produce audiovisual materials. The challenge is to change the passive role of student seen as someone who merely execute tasks. Such condition crucially affects the prerogative that the DE student must be autonomous. According to Belloni (2006), it is an embryonic condition and an exception in our universities.

Maia and Mattar (2007) add to the set of problems associated with the autonomous student his or her distinction in relation to face-to-face students in a scenario of cultural change from teaching to learning, permeated by other *auto* terms, including auto-regulated, auto-planned, auto-organized learning. For Saraiva et al. (2006), the link between the student and autonomous learning must be understood a *position under construction*, from which arise the peculiarities of the populations,

the objectives of each course and the overcome of difficulties in technology-based educative process. In this context, there are new ways of thinking about this topic, as well as it is important to identify and analyze the students' discourses, as we proceed as follows.

Discourses of the students from the courses of Physics and Teacher Education at UEM

Analysis of discourses by using DA requires understanding their meaning effects, that is, establishing relations between what is said and what is exterior, the conditions under which discourses are produced (ORLANDI, 2010). It also enables to identify which DE images are emphasized, as well as acknowledge the presence of what has been said by *others* and the association thereof with the individual speeches of the students.

Firstly, we realized that the student takes his/her standpoint as a citizen, and the discourse is mainly rooted in their living conditions, before taking the very role of student. The highlight is in the broader social, economic and cultural context which identifies, qualifies and justifies why he or she chose distance education.

As studied by Vianney (2006), the guiding axis of the social representations constructed by the students associates Distance Education with the ideas of something easy, comfortable, with flexible hours, opportunity, time- and money-saving, knowledge, among others. As meant by the author, these concepts represent DE in its utilitarian aspects.

The students' discourses prove such utilitarian aspects on a first level, and then afterwards, DE is thought in relation to the access to knowledge it provides and its dissemination by a institution of acknowledged quality. As follows:

The reason why I chose [DE] was because it was easy, it made my life easier, because I have a little daughter and because it fit me well, it really worked. As I had quit my previous face-to-face course and, in order to go on with it, that was what I bumped into. I did some research to check if the course was good, and I saw it was (Physics).

A priori it would be the opportunity, easy to do and I took into consideration the Higher Education Institution which provided the course. Because so far distance teaching was seen as makeshift and therefor did not have the credibility required within the educational system. E, pela UEM ser uma instituição bem conceituada, [...] as result it would offer some training that would harm the rank achieved over time (Teacher Education).

Social and economic challenges are also mentioned as they interfere with the choice of the courses. According to the students:

[...] I did not have any aspiration to take an undergraduate course because I could not afford it [...] I was not going to do it because I had no money to pay for the application fee, and there was someone who helped me pay for it. [...] My expectancy is very high because I did not know a college providing distance education and, moreover, at the time, there were rumors that it was a fake course, that the course was not going to be delivered, that it was a political move, many issues were raised about this matter (Teacher Education).

The expectancy of being able not only of taking a college training but also, to take a college training of good quality, in addition to the fact that it was free of charge. Public, free of charge and with quality (Teacher Education).

And also, the fact that there was a lack of professionals in this field. This is true because my first contract with the government was for a vacancy in Physics (Physics).

We may deduce, from the words above, that the scenario where DE courses are chosen by students and their expectancies are in line with the search for a university degree as a facilitator for the continuation of studies. incompatible with the structure of the face-toface courses and their living conditions, due to the need of transition to work, as well as the search for being a real citizen as a result of the public education, of quality and free of charge. Mota, Chaves Filho and Cassiano (2006, p.16) point out that "the social, economic, cultural and educational asymmetries" are a great challenge to the education system in Brazil, since its expansion goes hand in hand with income distribution.

In this context, DE becomes the opportunity to engage in a global world, and it also involves subjective, individual and verbalized aspects such as dreams and wishes to be accomplished, factors that should not be overlooked:

[...] today a university degree is very important in the global world we live in, either when you're looking for a job or for other opportunities. I had a wide range in front of me, actually, involving the course, involving the way I see things, the way I think. Then, this has helped me a great deal (Teacher Education).

SInce I graduated in science, in 2000, I dreamed of taking another degree in exact science area. Initially, I wanted chemestry, mathematics and, my third option would be physics. And that was the opportunity I had, to take physics. I expected to take another degree, to find a job; I work, a I'm an elementary school teacher, but I Always wished to work with older students, senior students basically. So my expectancies remain because, if I didn't expect it, this

dream of achieving another degree, I would have given up because there were too much difficulties! (Physics).

I wanted to take a great, I didn't care in what area. But as I never liked reading, I decided to take Physics. I am now Reading much more than the Teacher Education students! (Physics).

Choosing to take another degree, the expectancies and difficulties along the process make way for thinking over the specific characteristics of DE and the skill required in another cultural pattern. About his, Peters (2009, p. 70) says that:

In distance education, however, things are quite different. The typical and prevailing ways of teaching and learning are not speaking and listening in face-to-face situations, but to present the printed educational materials and utilize them in order to acquire knowledge. Speaking and listening are replaced with writing and reading, another cultural pattern which, however, is relatively new and for sure it is comparatively difficult.

In the students' discourses, there is the claim for face-to-face situations between the professor and the students so that the alleged easiness to learn by listening the professor would be included in the training, as a way to overcome the difficulties which, in a great deal, do not find their causes directly in this condition – the bodily absence:

I had imagined that it would be the same as in the face-to-face classes, to learn well. And I see now that it is even harder, much harder, oh boy! (Teacher Education).

My expectancies were exceeded. I thought it would be a poor training, that tasks would not be demanded so fiercely. There is a hope that when you graduate, you can be a good reader. And because of the distance, you think that your learning won't be the same as in the face-to-face classes, and I realized that there is no difference at all. It's even harder (Physics).

The presence of inter-discourse (what has been said by others, at other times, and which is present in the individual discourse) is remarkable. The legitimacy of face-to-face education as a promoter of the necessary knowledge and the fact that, through such education, it is possible "to learn well" is the background to qualify distance education as "harder" in some kind of surprise.

For us, there are views that are wrong about the structure and demands of distance course. One of them is to think that because it is easy and simple to access then commitment to the studies is loose. The effort and difficulties are conditions inherent to any situation of new learning, regardless of the type of education involved. Another mistake is to seek DE due its "more practical approach", because "it is easier to study":

Well, then, about what I expected in terms of knowledge, it has exceeded. But I think it is difficult, the person has to work hard, they must have a strong wish to do it, otherwise they would have already quit (Teacher Education).

When I was admitted, I needed a diploma, as I said, I thought it would be easy to study, a more practical manner. Today I still need the diploma, but now it is entirely different from what I had imagined. It is very complicated to take an online training because we don't have the backup that we need. Like, in my case, you ask a question and it takes long to get the answers back or the answers simply never come. When they do come, you have already handed in your assignment (Teacher Education).

We must also consider, in the process, the notion of time in Distance Education, which enhances the disparity between the time to get back to the student and clarify his/her doubts and handing in the assignments before the deadline, what, in some cases, may compromise learning due the discrepancy between the time given to accomplish a task and the time required to answer the students' questions.

According to Belloni (2006, p. 55), for the student, "it may be easier to 'deal' with the separation in space than with the immaterial dimension of time". That is, the teaching systems are flexible about spaces, but are very strict about timelines (for registration, for evaluations, to finish the disciplines, among others), "[...] what is still more revealing of a way of conceiving control based on the traditional classroom".

In this context, there appears the pedagogical mediation conducted by distance tutors or professors through the Virtual Learning Environment (VLE), which requires assiduity, commitment and ability to use it, so that students will not be hostages of the time gap that occurs while they wait answers to their doubts. Saraiva (2010, p. 186) points out that "[...] an online course does not admit failure in communication. If the messages do not go through or the answer takes too long, such event may disqualify the quality of course on the part of the students".

In relation to the methodology experienced by the students we interviewed and to the resources made available for distance learning, they said:

I use them all. As it is a distance training, you have to use them all! You have to read the texts, watch the web (events), you have to be always present in the forum and in contact with tutors if you need help to clarify some doubt. It is like that, that's the way it works. Moreover, in the beginning, when I was admitted to the course, as I came from a face-to-face course to DE, then, I

felt the difference, because you must have discipline to access the website and always get the updates. This was something I wasn't used to doing. I was used to going to school. Now, as you don't go to school, that's the way you have to do it, accessing the website everyday, you have to collect the materials from there, print them, watch the web classes. Otherwise, there no way of following the course. I think that now I got the pace, it is working just fine (Physics).

For me, it opened new horizons. I think it is good, but I think face-to-face [education] is better, because you have contact with the professor right there, you go to school every day, it is quite different when you do face-to-face and when you do distance [education]. Sometimes you are left to your resources, you have to study on your own, get answers for your doubts, talk to one or another classmate, call somebody else if they don't know (Teacher Education).

It is a methodology that depends on you. Because the professor is there, he or she did what they had to. I think then that I have to do my own methodology, a strategy of how I am going to use [the materials], what I am going to do about it, get it? How I am going to achieve that knowledge. You have to be very autonomous. You have to take the initiative because what they could do they have already (Teacher Education).

The need for autonomy about the way a student conduct his/her online student is not based on the idea that every and one does their own part, but it is rather in the relationship among all persons involved in the process, mediated by technologies. Statements of this kind lead to mistakes and guilt, and at the same time they clearly indicate that, for that pupil, the institution is in fact far away from him/her.

Considering that the basic assumption of DE is the mediation by means of technological

resources, it is important to combine different types of media to help students learn, as "The more media alternatives are offered, more effective is a distance education course and it is more likely of serving a broader range of students" (MOORE; KEARSLEY, 2011, p. 101).

At UEM, distance courses count on printed books, web conferences and VLE, the Moodle platform, which display the video classes and allows the contact with tutors and professors by means of forums and personal messages.

Trimer (2012) presents the three-element basis – book, class, and practice – as the support that props higher-education, which is also utilized in DE, with some adaptations. For the author, the practice and the class were moved into the virtual learning environment with the necessary changes, and the textbook, key for the cultural development of the human being throughout history, has been affected by financial, technological and copyright issues.

In the testimonies of all students participating in this research, the importance of the printed book for learning is emphasized, as well as they acknowledge the lack of funds to ensure this material will be delivered timely, as set forth by the Open University of Brazil program:

The printed learning material is paramount. You have to have it on your hands, the text that must be read, it is much easier. I like to have it with me so I can take notes and solve [exercises] instead of just reading on the computer. For me, that is not good. I will print it, or in case they send the PDF to be printed, because the government is not sending the money to make the books; this is difficult because the last books came in late (Physics).

Oh, yes, you have a lot of questions, many doubts remain [unclarified]. I myself cannot understand, say, there are people who study on the web [...] in the video classes, but I can't stay there and keep watching the video classes for a long time. For me, it is

difficult because I need to read the handout or textbook to sit for a test, it is more complicated for me to clarify a doubt on my own. You have to be there with a dictionary, as the words in the textbook are very hard to grasp, it is not the everyday language. Then, there are words I'm not familiar with. For me, it turns out difficult, many words I had never heard before. I think the book is very hard to understand (education).

For the students, it is necessary to have the book in their hands, due to its functionality or due to difficulties in reading directly from the computer screen. These reasons are in line with the historical construction about the action of studying by using printed materials.

Over time, students and professors learned how to utilize the textbook and they developed some learning strategies for it – taking note, writing marks –, which are added to the advantage that the textbook is portable and does not deteriorate after some time (FIORENTINI, 2003; DIAS; LEITE, 2010; MOORE; KEARSLEY, 2011; TRIMER, 2012). In fact, "The ways and means of production available, historically conditioned, exert direct influence on the learning and on the ways of participating and being students and educators" (FIORENTINI, 2003, p. 23).

The following speeches add up, to the relevance of the books, the necessary care that should be taken in their making:

[...] there are books whose contents, the ways the words are presented become difficult for a better understanding. Now, there are professors who put the contents in more clear way, with plain language. Then, this is very helpful when you study on your own, when you try and acquire knowledge (Teacher Education).

Another obstacle is the material, as only the basic stuff is made available and quit often with direct calculations (they jump steps, they think we should know everything), the OUB library does not count on many books, and in a test professors asks for more than what they had taught... In a DE course, you have to be self-learner. In the subject matters involving calculations, that's not simple (Physics).

According to Fiorentini (2003), the challenges when designing Distance Education courses and teaching/learning materials are complex, and one of them is to prepare texts that will motivate students, in order that such material will dialogue with the learner.

We understand that it is necessary to take care with the vocabulary utilized in the texts for DE purposes, taking into account the public they are aimed at, as well as detailing the activities, keeping in mind that the reader may not possess some items of knowledge that seem very obvious to the person who designed the material. Another concern is the lack of books in the library at the support centers, a condition that would adversely affect the search for references.

Studying with the printed textbook is enriched by the video classes. At UEM, students have at their disposal as many video classes as the professor of a given discipline deems necessary, an average of one video class for each chapter in the textbook. In addition, guidance for the course and specific activities may be videotaped. Students may access the Moodle and watch the classes as many times as they wish:

I watch the video classes, generally once or twice; when an exercise is being resolved, I watch it several times. This is also an advantage, sometimes, over the face-to-face situation; in that case, the professor is there and explains the exercise only once. It is different in DE: if I didn't get it very well, I can go back many times and watch that class again (Physics).

The things I did in mathematics were via the video class. I'm very grateful to

those video classes. I watched them, again and again, I took notes, I listened to the professor speaking once more, I went back. The success in the tests I owe to the video classes (Teacher Education).

We identified the advantage of the video class, because they make it possible to watch the professor's explanations several time, overcoming the relation of time and space, since in a face-to-face class, the explanation is given in an instant and, in case the student is absent or he/she is not paying attention at that moment, they miss it. However, the videotaped communication requires special care, because it is not enough for the teacher to be in front of a camera in a long and tiring monologue.

We add the obstacles of technical and methodological nature that prevent taking profit from the web conferences, as this is another important tool for distance learning. For the students,

There are some [video classes] that very good, it really seems you are in an actual classroom, the professor asks something and gives you time to think, because you cannot actually answer, but we can think about it. But in other [video classes], it is not like this. They come, talk, talk and talk. There are professors who has a documental camera, they do something and we watch it; there are professors who bring something already written, they wrote it beforehand and just show it so we can read it. Then, each situation is peculiar (Physics).

I don't participate a lot in the web [activities] because I live sixty kilometers far away, and what happens? You get there, broadcast is very bad, it gets stuck, wow, it's terrible! [...] So, for me, the web does not work fine. The time I spend on the road coming here I would rather stay home and study. Generally, I don't participate in the web (Physics).

For me, when a professor is giving an explanation, I stop what I am doing to watch it; but sometimes a professor is unable to transmit in a way that the students can understand it. Some classes are like this: we talk, we watch and we say "Wow, that's a good professor!", these are great. Now, there are others who speak words we don't understand in our everyday life. And there are professors who speak clearly, explain the matter once and you don't have to go around and ask, they get all of your attention. There are other professor to whom you don't pay attention at all because you can't understand them (Teacher Education).

The testimony by Teacher the Education student mentioned above touches a sensitive nerve in this type of schooling: virtual communication between professors and students. That is, in the moment of synchronous contact with students, it is expected that language will be more informal, as in a telephone call or in an online chat. What is implicit in this student's speech is the habit of talking with a more familiar language when someone meets someone personally, and this might be the differing element in a web conference in relation to a video class.

According to Cruz (2009, p. 88), "[...] the massive use of media in the classroom takes place, and it as a process that transforms the educative space, in which professors and students create new routines and relations based on parameters that have never been seen in the history of education". For the author, the professor will need to "learn the literacy of the audiovisual language" so that he/she can create new teaching practices.

The roles of the distance tutor and the professor, directly responsible for the learning of DE students, can be found in the speeches around the use of the Moodle platform, and similarly the VLE is understood in its importance for the everyday activities in the courses.

Students recognize the practical and functional dimensions of the Moodle, and they also identify the different uses of such learning environment by the students. In their own words:

The Moodle is also very good. Think it is very handy that you can log in and post your assignment there. There is the forum, and also the secretary, everything is in place, when you have a question, you talk to them, the tutor also talks about everything [in the VLE]. I think it is good too (Physics).

I access it all the time. I have already participated in forums, but not any more. I asked a quetion to the tutor and she took several days and the answer was like that, you're stupid. I understood why she answered that way and, in private, I replied: "But I never know what you guys want from us". Because everybody had the same doubt, do you see? And I didn't like the way she talked to me. So now I don't particpate [in the forum] any more (Teacher Education).

The forum is the reference to describe the movement of questions and answers in a time context in which the student thinks she or he is not being benefitted, since she or he believes that her or his questioning should be resolved at once. And there are also subjective factors that permeate the whole process.

According to Mill et al. (2008), one of the competences assigned to the tutors is the management of people from different cultures and with different living experiences by using clear communication, supported by the so called *netiquette* – a term that designates the use of etiquette in virtual communication –, including courteousness, respect and politeness when exchanging written messages:

In the negotiations with students, the tutor needs to develop the culture of

asynchronous communication, and should say clearly to the students that not always an immediate answer can be given in this kind of environment. This type of asynchronous communication is very important to reply the questions correctly, upon thinking them over. In addition, the asynchronous nature of communication allows for more control of the emotional aspects, both to the tutor and to the students. (MILL et al., 2008, p. 120).

In a scenario in which the students belong to different age groups, with peculiar life stories, diversified goals in relation to their education, among other aspects, it is expected that situations of conflict will occur.

Aware that the reflections we have developed so far are specific of undergraduate students from a given university, we emphasize that the meanings that we were able to grasp from their speeches enable us to present our conclusions.

Conclusions

For the students participating in this research, DE acquires meanings based on the easy access to higher education and on the fact that it is adequate to their personal living conditions. We recognize through it the opportunity of achieving training, capacity-building and a possible transition to work. Its development becomes a tool of political action in the search for public higher education with quality in the countryside of Brazil.

Mistakes arise when the possibility of transportation, flexibility of study hours and the convenience of studying at home or any other place that the student may choose, allowed by DE , are transferred to the idea that this type of education could be lesse demanding than its face-to-face counterpart.

In other words, students come deeply marked by the social, economic and cultural context in which their schooling experiences were constructed and, therefore, traces of these experiences remain in their expectancies about the undergraduate course they chose to take in distance education. Among these expectancies, we highlight the proximity with face-to-face practices, the need to find a job and the search for an easy learning, be it due to the flexibility of schedules and deadlines to comply with or due to the rigor manner of dealing with the students. As a result, another meaning is comprehended: the search for the characteristics of face-to-face education in the practices of distance education.

In terms of methodology in teaching and learning and in terms of the technological resources made available, this meaning is acknowledge when most students utilize the printed textbook and video classes are based on the old method where the professor teaches and the student listens and takes notes. Concerning the use of the forum to explain and clarify doubts, the student asks a question and expects that the answer will be direct and well-aimed.

It must be considered that professors from the State University of Maringá are free to conduct their disciplines according to their theoretical frameworks, that is, they may design their teaching strategies in compliance with what they believe and their understanding of the relationships between professor, students and knowledge. Thus, it is possible to establish a relationship for teaching and learning that will stress traditional practices and/or will

encourage students to construct their knowledge through other ways and means. Consequently, it is likely to observe methodologies that are different from a professor to another. Some of them stick to lecturing, even if there is a variety of alternatives provided by ICT, as well as other professors find it easy to create and with charisma for the communication with students, among other characteristics.

It is noticeable in the students' speeches that the main weaknesses in the use of technological resources lie in the difficulties of communication, such as the level of language, the delay in clarifying doubts posted in the forums and the use of *netiquette*. There are also technical obstacles which significantly compromise the quality of the web conferences. We also identified that the Moodle VLE is practical but is not utilized in its whole potential by neither the students, the tutors nor the professors.

In this scenario, we understand that the students' discourses are an addition to the debate about the distance education and they provide subsidies for future research and for pedagogical actions, especially taking into consideration the diversity of the Brazilian culture.

The research which was the basis for the reflections above enabled to identify and feel how important the closeness to and among students of both gender is, as we see them as the builders of a path towards the improvement of distance education in general and for their specific undergraduate courses.

References

BELLONI, Maria Luisa. Educação a distância. 4. ed. Campinas: Autores Associados, 2006.

CRUZ, Dulce Márcia. Aprendizagem por videoconferência. In: LITTO, Frederic Michael; FORMIGA, Marcos (Org.). Educação a distância: o estado da arte. v. 1. São Paulo: Pearson, 2009. p. 87-93.

DIAS, Rosilânia Aparecida; LEITE, Lígia Silva. Educação a distância: da legislação ao pedagógico. Petrópolis: Vozes, 2010.

FIORENTINI, Leda Maria Rangearo. A perspectiva dialógica nos textos educativos escritos. In: FIORENTINI, Leda Maria Rangearo; MORAES, Raquel de Almeida (Org.). Linguagens e interatividade na educação a distância. Rio de Janeiro: DP&A, 2003. p. 15-50.

GOUVÊA, Guaracira; OLIVEIRA, Carmen Irene. Educação a distância na formação de professores: viabilidades, potencialidades e limites. Rio de Janeiro: Vieira & Lent, 2006.

GUIMARÃES, Luciano Sathler Rosa. O aluno e a sala de aula virtual. In: LITTO, Frederic Michael; FORMIGA, Marcos (Org.). **Educação** a distância: o estado da arte. v. 2. São Paulo: Pearson, 2012. p. 126-133.

MAIA, Carmen; MATTAR, João. ABC da EaD: a educação a distância hoje. São Paulo: Prentice Hall, 2007.

MARCONI, Maria de Andrade; LAKATOS, Eva Maria. **Técnicas de pesquisa:** amostragens e técnicas de pesquisa, elaboração, análise e interpretação de dados. 6. ed. São Paulo: Atlas, 2006.

MILL, Daniel et al. O desafio de uma interação de qualidade na educação a distância: o tutor e sua importância nesse processo. **Cadernos da Pedagogia,** São Carlos, v. 2, n. 4, p. 112-127, ago./dez. 2008.

MOORE, Moore G.; KEARSLEY, Greg. **Educação a distância:** uma visão integrada. Tradução de Roberto Galman. São Paulo: Cengage Learning, 2011.

MOTA, Ronaldo; CHAVES FILHO, Hélio; CASSIANO, Webster Spiguel. Universidade aberta do Brasil: democratização do acesso à educação superior pela rede pública de educação a distância. In: BRASIL. Secretaria de Educação a Distância. **Desafios da educação a distância na formação de professores.** Brasília, DF: MEC, 2006. p. 13-26.

ORLANDI, Eni Puccinelli. Análise de discurso: princípios e procedimentos. 9. ed. Campinas: Pontes, 2010.

ORLANDI, Eni Puccinelli. Discurso e leitura. 8. ed. São Paulo: Cortes, 2008.

PETERS, Otto. **Didática do ensino a distância:** experiências e estágio da discussão numa visão internacional. Tradução de Ilson Kayser. São Leopoldo: Unisinos, 2006.

PETERS, Otto. A educação a distância em transição: tendências e desafios. Tradução de Leila Ferreira de Souza Mendes. São Leopoldo: Unisinos, 2009.

SARAIVA, Katia, Educação a distância: outros tempos, outros espacos, Ponta Grossa; UEPG, 2010.

SARAIVA, Luciana Martins et al. Tensões que afetam os espaços de educação a distância. **Psicologia em Estudo,** Maringá, v. 11, n. 3, p. 483-491, set./dez. 2006.

SILVA, Ketia Kellen. Araújo **Mapeamento de competências:** um foco no aluno da educação a distância. 2012. 185 f. Dissertação (Mestrado em Educação) — Universidade Federal do Rio Grande do Sul, Porto Alegre, 2012.

TAROUCO, Liane Margarida Rochenbach; MORO, Eliane Lurdes da Silva; ESTABEL, Lisandra Brasil. O professor e os alunos como protagonistas na educação aberta e a distância mediada por computador. **Educar em Revista**, Curitiba, n. 21, p. 29-44, 2003.

TRIMER, Roger. Livros e apostilas em EaD. In: LITTO, Fredric Michael; FORMIGA, Marcos (Org.). **Educação a distância:** o estado da arte. v. 2. São Paulo: Pearson, 2012. p. 311-317.

VIANNEY, João. As representações sociais da educação a distância: uma investigação junto a alunos do ensino superior a distância e a alunos do ensino superior presencial. 2006. 329 f. Tese (Doutorado Interdisciplinar em Ciências Humanas) — Universidade Federal de Santa Catarina, Florianópolis, 2006.

Received on April 23, 2014

Approved on November 25, 2014

Simone de Souza is a PhD by the Graduate Program in the Education for Science and Mathematics at the Universidade Estadual de Maringá. She is a professor of the Universidade Estadual de Maringá.

Valdeni Soliani Franco is a PhD in Mathematics by the Institute of Mathematical and Computing Science - Universidade de São Paulo (ICMC/USP) - São Carlos. He is an associate professor at the Department of Mathematics (DMA) and at the Graduate Program in Education for Science and Mathematics (PCM) in the Universidade Estadual de Maringá.

Maria Luisa Furlan Costa is PhD in Education by the Graduate Program in School Education at the Universidade Estadual Paulista Júlio de Mesquita Filho-UNESP/Araraquara. She is a professor at the Department of Education Fundaments and at the Graduate Program in Education in the Universidade Estadual de Maringá.