

# STRUCTURE DIDACTIC DISCIPLINES in EAD: REPORT OF AN EXPERIENCE

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## Abstract

*This text aims to announce a brief experience in structuring teaching for Distance Education in college education through the report of the implementation of the first courses built: **Computers and Society, Information Technology and Citizenship, and Environment and Information Technology** for classes in Systems Information and **Education and Information Technologies and Communication, Distance Education and Thematic Seminars** for classes in pedagogy, in a private university located in Southeastern Brazil. The didactic structure was based on socio-constructivist view and the parameters used in the theoretical teaching Fernuniversität (Germany) presented by professor Otto Peters. The virtual learning environment Moodle platform was used and the subjects used were created in the years 2005 to 2009. The experiment was successful and was the basis for subsequent restructuring, since the evaluation seeking higher success is a constant.*

**Key - words: Distance Education, Instructional Design, College Education.**

## I – Introduction

Humanity is on the threshold of a new era: the Age of Information. It is an exciting and challenging time for education. The constant changes that alter the ways of thinking and acting, challenges form of teaching. The advent of the Internet, worldwide phenomenon, which leads to almost instant interactivity, drives teachers to seek grants for both education and for the redesign of processes within the traditional school. Distance Education emerges as savior and villain at the same time as for some teaching situations. We question the quality of distance education, although high failure rates and official statistics

such as the IDEB Development Index (Basic Education) condemn the teaching. The didactic strategies and learning are placed in confrontation. The dynamics of television, the internet, access to many media and computer games make the traditional classes look like boring, since they do not share the frequent changes from day to day and from the frantic pace of events.

Against this backdrop of sweeping changes, not only technological or physical, but in ways of thinking and acting that arise questions that afflict educators: How to think and make education? Distance education, using computational tools is one of the possibilities? Within this possibility, how to make the environment really effective in its goal of teaching? Or to promote the construction of knowledge?

## **II - The structure of the disciplines in the distance**

In 2004 a group of professor of a private institution held several discussions and debates in order to reflect on the application of distance learning at university. Participated in the group pro-rector of the extension, a professor at the rector, a School of Education, an Institute of Humanities, and two school computer. In this context were built several texts, participation in conferences and the creation of some disciplines to be developed in the virtual environment Moodle. The experience was reported by Professor Sonia Mendes in "22nd ICDE World Conference on Distance Education" in 2006 in Rio de Janeiro.

The first courses were built **Computers and Society, Information Technology and Citizenship, and Environment and Information Technology** for the classes of Information Systems and **Education and Information Technologies and Communication, Distance Education** and **Thematic Seminars** for groups of Pedagogy. The subjects began to be built in Moodle through adaptations of the subjects face and evaluation followed the same scheme. The evaluations of all phases of construction and application of subjects were made by school staff and then by computer group. With the creation of ADEN (Center for Distance Education) of the institution, the group has worked a long gradually being replaced.

The construction of these subjects, after numerous discussions in the group appropriated the constructivist view (Piaget, Vygotsky) on the learning that takes students to actively participate in the process of building their knowledge through meaningful and relevant experiences. Using the web as a space for learning not only allows us to infer that the internet has never been a

space for simple dissemination of information, but as stated Peraya (2002): "It's a true intellectual technology, a cognitive tool in its fullest sense." (P.31)

On this assumption the pedagogical proposal was based on a web environment with interactive activities to facilitate learning. The classes were scheduled in the weekly format with the participation of the teacher-tutor as a facilitator and supporting students in carrying out the proposed activities in order to bring about these interactions and significant experiences.

During the performance of the group, the subjects followed some theoretical parameters, including the structure used in teaching the course *Fernuniversität (Germany)* presented by professor Otto Peters (142-148). Regarding the assessment of learning, it is to begin teaching in the structure, part of the specific objectives of the unit, the structure of didactic texts and designer. According to Peters all units of the course follow the same sequence for teaching: *"This sequence is already in itself a help, because it facilitates orientation and self-employment with the separate elements of the course during the study."* (2001, p.144) The didactic structure of the text itself, Peters points out *"is the decisive shift from mere exposure of contents to be taught to the availability and initiation of cognitive processes and learning."* (P.148) and explains the concept of fine mesh and coarse mesh where a textual structure presents a theme without much explanation goes to the student the feeling of loneliness, while an extremely explanatory structure inhibits the possibilities of developing a more autonomous learning. Evaluation therefore is intrinsically linked to teaching the course and structure of the text itself. In the matrix of *instructional design* the two *columns* are fully connected. For some activities were stipulated responses involving cognitive skills through the demonstration of skills such as evaluation, synthesis, analysis, comprehension and memorization. Therefore, the hypertext available on the course allowed immediate access to links related to the subject, as well as a glossary of technical terms. This type of action favors the research, interest in reading and acquiring new knowledge.

The courses were designed within a vision socio-interactionist and thus the interactive activities were particularly emphasized **in the discussion forums** and activities conducted collaboratively on group **tasks (task, wiki, glossary of terms)**. Within this perspective have also been created light activities as **"Hot Potatoes"** and exercises aimed at building knowledge in a playful manner. The evaluation activities were scored according to the criteria for evaluating attendance and represented 49% of the grade for approval in the discipline. The remaining 51% were obtained in test performed.

According to Pinto (2002), University of Minho, Portugal,  
*[...] Students who use distance learning systems are adults with professional activity, with many responsibilities and no time. Studying the night in most cases are people who know what they want, enriching knowledge in areas where they felt well in the past or in connection with his professional activity, that they well known.(P.20)*

This definition fits perfectly to the target audience of graduate courses attended. Thus, all content is presented simply to facilitate student learning. The texts with flowery language or extremely erudite tend to tire and confuse the student. The language in this case more colloquial, facilitated communication through interactivity raising the pseudo-intimacy that resulted.

Considering the dynamics that can be deployed in virtual environments, especially in the virtual environment Moodle, there was the development of these prototypes interactivity in cyberspace as a tool for driving the construction of knowledge through dialogue and effective participation of students, creating true virtual communities . According to Peters (2001), *"the dialogue becomes pedagogically important because in it language, thought and action are closely related and because it do the individual and social development of the human being." (P.80)*

The courses are designed to use asynchronous media such as text of the Digital Book, hypertext, video, animation and how synchronous media was intended to be used only recourse Chat or Chat.

### **III - Assessment in classroom activities**

The classroom activities are presented through lecture, with the aim of guiding the student as to access the program, its resources, the dynamics of the proposed work, and discussed the expectations of the work to be developed, since the possibility of study was still viewed with suspicion by many.

In the final evaluation of the course, the student is presented again to perform the tests. The evaluations were designed to capture all the dynamics developed along the course, in a context of objectivity, which marked the conceptual knowledge, and in the context of subjectivity, where there were attitudinal and procedural concepts. It should be noted that throughout the formatting of the discipline, these concepts proposed structured content, so that really the dynamics of learning autonomy was exercised by the student.

In this second meeting, it was observed that the student actually answered the questions posed, since the dynamics of the forums, development activities, resource utilization, the program itself in a playful manner, as **"Hot**

**Potatoes,**" created a new possibility of learning, which was seen as an affirmative action of Distance Education in teaching subjects in the courses so far offered.

#### **IV - Comparison between the evaluation activities and presence in the distance - What really changes?**

The rating, as defined Luckesi (1996) *"is like a value judgment about events relevant to reality, looking forward to make a decision"* (p. 33). From this basic premise, the forms of assessment were used in the same way: an initial diagnostic assessment (*classroom or online forum*) to meet the student and try to identify the level of knowledge of content to be displayed. We were checking and sorting of the contents stage where it should act by speeding up or slowing down in some activities (it was the decision making).

In the second stage we use formative assessment or procedural, where every week we used to check the activities of student development, the memorizing capacity of analysis and synthesis, writing and textual correction (in the various exercises and tasks). Each activity was scored. The adjustments made were practically of order media, focused on the adequacy of the defendant used the virtual environment.

According to Sandra Gusso DEMO cited (p. 59), *"Evaluating not only measuring but, above all, support the positive development of students"* (DEMO, 2000, p.97). In this sense, the instruments must be adequate, but in essence is the same assessment. Transform some teaching activities that are conducted face in *online* activities requires an interesting exercise in creativity. And according to Domingues (2006):

*The primary goals of the Distance Education should be to get students' ability to produce knowledge, practices and examine critically position themselves in concrete situations, not the ability to reproduce ideas or information. Thus, the focus of evaluation is the analysis of the capacity for critical reflection and collaborative student on their own experiences and the experiences shared with colleagues.*

The *online* courses, while teaching units need to be well structured to meet some basic guidance to the student in a virtual environment, the didactic and pedagogical issue is essential for coherent structure that can promote successful learning. The technological mediation for learning is a complicating factor and human creativity to overcome this difficulty is fundamental.

## V - Final Thoughts

The experience of creating and implementing courses in distance education has been enriching. The construction of the virtual course in Moodle environment is not difficult. The tools in Moodle are user friendly, versatile and easy to handle. The greater complexity was related to pedagogical theory and the planning and design of the course prior to the preparation of this virtual environment, more specifically related to the work of Instructional Design (ID).

With respect to weeks / lessons, it was observed that the teaching units need to be better structured to meet some basic guidance to the student in a virtual environment, since the Distance Education is still an innovative activity in the teaching and learning. For technological mediation for learning is a complicating factor, in which human creativity is needed to propose and develop to overcome this difficulty as a fundamental structural axis.

Does the *instructional design* is today is a modernization of the teaching that was yesterday?

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