INTEGRATING COMUTER AND COMMUNICATION TECHNOLOGIES IN DISTANCE COURSES: AN EXPERIENCE

Fantini A[1]., Dans M[2].

INTRODUCTION

This paper communicates our experience in integrating computer and communication technologies in grade courses of the Economy Faculty of National University of Patagonia, Argentina. The University has four Academic Units separated by long distances, at Economy Faculty there are teachers who travel from one to another, teaching the same course in everyone, to satisfy local demands. Sometimes the teachers can not travel because of adverse clime or bad operation transport.

The main goal of our project was assist the Economy Faculty in satisfying the local needs of each Academic Unit, by including computer and communication technology to build materials and delivery the courses.

THE DISTANCE EDUCATION MODEL ADOPTED

Today, the interest in distance education is especially high in places, like Patagonia, where the student population is widely distributed. Since, each region has developed its own form of distance education in accordance with local resources, target audience, and philosophy of the University. And, because there are different concepts of distance education, first, we will define our frame of reference for this project. To provide the criteria against which can be measured.

Its hallmarks are, the separation of teacher and learner in space and time (PER88), the autonomy of learning by the student (JON92), and communication between students and teachers, mediated by some form of technology (KEE95).

The theoretical issues on which instructional model is based, affects not only, the way in which information is communicated to the student, besides the way in which students make sense and construct the new knowledge (ONT96). Our project is based on constructivist principles. We take care about the form the information is presented, each course is designed centered in the learning student needs and styles (ALO92).

COURSE DESIGN CONSIDERATIONS

The instructional development process for distance education consists of the customary stages of design, development, evaluation and revision (WIL92). As we mentioned above, in designing effective distance materials, we must consider the goals, needs, and characteristics of teachers and students, but also, the content requirements and technical constraints. When the development group starts the design of materials, they always bears in mind that they have to facilitate the development of a critic attitude and ability to make decisions on the part of the

[1] Full-time Associate Professor and Researcher. Fanguer@infovia.com.ar
[2] Full- time Adjunct Professor and Researcher. Mdans@cpsarg.com

students. In previous projects we analyzed this, if you are interested of it, you can read about it in (FAN99) and (FAN99a).

We recognize as a critical point of our project the technical constraints for the delivery system. We need to assure full courses access to all participants, in a region where electronic communications is an increasing field, but not totally developed yet. Then, we plan that someone, with a computer and modem, could be student of these distance courses.

Another important aspect we take care was the requirements of the target group (BER95). All of them are adults, with a job and most of them with family. They study in their spare time. Our distance education system design focuses on interaction between teacher and students, but also promotes the interaction among students themselves, to build a favorable learning environment.

We believe that, an important factor for successful distance learning is to maintain a high level of interaction of the students. It is the instructor's role, as a facilitator, to promote a high level of interaction in the course. By promoting group discussion of an specific topic or issue, by assigning individual practical problem, and sometimes, propose group activities, where the students are divided into small groups for a particular assignment, of for a project presentation. The teacher groups the students based upon the residence place and the common interests. Some answers are posted publicly, so that everyone in the course can read them, to promote the basis for sharing ideas and discussion among participants. In that way we write a set of guidelines for the teachers, including strategies for tutoring activities.

TECHNOLOGY FOR DELIVERY

We look at what is the communication and computation technology disposable by the participants. A 50% have a computer at home, and the rest can use one at the job. Not all of them have full Internet access, but all have electronic mail.

The University has one web page for each Faculty, with institutional information, there we put one page to each course to add the materials. The students could access web at the computational equipment of the Academic Unit; nevertheless they receive, by mail and email, all they need, if they have not full Internet access.

Electronic mail provides an effective way to interacting among the participants and the teachers, because allows them to send messages to each other. Also, we build a group mailing list of each course for students interacting themselves.

STUDENT AND ADMINISTRATIVE SUPPORT

It is widely known that, student support is more important in a distance education system than in a face to face one. The support is essential to fight the isolation and the frustration. The student assistance is a responsibility shared by the teacher and the administration. Somebody in the Institution, who might have contact with the student, must assist his or her expectations. Quick feedback with

solutions is the politic adopted. If a participant do not receive feedback on his expectations, problems, responses, he o she will eventually stop posting messages, and probably leaves. The students are identified as individual persons for the teacher and for the Institution, and their needs are properly satisfied by all of them every time.

In spite of, all the best planning and technical support, problems occur. Preventing these, there are a telephone number accessible to the students and the teachers, at office hours, and a fax that allows student to access teachers 24 hours a day.

This education system design is inherently student centered. With a group properly motivated, we expect a high level of learning. We are sure that, will be better than the previous model, with teachers travelling once a month, and playing two or three intensive face to face classes in a few days, with pour or none support between one to next trip.

CONCLUSIONS AND NEXT WORKS

We design a particular implementation and delivery plan incorporating computer and communication technologies, according to the actual possibilities of the Patagonic region. To supply assistance to the Academic Units, on satisfying the requirements of the local students, and to be less dependent of clime and transport restrictions, in their courses implementation.

The plan is incremental. The next step is build delivery tools to offer full Internet access to the students, teachers and Institution. Now, the system ensures full access to all participants, yet with minimum equipment.

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