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From Teacher to E-teacher: Teaching Experience in the Distance Learning at the Mato Grosso State University

Carlinho Viana de Sousa, Gleber Nelson Marques, Irton Milanesi
(Department of Computing, Department of Pedagogy, Mato Grosso State University, Brazil)

Abstract: The present report details some teaching experience as a professor in the Brazilian countryside in the context of some important challenges for the Brazilian Education, the Distance Learning (DL) in the Mato Grosso State supported by the UNEMAT state university. After we establish a global view of structure and policies concerning to the DL, the appointments from the perspective of the research-teacher, facing the challenges as a technological immigrant enable us to realize how deep and complex is this transition in practice. The need of good open courses to attend the demand for technical and specialized formation and pieces of information is mandatory for the informational society, thus, public Brazilian universities have an important role to play in this new scenario. The experience at the classrooms, particularly the ones planed to be as an open course, pointed out some difficulties with regard to space and time in DL practice. These aspects concerning to teacher preparation and the organization of the DL at Mato Grosso State University (UNEMAT) are detailed in this paper.

Keywords: distance learning, technologies information and communication, pedagogical practice

1. Introduction

The contemporary world, sometimes called the knowledge society, post-industrial society or late modernity has been changing education due to the advancement of new technologies of information and communication that have come into the school environment. These transformations intervenes in various spheres of social life, causing economic, social, political, and cultural change, also affecting schools and professional practice of teaching (Libâneo, 2011).

In this scenario, the DL gains strength. It is totally dependent on the information and communication technologies, and today it makes use of media and multimedia to promote high interactive education, characterized by a marketing education based on the principles of rationality, division of labour and production mass. Belloni (2003) with based studies in Cropley and Kahl (1983) define DL like a kind of education-based procedures that enable the establishment of processes of teaching and learning even where there is no face to face contact between teachers and learners, thus it allows a high degree of individualized learning.

Carlinho Viana de Sousa, Auxiliary Professor, Department of Computing, Mato Grosso State University-UNEMAT; research areas: education, educational technology, educational computing, teacher training. Email: profcarlinho@unemat.br.

Gleber Nelson Marques, Ph.D., Adjunct Professor, Department of Computing, Mato Grosso State University–UNEMAT; research areas: computing and education, educational technology, development of scientific and educational software, including CAD/CAE software. Email: gleber.nmarques@unemat.br.

Irton Milanesi, Ph.D., Adjunct Professor, Department of Pedagogy, Mato Grosso State University-UNEMAT, research areas: teacher training, supervised training, teaching-learning interdisciplinarity. Email: irtonmila@gmail.com.

Nowadays it is required teachers with some skills, such as, innovator, multidisciplinary, creative capable of learning “to learn”, use and manage information and communication technologies, and, finally, schools need new teachers to a new time.

In this sense, the report proposed here, presents the experience of a teacher that comes from classroom teaching to work in distance learning. The paper is divided into three sessions. In the first session is made one contextualizing about the origin of DL at the UNEMAT and the partnership with the Open University System of Brazil (UAB). In the second session is reported teaching experience of a teacher in distance mode in the subjects of Introduction to Computers in the course of Degree in Biological Sciences and Information and Communication Systems in the Public Sector in the course of Bachelor of Public Administration. In the third session are presented a few reflections about the teacher first experience in distance modality, and in the next, some important appointments to the development of DL at Brazilian educational institutions are pointed out.

2. Contextualization of Distance Learning at the Mato Grosso State University

This session will describe the genesis of DL in UNEMAT since its organization and regulation until the partnership with the UAB system in 2008, period when DL starts to expand in the state of Mato Grosso with the creation, structuring and offering undergraduate courses and graduate in the poles.

2.1 Brief Historical

The UNEMAT has initiated the services of DL in 1999 by two cores in regions that lacked access to classroom courses and a huge demand for teachers to work in basic education without adequate training. To meet the request of municipalities and the LDBEN nº.9.394/96 which establishes in its Article 62, §2 that for the continuing education and professional training of teaching they may use resources and DL technologies (Brazil, 2006a), the UNEMAT created the nuclei of Jauru and New Xavantina, providing to the formation in 2010 of approximately three thousand teachers to work in Basic Education and Early Childhood Education.

The DL in UNEMAT began to be thought, planed and organized about 2002, and has been stated as a institutional policy for Education of the UNEMAT after the approval of the regiment that established the Division of Distance Learning (DDL) by Resolution n°.036/2002-CONEPE of May 23, 2002. The DDL was subordinated to the Dean of Teaching and Extension of UNEMAT and had the responsibility to support the development of projects like courses, programs and graduation and continuing education courses in educational, scientific, technological, artistic and cultural areas in the form of distance learning (Unemat, 2002).

In 2004 the DDL shall be called Coordination of Open and Distance Learning (CODL) being linked to the Dean of Undergraduate Studies of UNEMAT, through Resolution n°.336/2004-CONEPE of December 14, 2004. The objectives of CODL are founded on four pillars: Institutional policy, Teaching, Research and Community Services. Thereby, the CODL would have, among other responsibilities, the aim of: (1) gathering a team to reflect on teaching practice in DL; (2) ensuring the training of teachers in service and continuing education; (3) facilitating the exchange of alternative teaching practices among regular, modular, “splitted” and distance courses approved by the UNEMAT; and (4) providing the experimental conditions for practice and research in DL (Unemat, 2004).

2.2 Partnership between the Mato Grosso State University and Open University System of Brazil

The UAB was established in 2005 and regulated in 2006 by the Ministry of Education, through the National Association of Directors of Federal Education Institutions and State Enterprises. The Decree 5.800/2006, of June

8, 2006, provided for the creation of the Open University System of Brazil and establishes at the Article 1. that It is established the Open University System in Brazil — UAB, facing the development of the modality of distance learning, in order to expand and internalize the provision of courses and higher education programs in the country (Brazil, 2006b).

In 2008 the UNEMAT acceded to UAB system through an agreement term signed with the Coordination of Improvement of Higher Education Personnel. The courses of the agreement between UNEMAT/UAB began in 2010 were Bachelor of Public Administration, Full Degree in Physics and Degree in Biological Sciences; beyond the specializations in: Municipal Management, Public Administration and Management in Health. In undergraduate courses are attended over 1,900 students distributed among the ten local poles in the country side of the Mato Grosso State.

The UAB system is organized as follows. There are one course-coordinator for each course, one tutoring-coordinator for each course associated to the course-coordinator, classroom and distance tutors, which are subordinated to the tutoring-coordinator; faculty for each course, these are linked to the course coordinator, pole coordinator for each unit, this linked to the course coordinator; courses at each pole, under the administration of pole coordinator; students registered in the courses at each pole. It is noteworthy that the poles are created with the support of the municipality where the courses are offered, in general the prefectures give the physical infrastructure and all other resource for the course is assembled with libraries, computer labs with Internet access point, multimedia projectors, staff room for polo coordinator, secretary, among others.

2.3 Physical and Technological Framework for Supporting the Courses

The CODL is responsible for giving support to the courses offered at the local poles, and manages the entire structure of the UAB system from UNEMAT. The CODL is headquartered in the city of Caceres/MT, where it is provided physical, technological and human infrastructure for offering the distance courses. Given the above structure, the UNEMAT can also offer courses in the form of distance learning even when not linked to courses of the UAB system.

The training of teachers, tutors (classroom and distance), as well as the recording of classes and all support for the courses offered by UNEMAT/UAB are performed by the CODL in Caceres/MT. For the recording of classes it is used the platform of the National Research Network, through Adobe Connect software available at the electronic address http://webconf2.rnp.br/uab_unemat. The classes are posted on the Virtual Learning Environment (VLE), which is a term used to define a platform for multiuser software available via the web that supports classroom and distance courses, which integrates tools that enable interaction between users, file sharing and management of class (Leite, Behar & Becker, 2009).

The VLE is available at the electronic address http://ava.unemat.br, as well as the materials for each discipline of each teacher. The virtual environment we have used is Moodle (Modular Object-Oriented Dynamic Learning Environment), created by Martin Dougiamas. In this context, the VLE must to allow the teaching-learning processes occur through not only of interactivity, but concerns to the teacher stimulate the interactions, aiming to favor the construction/reconstruction of knowledge, authorship, shared knowledge production in collaboration, with peers, looking for kind of significant learning (Silva, 2010) for the student.

In addition to classes, all the materials that make up the discipline of each teacher, as teaching plan, book of discipline, slides of classes, additional contents (articles, videos, links, etc.) are posted at the VLE. Finally, all program and calendar of each discipline of a teacher is posted in the VLE, according to Figure 1 below.

Figure 1 Teacher's Page in the VLE

The page shown in Figure 1 is the main channel of communication between the teacher and the students, in this local the teacher can attend individual students (chat or email) or in group (discussion forums) as well as manage and monitor all activities related to the disciplines.

3. Reporting of Teacher Experience in Distance Learning of UNEMAT

This session will describe the experience by a teacher come from classroom teaching to work in distance learning. We will present all the activities and the difficulties encountered by the teacher throughout the teaching practice as well as reflections on performance in distance learning.

3.1 Contextualization

Before reporting the practical experience in distance learning during the work at UNEMAT/UAB, it is worth pointing out that the researcher who collected most notes have been worked as teacher with regular classrooms of the graduation courses in Computing Sciences from the UNEMAT, since 2006. In 2012 an opportunity arose to teach two disciplines, namely: Introduction to Computers (IC) — in the first half of the Degree in Biological Sciences, and Information and Communication Systems in the Public Sector (ICSPS) — in the fourth semester of the Bachelor of Public Administration course, both by the UAB System in partnership with UNEMAT. The first discipline had its activities carried out from November 2012 to January 2013, and the second discipline took place from February 3 to March 3, 2013.

To fulfill the activities of the disciplines, the teacher held pedagogical/technological training in CODL Caceres/MT about the policies and the VLE, and received several guidelines regarding: preparation of the planned teaching, knowledge of the pedagogical project of each course; recording of classes; development of questionnaires, development of classes tests; training on VLE; contacts with people involved in the subjects and courses, and the virtual environment that supports the distance learning.

3.2 Teaching Experiences in Learning Distance

The researcher-teacher developed, first, some essential activities for the discipline of IC, in the period from November 2012 to February 2013. Before starting the discipline, he had prepared the teaching plan accordingly to the program of the discipline, the teaching plan developed for distance learning course had information like: identification, information about the discipline (introduction, program of the discipline, objectives: general and specific), roadmap of the activities, structure of the discipline (information about the contents of the units, readings required and supplementary) and class test. Through the information contained in the plan teaching, the team of Information Technology (IT) of CODL rides the page of the teacher, as shown in Figure 1.

From the preparation of the plan teaching, the teacher made all evaluative activities of the subject, that were: two mixed questionnaires (with questions: multiple choice, relationship of the one column to other, true or false) and a paper beyond the class test (first call, second call and final exam). However, before meeting the students, the teacher has already prepared all evaluation activities. We believe that class test in any modality of education will be defined accordingly to the exchange of experiences between teachers and students, however, first of all it is crucial to know about our students to prepare properly the evaluative processes.

It was prepared all evaluation activities occurred the recordings of classes, titled of web classes. For the discipline of IC it was recorded four classes, all of them in remote time (without the participation of the students). For the recording of the lesson the teacher prepared the slides on the contents of the units proposed in the teaching plan, following certain rules set by IT, which were: moderate use of images, avoid text small and avoid slide transition. All material produced is related to the learning objectives for the incorporation of digital resources, indeed Torrezzan and Behar (2009) say the use of the technology by technology is not enough to contemplate a new educational concept, the key point is worry about pedagogical planning in that digital resources are inserted.

Additionally for the production of an educational material should be taken into account three kinds of design, namely: (1) *instructional*, has to do with the planning of educational materials, (2) *educational*, has to do with the pedagogical factors, providing moments of learning and (3) *of system*, has to do with the configuration or reconfiguration of the system which supports the educational material (Torezzan & Behar, 2009).

Once prepared the slides, they were sent to IT staff so that the file was uploaded to the virtual room, available on the website: http://webconf2.rnp.br/uab_unemat where occurred the recording of classes. The recordings of classes were previously scheduled by the course coordinator, the teacher can record them from his home or from any location, having a computer connected to the Internet with the minimal resources of sound and image. We chose to record all lessons at the CODL, because as a beginner teacher this first time could need more technical support from IT staff.

The recording of the first lesson of discipline was not an experience of the best, the teacher felt insecure, a little lost, a little jumbled in the description of contents, doing very quick, locking in a few moments. Accustomed to the classroom he missed seeing and talking with students. The physical separation between teacher and students was the predominant factor in the failure of the first class that lasted approximately 29 minutes. Moore (2002) states that distance learning is not the geographical separation between student and teacher, but a pedagogical concept: Concept that describes the universe of student and teacher relationships that occurs when students and tutors are separated in space and/or time.

After recording the first class, the teacher felt that something was missed, he thought much about the class, on the methodology used, and how the receiver (student) could absorb the contents of the recording to learn. As requested the IT staff provided a new recording of the class, since the teacher wanted to have the opportunity to

fix some technical mistakes, and add more information, finally do better.

The request was granted and the class was recorded again lasting for about 49 minutes, twenty minutes more than the first time. In this way, we agree with the words of Belloni (2003), which states that directly related to technological innovations, with new social demands and the new demands of a more autonomous learner, one of the central issues in the analysis of DL, and perhaps most controversial, refers to the teachers roles in this mode of teaching, which in turn is called upon to perform some functions for which they was not trained or prepared adequately.

After the first difficulty, the teacher would overcome the differences of a classroom to a distance class in how manage the activities of the course. The research for preparing the classes were more intense, as the readings, and also have watched several video classes to better present and record his video classes. Again from the interlocutor (the student) point-of-view, it was tried to explain in detail the contents of each unit, quoted the name of students in the classes who participated in the discussion forums. To break the barrier of physical separation between the teacher and the students (since classes were recorded remotely) he had imagined, at times, he was in a room full of students as a role play, and in many classes he was able to ask students to reflect on key concepts of the presented content.

Another way used to overcome the physical separation between teacher and students was the use of discussion forums, which were used to discuss the content of the discipline and for students show their questions about the contents of the classes tests and homework. One week before the class test, we started a day-by-day journey by means of chat to talk to students and know his questions, giving a proper explanation. It is noteworthy that both in the discussion forums as in the chats, the student participation was minimal.

Regarding the activities for evaluation, it was observed in the first questionnaire that the students obtained overall average of 82.23 points, in the second questionnaire the overall average fell to 75.32 points, possibly because the increased level of difficulty from one content to another. It is noteworthy that the student had the opportunity to answer the questionnaires twice, being considered the highest score. In the third activity, a short paper assembling the major topics discussed, the students achieved an overall average of 72.72 points. However, in the class test, the overall average of the class was about 48.17, so the students did not achieved the minimum of 70 points. It is noteworthy that the activities in VLE were worth 50% of the final grade and the class test the other 50%.

It can be noticed from above that for the nonlinear activities developed in the VLE, students have obtained a successful result, differently, in the class test with the traditional linear way of doing, when they did not obtain a successful result. According to Demo (2002), the knowledge and learning are activities that express non-linear processes, however, the debate on the evaluation is full of linear assumptions, thus a feedback to the students would be important to collaborate with students. Also, the phenomena being evaluated from both quantitative and qualitative perspective can be considered just one possible approximation for the evaluation of the student, and it needs to be performed in order to collaborate with student learning to allow properly alternative interventions (Demo, 2002).

The activities of the discipline ICSPS occurred from February 3 to March 3 in 2013. In general, the organization of the content of the course was similar to the discipline of IC, e.g., the teacher set up the teaching plan and has already prepared the evaluation activities, proceeded with the recording of classes, etc. The differential between the activities proposed for the IC discipline to the ICSPS discipline was the absence of a short paper homework and the recording of two classes in real time (live). In summary the discipline had two mixed

questionnaires, four classes in remote time and two classes in real time (live) and was supported by the same VLE.

The scores of students in the questionnaires was very high, overall averages of 92.03 points in the first questionnaire and 93.9 points in the second questionnaire. The better performance of activities compared to the first described one, is probably due to the fact that students are more experienced (4th semester of the course) and so, they possibly have already acquired a certain autonomy to study and to learn. The autonomous learning can be understood as a process of teaching and learning centered in the learner, whose experiences are employed as a resource, in which the teacher may help as an additional resource for the learner, which is taken as an autonomous being, manager of his own learning process, capable of self-manage and self-regulate this process (Belloni, 2003).

The classes recorded live served to take the doubts of students on the contents of the four classes recorded remotely, being one class recorded live for each two classes recorded previously. These two classes transmitted at real time do not served to alleviate the feeling of physical separation between teacher and students, for instance, the interaction between transmitter (teacher) and interlocutors (students) was minimal, they only participated in the chat, after that the teacher has revised the contents.

The teacher felt needed of seeing the faces of his students, hearing their voices, being interrupted during class, etc. According to Longh, Behar and Bercht (2009) Education does not exist without interaction. The directions of the teach and learn are strongly grounded in the relations and actions effectuated between teachers, students and environment. The interactivity between teacher and student occurs indirectly in *space* (distance, noncontiguous) and *time* (deferred communication, not simultaneous) which adds complexity to the already complex process of teaching and learning (Belloni, 2003).

In summary despite some difficulties, the teacher evaluated positively his experience in distance learning, considering the support on technologies and staff activities, and has understood that this type of education has different characteristics, different students, different media and different methodologies. New challenges have been arisen each day for students, for teachers and for all people in our nowadays society, and the school and universities must pay attention to this technological benefits that are claimed as a natural demand of the informational society (Castells, 1999). Thus, the main goal in the Brazilian countryside still is to democratize access to a full education, and also to allow people receive education in times and places they want.

4. From Teacher to E-teacher: Some Reflection

The contemporary society provides easy communication, information and globalization as it emphasizes the need of more than technical training, but additionally multiple professional skills such as dynamism, innovation, adaptation, among others are required. These requirements are part of the neoliberal model of society increasingly consumerist and molded as per demand of capital, of the industrial production of goods and services. The DL is configured as an industrial education based on rationalization, division of labor and mass production. Rationalization is because the educational objectives are planned of forming more systematically as possible. At the division of labor, because there are teams of specialists (each responsible for a specific task). In mass production, because courses and teaching materials are produced to a lot of people. With the rationalization and segmentation of teaching in the DL, the teacher that figure centrally in traditional classroom, becomes only part of the process in the DL. That is, the teaching duties will be separated and will be part of a process of planning and executing divided in time and space: the functions of select, organize and transmit the knowledge, exercised in the masterful classes in the teaching classroom, represent in DL the preparation and authorship of curricular units

(courses) and of texts that form the basis of pedagogical materials made in various brackets (text-book or manual, programs for audio, video or computers) (Belloni, 2003).

For act in DL the teacher must assume a new role, from a personal teacher to a collective teacher, from local synchronous communication to synchronous or asynchronous communication supported by tools and at distance. Teachers need to rethink their practice, not only for distance learning, but also in a classroom, as Tardif (2011) that discusses the knowledge of teachers from their experience and as Schön (1995) which discusses the rethinking of teaching practice from the classroom. They are adept of the epistemology of professional practice or "pragmatism", which can be defined as the study of *set* of the knowledge *actually* used by professionals in their daily workspace to perform *all* your tasks (Tardif, 2011).

Schön (1995) supports the idea of a reflective teacher in favor of tacit knowledge. For this author, the teacher as reflective practitioner meets the student and try to understand the reflections from the action, he has the ability to individualize and pay attention to each student, formulates problem posed from the problem situation. Belloni (2003) show the various roles that a teacher assume in the DL, a teacher who reflects his practice, a teacher researcher: that researches and updates himself in your specific discipline, in theories and methodologies for teaching/learning, that *reflects on his pedagogical practice* and directs or participates in the research of his students.

The transition of the teacher from classroom teaching to distance learning requires some thoughts and actions to be performed, among them, we can highlight: adapt to the new; overcome the physical separation teacher/ student; master the technologies of information and communication; passing from personal to collective teacher (centered learning students); constantly rethink the classes; constantly motivate students; rethink teaching practices; recognizing always to innovate.

5. Conclusion

The contemporary, or simply neoliberal society imposes changes on society, culture, politics, economics and education. The advancement of information and communication technologies brings about the need for a new professional endowed with various skills such as innovation, adaptability, versatility, flexibility etc. This work reports some important challenges for the Brazilian Education limited to the DL in the Mato Grosso State by the UNEMAT. From a global view of structure and policies concerning to the DL, the appointments from the perspective of the research-teacher, facing the challenges as a technological immigrant enable us to realize how deep and complex is this transition in practice. The need of good open courses to attend the demand for technical and specialized formation and pieces of information is mandatory for the informational society, thus, public Brazilian universities have played an important role in this new scenario.

These demands of current society begin to create new models of education, an education that can meet market requirements, of increasingly practical way. In this scenario, the DL is strengthened more and more, because the distance learning also serves the purposes of neoliberalism, and is a type of education based on the rationalization, division of labor and mass production, to make constant use of new information technologies and communication to promote education, giving a new drapery to education. In this model, autonomy and discipline are important characteristics for the students, to promote a teaching and learning process centered at themselves. Also, discipline and autonomy are important for the teachers to keep him up to date in terms of information and communication technologies.

We agree with the evolution of teaching and the new ways of teach and learn, however, we must attempt to the use of technology by technology to avoid it becomes an exaggerated pragmatism. Also we must consider the overload of technical "things" a teacher need to know for being able to share the same environment of information and communication technologies (social networks, email, chats, talks, etc.) of his students, and moreover, that he needs to adapt himself to plan, to build, to make his courses for being also offered at distance. More than recording classes, the teacher must to know the more common ways of communication of its students to plan productive and collaborative learning activities at distance. Thus, the technological support is mandatory as well as the continuing education for helping teachers to overcome the known difficulties, which were observed.

It is clear that we must rethink of Education and Distance Learning from a complementary point of view, considering all gains but also all difficulties inherent to this process of technological immigration for teachers and students. How to prepare teachers to be able to make efficient use of technologies for build his open distance courses with good pedagogical quality, remembering that one of the main goal of Brazilian Education still is to awake the critical sense in the subject and help him to become emancipated, so he can change himself and the society where he lives.

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