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ABSTRACT

Global civilization means simultaneously progress for everybody and destruction of the ethical and mythical nucleus of individual cultures. The role of education in the global world would be to start a universal dialogue between all the cultural groups of the world. Education will save the values now in danger, because a multicultural dialogue may rescue endangered cultures. Computer-based distance education and training in developing countries ought to fulfill the same goals as the whole educational system to prepare people for the oncoming globalization. A virtual college is one expression of a growing virtual society that also includes virtual corporations, telework, telemedicine, and teledemocracy. Many new technologies have a potential application in education: the Internet, intranets, World Wide Web, electronic mail, groupware videoconferencing, workflow, CD-ROMS, and interactive television. A virtual college project based on e-mail has been proposed. The structure includes a virtual classroom, subscription to lists, virtual library, virtual administrative office, and virtual company. Courses are organized according to a schedule that includes dates for registration, distribution of lessons, and evaluation. Students are always given a manual with course details, scheduling, curricula and specific instruction, bibliography, and information about homework evaluation, certificates, and qualification. (Contains 12 references.) (YLB)

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**THE FIFTH ANNUAL LEADING EDGE TRAINING TECHNOLOGIES CONFERENCE**

**DISTANCE EDUCATION IN DEVELOPING COUNTRIES: OPPORTUNITIES AND CHALLENGES**

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**THE GLOBAL VILLAGE. TOWARDS A GLOBAL CIVILISATION.**

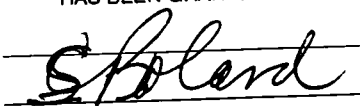
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When we speak about the Global Village we mention a special and determined set of concepts in order to describe and explain a social, cultural and also political and ethical phenomenon that mainly characterises itself by making every spot in the world at hand for everybody. Not only the means of transport have made the world smaller but also the new information technologies. Nowadays everybody is a keystroke from everywhere. This phenomenon changes the world and makes it a changing world. The world has changed because of technology, as it happened the previous century with the railways, but in addition, new technologies change themselves and the world we are living in, day by day, as never before. Globalisation is motorised by technical evolution but it is not only a technological fact. The whole humankind is entering in a Unique Global Civilisation that looks, as Jan, two-faced. This Global Civilisation signifies simultaneously a gigantic progress for everybody, and a heavy task in order to adapt the cultural inheritance of a particular nation to the global patterns.

Three remarkable points define Global Civilisation:

- The Scientific point of view and Technological Development unify humankind in quite an abstract level.
- Consequently, Policy and Economy become globally rational.
- Finally, there is a Universal Way of Life that evolves throughout the world.

What does this Global Civilisation mean? We mentioned its double faced condition, since it means simultaneously progress for everybody and destruction by erosion, of the ethical and mythical nucleus of individual Cultures. Although weaker people are more exposed, the above mentioned problem is common both to the developed countries and the developing ones, to the weaker countries and the stronger ones. We perceive this Global

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Civilisation as an abrasive tool for the mythical and ethical nuclei at the bottom of all cultures. These nuclei have been formed through the centuries by the Great Civilisations of the past and constitute an inheritance for humankind. If they are lost, a specific memory of humankind dies for ever. This makes us aware that there are several cultures and not one Culture, and so we realise that any cultural monopoly, real or illusory, has finished. We are threatened by our own discovery, and experience that Cultural Monopoly is not good for us, the whole humankind. The triumph of the Global Civilisation, over local cultures, everywhere the same and integrally anonymous, would represent the creative culture at zero degrees, the most absolute nihilism.

### THE GLOBAL VILLAGE AND THE DEVELOPING COUNTRIES.

These reflections make us wonder what to do in order to save the cultures and to save the human being. This oncoming reality, the Global World, sets some main questions from the weaker countries' point of view, which awake us from the dream of an easy solution:

- Must we get rid of our cultural past, the reason of our cultural being in order to make progress in the modernisation path?
- How do we modernise our countries turning to our cultural sources?
- How do we wake up from a dormant culture and enter the global civilisation?

The role of Education in the prospective world, in a "small" and technological world would be to start a universal dialogue between all the Cultural groups of the world. In such a way Education will save the values now in danger since only in a multicultural dialogue we may rescue the cultures of weaker people. In such a stage, what about new technologies, computer based education and distance education? We continue asking some questions:

- What about the isolation of the southern cone?
- May the new information technologies break down the wall built up by last century progress between developed countries and developing ones?
- Or more specifically: will new information technologies break down the wall between the English Speaking North and the Latin Speaking South?
- Are the new information technologies a real aid to the weak South American Educational Models?
- May we develop a Computer Based Education and Training Model which diminishes the differences that Globalisation blows up?
- Does CBET play in the developing countries a similar role to the one it plays in the Central ones?

Of course we think that all these questions may be answered affirmatively but it would be necessary to make a Copernican inversion in the field of education. If an eighteenth century teacher came to life he or she would be comfortable in our schools at the end of the twentieth century, mostly because the scientific set

of concepts which guide our education, which are coeval to the French Revolution. Education based on new technologies is forcing the changes in the Central countries, making it more natural to adopt the results of Piaget's psychological research, or those of Vigotsky's. Collaborative and situated learning, learning while doing, constructive learning, learner centred learning, multiple ways communication learning etc., are nowadays not only possible features but oncoming ones in the educational systems of the world. In such a task an educational system supported on the new technologies, and extended Distance Education, will be demanded not only for basic education for work, but for training workers to recycled or new positions in a high-skilled-worker demanding world marketplace.

**THE GOALS OF COMPUTER BASED DISTANCE EDUCATION AND TRAINING IN THE DEVELOPING COUNTRIES.**

Obviously the CBDET ought to fulfil the same goals as the whole Educational System in order to prepare people for the oncoming Globalisation. However, the CBDET has its own set of aims, also in the developing countries. The first one is to reach every remote spot in our extensive countries with the benefits of basic education. By basic education we mean not only respecting the now poor contents of our elementary school, or giving a PC to every rural school, but sharing the benefits of communication with every student in the country, to make communication with the whole world, possible for everybody.

We are in a changing world and our countries are immersed in a changing economy. We can't dream of a lifelong job for our children. The world has become a unified enormous marketplace. And because of the changes of development, because of competition, companies need high skilled workers, for new developed positions. CBDET makes it possible to recycle the human resources in the workplace itself. In such a way, desktop courses become the way companies train or retrain their employees and workers instead of traditional lecture-based courses. Computer Based Distance Education and Training transforms the homes into a training spot. In the same way the home based working has spread successfully everywhere, home based learning may transform homes into home based schools. Computer Based Distance Education and Training improve the opportunities for teachers. The task is hard: to change the whole landscape of the education into a more scientific conceptual mark of references.

**CYBER SCHOOL, VIRTUAL COLLEGE, VIRTUAL UNIVERSITIES.**

Like a century ago, when ships disembarked hundreds of people at Buenos Aires harbour year after year for decades, we are today facing a Great Educational Challenge. Last century, the task was to teach reading and writing

to an illiterate mass of foreign people that mostly didn't speak Spanish, and were extremely extraneous to almost all the habits and traditions of the population of the Argentine Republic. The Leaders of the National Organisation after the National Constitution accepted the challenge, and the whole Nation became a primary school. And it worked in such a way that in the 1930's we had one of the lowest rates of illiteracy in the world and the lowest in Spanish speaking America. Today, facing next Century, the challenge to accept is to change the habits and skills of the whole population, to get a niche in the global work marketplace, but preserving intact the old values that constitute the inheritance we received from Spain and from each country whose emigrants where our great grandparents.

The challenge implies to accept:

- Focus on the human being.
- Computer Based Education and Training for the whole educational system.
- To create a world wide competitive working force as a task led by education.
- Virtual learning for the whole educational system: prepare the actual pupil as a future virtual student.
- Virtual adult education.
- The future of universities and colleges as training centres.

### VIRTUAL COLLEGE: A PROJECT FOR A DEVELOPING COUNTRY.

#### THE VIRTUAL SOCIETY.

A virtual college is one of the expressions of a growing virtual society, that is also supposed to deal with virtual corporations, telework, telemedicine, teledemocracy. No matter which definition of "virtual" we adopt, we're saying that a culture once based exclusively on physical contact is being transformed to one where goods and services are accessible without face-to-face contact with other people. The communication structures enabled by new technologies are not constrained by place and time.

#### NEW TECHNOLOGIES.

Many new technologies have a potential application in education and could be used for the project, including Internet, intranets, the World Wide Web, electronic mail, groupware, videoconferencing, workflow, CD-ROMs, hypermedia, interactive TV and others. We must be aware of the fact that technology by itself does not ensure the coming of the virtual society or the success of a virtual college project. Some individual computer literacy is required, as well as the ability of figuring out how things are going to work, designing and evaluating alternative solutions, and arranging and adapting them

to the present context. Actually, there is a cornucopia of supporting technologies; among them, the electronic mail appears as the foundation for most of the communication and is available at a relatively modest cost.

#### **ADVANCED TECHNOLOGIES: ADVANCED COMPUTING AND ADVANCED CONNECTIVITY.**

The technologies that serve education have advanced along two somewhat orthogonal dimensions in recent years. First, computing has advanced: it has become increasingly easy to process larger quantities of data and more complex systems in less time with smaller, cheaper machines. Second, connectivity has advanced: it has become easier, faster, and more convenient to move information from one place and time to another, and from one form to another. Or from another point of view, it is increasingly convenient for humans to move their attention from one point in space and time to another, and from one medium to another. Some good examples of advanced computing are "advanced visualisation" and simulation of complex systems; while the best current example of advanced connectivity is the World Wide Web. Advances in connectivity are of general interest in all disciplines.

#### **A VIRTUAL COLLEGE PROJECT BASED ON E-MAIL.**

##### **Fundamentals.**

This virtual college proposal is aimed to professionals in different fields, who will find learning from the comfort of their homes or work places, very convenient and appealing, especially included those who live in remote areas or places where the weather conditions can be extreme. The use of e-mail as the main tool is based on the fact that it provides an inexpensive medium of communicating, and the student can learn at any time of the day or night. Taking into account our very high telephone rates, other alternatives such as being on-line all class long, have been discarded.

##### **Structure.**

The structure includes:

A virtual classroom, where each pupil is required to have at least an e-mail facility so that courses can be delivered.

Subscription to lists is also recommended, as well as belonging to determined groups of interest (physicians, chemicals, lawyers, teachers, etc.), and discussing subjects with class mates and teachers.

A virtual library, where to find material including lessons that could be lost in cyberspace.

A virtual administrative office, to attend to registration, payment, and delivering of certificates.

A virtual company, where partners, technical and academical responsables could be geographically distributed.



### **Software Support. The E-mail.**

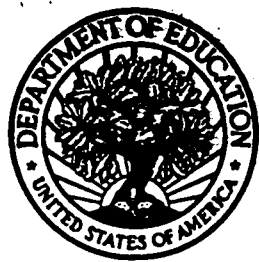
Many distance learning programs are correspondence courses where books, materials, and coursework are exchanged through the mail. The piece of software called "e-mail", provides a flexible environment for sending and receiving messages electronically. For reading mail, it offers commands to allow saving, deleting, and responding to messages. For sending, it allows editing, reviewing, modifying and queuing the message. When selecting mail software, it's important to take care of simplicity, the presence of address books, aliases, the possibility of sorting incoming mails by different criteria, searching through messages and setting up folders for easier mailbox maintenance.

### **Methodology.**

Courses are organised according to a scheduling that includes dates for registration, distribution of lessons and evaluation. Lessons are delivered over nearly eight weeks, and the student is always given a manual describing the College characteristics, the specific manual including course details, scheduling, teachers' curricula and how to contact them, teachers' specific instructions, bibliography and information about homework, evaluation, certificates and qualification. The College is also concerned with giving useful Internet addresses to their students.

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