# **CHAPTER 16**

# STRUCTURING DISTANCE LEARNING IN A PERSPECTIVE OF SOCIAL INCLUSION

Learning and Teaching Distance Education: the challenges of structuring in an inclusive perspective

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### 16.1 Introduction

Distance Education (EAD)<sup>1</sup>, with the use of Information and Communication Technologies (ICTs), allows us a new way of learning in virtual communities. These social agglutinations are defined by Jenny Preece (2000) as groups with a strong emotional connection that actively interact through computational systems in order to reach shared objectives.

The ICTs allow an interaction of the subject with him/herself, the interlocutor, and the world, enrich the spaces (moments) of interaction in which, through the language, emotion is structured providing new ways of seeing/feeling the world, and even comprehending and interpreting it.

The possibility of online teaching and learning in virtual communities is something that Unisc – Universidade de Santa Cruz do Sul – believes, trusting in a methodology that qualifies **the collective construction of knowledge** through **dialogue** and **cooperation**. Such cooperative conception, presented in the sections bellow, is reflected in an innovative inclusive trajectory, emphasizing two dimensions – infra-structure and human formation.

# 16.2 From Face-to-face to Virtual: Infra-structure Support

In order to reach the so-called potential of ICTs to help/improve Distance Education (EAD), develop projects, and provide technological solutions for courses that use EAD, the Unisc Distance Education Commission was created in 1998.

<sup>1</sup> Educação a Distância (EAD).

Operating with a multidisciplinary staff, mechanisms, tools, and methodologies were investigated. As a result, besides the methodology to prepare courses based on the Web, the first version of a Learning Management System – LMS was available to the first distance experiment at Unisc, validated through the preparation and offer for two subjects of an under-graduation course.

The results and research gave new possibilities of improvement to the LMS and several updates and upgrades were available to the Unisc Academic Community in 2002 as support to a) face-to-face teaching learning process, and b) classes using Distance Education as support to face-to-face teaching as well as distance education.

The EAD Unisc LMS (Figure 16.1) has several tools for communication, cooperation, publication of materials, evaluation, and awareness of activities. Its use however, depends on each and every teacher desire to adopt this pedagogical resource in order to support their classes.

This LMS was developed following not only in the molds and styles proper to EAD, a "dynamic and interactive classroom", but also with attention to combine the complementary pedagogical structure necessary to the development of other activities involved in the educational process.

Observing the initiatives of other institutions it was perceived/realized that most of them consider EAD a "separate" modality and not integrated to the processes and infrastructures of regular education. A Center, or units, responsible for EAD is developed, almost a different Institution, with its own academic-administrative resources.

We believe that such practice leads to differentiation (discrimination), and in general, reduction of quality in the services offered in the distance basis. We consider then that

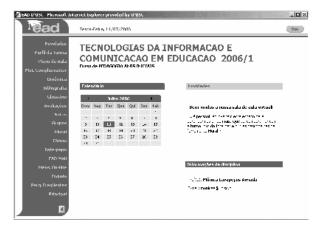


Figure 16.1 – EAD Unisc LMS Source: EAD Unisc Laboratory

the integration between the EAD Unisc LMS database and the Institution Academic System was a fundamental effort to improve/implement the LMS to teachers and students and the assurance of consistent data to every subject. The moment a student enrolls in a subject, he/she receives a password to access the services provided: academic system, library, laboratories, EAD Unisc LMS, and others.

Besides the management aspects, easily perceived, we point out that staff's unfamiliarity to EAD specificities might contribute to the feeling of exclusion felt by students in an EAD program. The pupils although physically "distant" have the necessity to feel "close" to the University they study at. Trivial situations can lead to a feeling of exclusion/discrimination or create/experience doubts about the competence and quality of the Institution. Imagine yourself as a student in a EAD program. How would you feel if someone asked you about the University you study at, and you would only be able to talk about its LMS? If you called the University Information Center asking information about EAD courses and they tell you that such information is available only at the EAD unit? Or, if the promotional material, prepared to divulge the courses, had information only about regular face-to-face courses, and nothing on Distance Education programs?

We believe that Distance Education has some specificities, and for that reason its proposed that they should be under the responsibility of the Distance Education Advisory and the Distance Education Laboratory. However, once it also involves institutional processes, requires professional, it is from the different instances of the University, and they must be prepared to support the development of EAD and properly help pupils from these programs, courses and subjects.

Next, we will focus the institution efforts to develop its staff to properly act in Distance Education programs.

## 16.3 From Traditional – Face-to-face – to Virtual: an Inclusive Human Formation

In the year 2000 the Advisory for Distance Education (AEAD)<sup>2</sup> was created at Unisc, when the policies to structure the EAD at the University were effectively initiated. Amongst the actions articulated we point out the meeting with managers as well as courses collegiate in order to explain the importance of this new teaching learning modality and the mobilization of teachers interested to participate in the planning and implementing activities of the Unisc Distance Education.

The strategies of mobilization and information contribution are fundamental to the mutual comprehension amongst the subjects, about the object under study, one of the basic requisites for the establishment of cooperative relations. Researchers in Computer Supported Collaborative Learning (CSCL) area name this process as "grounding" and it is pointed out that to have an approach incorporated to the "common ground", some kind of feedback must occur amongst the partners, a process which requires effort from both parts. The "grounding" process involves, besides sharing data and facts, processes of diagnosis and feedback (Baker, 1999).

<sup>2</sup> Assessoria para a Educação a Distância (AEAD).

The feedback from the teachers in the early contacts revealed several myths and preconceived ideas concerning the new modality. The AEAD invested in seminars and lectures, with well known authors in the area such as José Manuel Moran and Piérre Lévy.

Proposing collective construction of knowledge in Virtual Learning Communities in a teacher-centered traditional educational culture evidences a complex challenge and the results tend to be gradual. For that reason the consolidation of the Distance Education at Unisc is intentionally slow, once it presupposes voluntary adhesion to the program.

The following step, in the process of preparing the academic community, was the investment in a "culture" of using new technologies in regular face-to-face education. In 2002 the EAD Unisc LMS was made available as a support to regular teaching and learning in order to qualify educational processes.

The focus of the EAD action is to achieve the construction of knowledge in a lively-reflexive way. After using the specific EAD technologies it is easier to foresee the distance didactic-pedagogical interaction possibilities. Branco, in the same perspective, points out the importance of creating a "net culture" in the academic community:

"Behind the keyboard and the monitor there is a possibility of change in the perception of the world and enlargement of horizons (...) But, 'one doesn't give what one doesn't have'... How will teachers be able to develop that mentality and the way of seeing cybernetic things in their pupils, if they themselves don't have it?!... In online education, distance, non-face-to-face — no matter how it is called — this understanding is of utmost importance and has to be worked by both sides: teachers and learners. Thus this 'acculturation' to the use of the net is a sine qua non condition for a good work with non-face-to-face teaching" (2003, p.424).<sup>3</sup>

In the constant quest to include new actors in the EAD several internal promotional actions such as conferences with administrators, participation in department meetings, distribution of posters, leaflets, inauguration of the University Distance Education site, among others, were taken.

Teachers were invited to participate, flexible training program was organized, and face-to-face workshops were periodically offered in order to use the basic techniques of the EAD Unisc LMS. In these workshops, besides the instrumentalization, the importance of using this new LMS as a way of enriching teaching practices is highlighted promoting a more dynamic teaching-learning process under teacher *versus* student relation, amplifying their interaction to a space outside the classroom.

Another possibility to keep the formation process active is the seminars on EAD, and the use of technologies in education, along with didactic-pedagogical update programs promoted by Unisc undergraduate Pro-rectory.

It is important to point out that the participation in the activities proposed by the AEAD is always in a voluntary basis, respecting the pedagogical autonomy of each teacher.

The praxis restructuring process was systematically progressing in a voluntary basis. By the end of 2005, 126 teachers (from a total of 593), and 6,124 students (from a total of 10,174) had improved their regular classes with the use of EAD Unisc LMS.

<sup>3</sup> Our translation.

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	Use of the Unisc – EAD LMS (year/semester)			
	2003/2	2004/2	2005/1	2006/1
Teachers	72	97	126	172
Subjects	167	229	293	420
Classes	207	312	400	560
Students	3688	4728	6124	7451

Use of the EAD Unisc LMS
Source: Distance Education Unisc Laboratory

We also point out the inclusion of teachers in their own formation processes. Several actions were taken in order to interact and dialog with the teachers to map: reality, challenges, needs, and expectations to be faced in the EAD teacher formation program (Arriada et al., 2005).

Amongst the articulated actions, a survey, carried out in 2003, involving 25 educators who have been using or who had started using EAD and had given it up, presented results concerning teacher's difficulties and deficiencies in the digital inclusion process, as shown in Figure 16.2.

This interaction identified aspects that needed improvement. Thus, EAD tried to qualify its actions in several points:

- Development of new functions (functionalities);
- Staff of monitors giving technical support for teachers and learners in a more effective basis;
- Development of a techno-pedagogical management system for the staff of monitors;
- Workshops developed and offered by the staff of monitors to students;
- Revision and division of the workshop in two parts, to avoid overload of information;
- Divulgation of AEAD actions.

In 2005, as part of an undergraduation course conclusion work, another survey with 174 teachers who hadn't used the EAD Unisc LMS in the second semester of 2004 was carried out. Its objective was to identify reasons which justified the teacher's option. Lanzarini (2005) selected a stratified sample by department, proportional to its representation in the survey. Each teacher received and answered a questionnaire composed of thirty multiple choice questions and one open question. The topics were the teacher's familiarity to ICTs, their opinions about the use of these technologies in education, and motifs that justify not using the LMS in the semester related to the survey, and their plans for the year 2005 concerning the use of technologies.

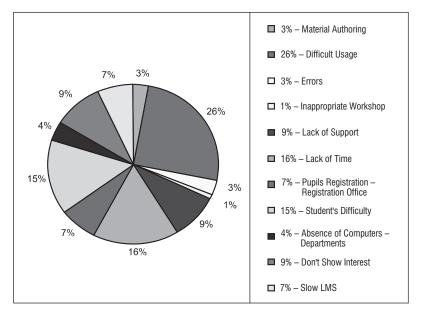


Figure 16.2 Difficulties presented by the teachers – 2003 Source: Distance Education – Unisc Laboratory

In contrast to the results obtained in 2003, where the highest rate of resistance was attributed to difficulties using the LMS (25%), this one showed that only 14% of the teachers pointed out this factor as an impediment to its use, and a few teachers, only 6% of the sample, to the lack of institutional technical support and guidance when doubts occur. This would be the least plausible reason to justify the non-participation in the EAD program, once 76% of the teachers disagreed with the assertion presented in the question dealing to this argument.

When questioned about the reasons that justified the non-use of LMS during the semester mentioned, as a support to regular education, once this was one of the major institutional initiatives to Distance Education, one of the main reasons pointed out was lack of time (about 30% of the sample). Another one was the unfamiliarity with the pedagogical use (36% of the teachers).

Other significant information was the integration plans to the actions of AEAD concerning 2005. When questioned if they would like to use the EAD Unisc LMS as a support to the subjects they teach at Unisc, 14% didn't show interest (this group work at Unisc for an average of 13 years), opposing to the 71% who revealed to be accessible to this knowledge. And approximately 65% demonstrated interest to participate in a EAD class mediated by the new technologies, as a way of learning and exchanging experiences in the use of the EAD Unisc LMS.

The studies revealed an important contribution to teacher formation based in the necessities and challenges brought about in the interaction with these social actors, identifying fundamental aspects to be issued in the teacher formation to act in the EAD modality.

According to Arriada (et al., 2004) we believe that basic technical instrumentalization is essential to improve new dimensions and a re-signification of the praxis with the use of ICTs. Another important aspect is the possibility of experiencing the logic that surpasses the different technologies with its specific characteristics, e.g., the new synchronous communicative tools (chats) or asynchronous (forums) that qualify the pedagogical dialogue with his/her pupils.

Thus, converging to the interest evidenced by 65% of the teachers, and according to Maia, it was evidenced the importance of experiencing the teaching learning process mediated by the ICTs:

"And I use to tell those who ask me about how it is and what is necessary to be a virtual teacher, I immediately inform them that the first thing to do for those who want to adventure in this new career is to enroll in an online course" (Maia, 2004, p.36).<sup>4</sup>

The following step in our Teacher Formation Program for EAD was the accomplishment of a 30 hour extension course in the Distance Education modality, aiming to offer to Unisc teachers basic knowledge in EAD, oriented by the pedagogical practice based in a live experience in this modality, involving online teaching-learning strategies. The course was entitled "Teacher Formation Course for EAD: fundaments on online education" and had two editions offered in October 2005 and March 2006 for teachers who work at Unisc only. The third edition, for the public in general, is scheduled to occur in August 2006. Our plan is, besides this first module, to organize a second 30 hours module with aiming to help teachers prepare materials to be used in this new modality, and to offer both modules every semester.

We are expanding our activities in human formation, since it is of fundamental importance to disseminate of a "culture" of ICTs use, and most important, their proper use in Distance Education programs.

The EAD Unisc Learning Virtual Community is now a reality and proposes:

- a continuous Faculty formation;
- to help teachers think about the teaching learning process specific for the EAD modality;
- a space for discussion and experience of practices of cooperative construction of knowledge through the ICTs.

At the moment the community is composed of 42 teachers from several departments. Most participants attended the formation courses offered by our EAD and are interested in studies and debates that contribute to the definition of the EAD Unisc program.

#### 16.4 Final Considerations

Based in these processes the EAD Unisc program is under development and institutional policies of incentive to the Distance Education modality are being structured.

Nowadays, after a period of investment in human resources as well as in Distance Education technology, Unisc has both technological resources and a Faculty familiarized with the

<sup>4</sup> Our translation.

teaching learning process mediated by the EAD Unisc LMS. This fact allows us to improve in the new system with confidence. We are promoting distance courses of extension in the modality and have enrolled, at the Ministry of Education (MEC)<sup>5</sup>, a project to credit the institution to offer Distance Education courses, either Undergraduation or Graduation.

#### 16.5 References

ARRIADA, Mônica Carapeços; KIST, Tânia; RIZZATO, Elizabeth. "Do presencial ao virtual: desafios da formação humana nos primeiros passos na educação a distância". In: Revista Reflexão e Ação. Santa Cruz do Sul: Universidade de Santa Cruz do Sul (EDUnisc), v. 12, n. 2, jul.-dez. 2004.

.; LANZARINI, Joice; KIST, Tânia; RIZZATO, Elizabeth. "A formação para EAD numa perspectiva inclusiva: mapeando necessidades e desafios junto aos atores sociais do processo". In: Anais do 12º. Congresso Internacional de Educação a Distância, Florianópolis, set. 2005.

BAKER, Michael; HANSEN, Tia; JOINER, Richard et al. "The Role of Grounding in Collaborative Learning Tasks". In: Collaborative Learning: Cognitive and Computational Approaches. Reino Unido: Elsevier Science Ltda. 1999, p. 31-63.

BRANCO, Adylles Castelo. "A portaria no. 2253/2001 no contexto da evolução da educação a distância nas instituições de ensino superior no Brasil". In: SILVA, Marco (org.). Educação Online: teorias, práticas, legislação e formação corporativa. São Paulo: Loyola, p. 413-428.

LANZARINI, Joice Nunes. Do presencial ao virtual: uma complexa travessia. Estudo das resistências ao uso das tecnologias da informação e da comunicação na Universidade de Santa Cruz do Sul. 2005. 128 f. Monografia - Especialização em Gestão Universitária - Universidade de Santa Cruz do Sul, Santa Cruz do Sul.

MAIA, Carmem. "O primeiro curso on-line a gente nunca esquece". In: Guia de Educação a Distância. Ano 1, n. 1: São Paulo: Editora Segmento, 2004.

PREECE, Jenny. Online Communities: designing usability providing sociability. Chichester: Wiley, 2000.

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<sup>5</sup> Ministério de Educação e Cultura.