# DESIGN AND DEVELOPMENT OF A HYBRID LEARNING ENVIRONMENT WITH THE USE OF TELECONFERENCE: CONNECTING STUDENTS THROUGH AN EXCHANGE OF THEIR LOCAL HISTORY SEARCHING EXPERIENCE

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***Abstract***

*In this paper there is a presentation of a hybrid learning environment design and application, that employs distance learning (teleconference) and distance-collaboration methods in Elementary Schools, which was developed on the basis of the curriculum guidelines concerning an official extra curriculum innovative course for the 6th Graders of Elementary School (called "Flexible Zone"). The implementation includes teaching activities and various projects, while, at the same time, various techniques and tools for distance collaboration, following constructivist principles have been introduced. Together with the evaluation of this project' learning outcomes, a pilot study for the evaluation of an historical software, designed by the authors for history teaching, has been carried out too in order to collect sufficient feedback for modifying the design of some activities of this software as well as for highlighting possible problems in the planning of teleconference. The evaluation of the whole process provided us with some interesting results.*

## INTRODUCTION

There is among educators a general agreement that new technologies, under specific facilitative conditions, may be used for creating numerous, significant changes in the contemporary educational environment, as it has already happened in the wider productive and socio-cultural environment of our times. The role of contemporary Education, however, is not merely that of a blind following up technological or other kinds of developments in the economic market, but also to contribute in building up and fulfilling the historical role of social and cultural transformation of our complex and globalized society. In this context, the multimodal and powerful Technologies of Information and Communication (TIC) are not merely called to replace the traditional teaching methodologies, but to enrich and expand them, while at the same time offering some new opportunities for upgrading the traditional educational environment by adopting some innovative or transformative pedagogical approaches, which will aim at essential changes of the educational environment and process at many levels (Raptis & Raptis, 2004).

Distance education, especially in combination with the development of the hypermedia and internet technology that is constantly growing, has been proved to be a promising field which creates many expectations to both educators and learners, as it has introduced new dynamics in learning, in the access to knowledge and in the demand for a more open and decentralized education, that may result in overcoming the inflexibility, the sterile academism and the excessive fragmentation of knowledge of the traditional curriculum. (Makrakis, 2000, Lionarakis, 1998, Anastasiades, 2000). The distance education can radically transform the way in which we perceive education, on the condition that the experience of the distance learner will at least be as complete, sufficient and acceptable as the experience of the learner in a face-to-face educational system (Simonson, 2002).

In the recent years, various proposals that have been developed, favor the creation of learning environments on the internet (Graham, McNeil & Pettiford, 2000, Horton, 2000, Jolliffe, Ritter & Stevens, 2001). Most of them point to the view that the technological tools per se do not comprise but the first step for the transition from today's conventional classroom to the new model of the virtual classroom and the hybrid school (Rossbottom, 2001). The essential conditions for planning a learning environment are the learning goals, the learning activities, the role of the educators and learners and their interactions, the association of the learning goals with the educational content and the proper material, the educational means and tools, the assessment and the social context of learning, the support of the

learner and the services available to the learner (Learner support and services) (Colis & Moonen, 2001, Anastasiades, 2002, Raptis & Raptis, 2004, Makrakis, 2000).

Within such a context, the socio-constructivist and emancipative pedagogical approaches have placed particular emphasis on the creation of open, complex, exploratory and original learning environments with abundant and fertile interaction among the social partners of learning: The pedagogical advantages that collaboration offers and the educational activities based upon it through the use of open, calculating environments have been thoroughly discussed lately (Dillembourg, 1999). Also, emphasis is placed upon the creation of communities of learners who share common goals, rules of action, use of proper tools and autonomous allocation of labor (Scardamalia & Bereiter, 1994, Wilson & Ryder, 1996), which also favors the implementation of the so-called activity theory (Nardi, 1996, Lewis, 1997, Jonassen, 2000).

Furthermore, Vygotsky, Leontiev and Luria (Komis, 2000) in placing the foundations of the activity theory, lay particular emphasis on the mediatory role of the cultural symbols of human action and the developing procedures (The mediation occurs by objects, which define and include instruments, signs, languages and they are created by the human beings in order to control their interaction with the social environment).

This challenge has also initiated the need to change the way the learning environments are designed through the computer (computer-mediated environments): the quality of the support of interaction and dynamics that develop in an activity system, including the relationships among the students, their educators, the work that needs to be done, the help and the guidelines available for this purpose (Gifford, Enyedy, 1999, Kokkos et al, 1999).

**Presentation of the project "Aegean, A Sea of Culture"**

The particular application, based on the above framework, may also be useful in meeting the need to "invent" and elaborate educational instructional projects, together with suitable learning scenarios and material, for the implementation of an official extra curriculum course, known as "The Flexible Zone", on which Greek teachers as well as central educational leaders have not have developed sufficient experience yet, having thus to confront many frustrating situations and the risk of leaving opportunities for innovation unexploited. The ultimate goal of the Flexible Zone in the elementary school is the promotion of the pedagogical and instructive autonomy of educators, the students active involvement in collective as well as open learning activities as well as overcoming the knowledge-centered, and reproductive character of school today, which needs to become more open to life and to complex social issues of nowadays and thus respond better to the various needs of the students, beyond those of their academic development.

The project has been applied to the 6th Graders of two Elementary Schools, within the thematic field "Culture – Intercultural communication and interaction". Through the fraternity of two school groups coming from different areas, an urban one (N. Smyrne) and an island – marchland (Mytilene), the students were expected to critically distinguish and appreciate common and different elements from the environment, the culture and the daily life of the population in their areas as well as experience the multiple beneficial results of the whole distance communication process. In this way history teaching has acquired meaning and an association of local history as well as of social issues with recent history taught in the academic courses has been attempted. (The two schools have various differences between them but they also share some common experience of Greek refuges reception coming from M. Asia coastline during the 1922 war. Many students have relatives that lived in this time and they could try to critically "re-write" history through using their own raw data as well.)

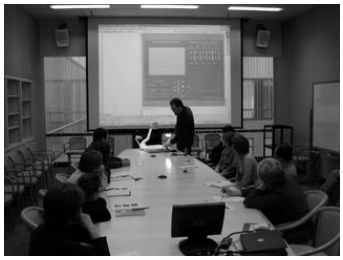
**Basic structural elements: Teachers:** One teacher per school

| School | Duration | Grade/ Class | No of Students |
|---|---|---|---|
| 2nd Elementary School (In Mytilene island) | Sessions 3rd and 4th : | 6thA | 24 |
| Leonteios Elem/ry School in N. Smyrne | Sessions 3rd and 4th | 6thA | 28 |
| **Thematic field**: Culture – Intercultural Communication and Interaction **Module title**: "Aegean, a sea of culture" (An interdisciplinary topic having to do with history, social geography, expressive literature etc) | | | |

**Goals of the project** Our main cognitive instructional target was to facilitate students' knowledge of historical and cultural elements from the near past by sharing their research findings concerning the historical and social experience of the people who were violently expelled from the Asia Minor coastlines (after the 1922 catastrophe and settled to their areas) and critically connect them with modern history and life in Greece. By researching the historical and socio-cultural elements of their areas, an urban one (Nea Smyrne) and an insular-frontier area (Mytilene), students arrive at some consideration of both the common elements they share as well as the differences of their experience while, at the same time, they develop bonds of collaboration and friendship between them.

More specifically, the main learning objectives of the projects' teleconferences were the following:

- to become familiar with characteristic features of their natural, socioeconomic and cultural environment as well as with some elements associated with peoples' everyday life.
- to discover common elements that link the history and the culture of the two areas and to associate their common origin with important events of the modern GreeK history.
- primarily, to be familiar with the main historical events, associated with the Asia Minor War in 1922 and their impact on the social development of modern Greece as well as on its external political affairs; Secondly, to appreciate peoples' historical effort to reconstruct their social life.
- To try to see the related historical events concerning Asia Minor War in 1922 from both countries', involved in this war, point of view and take lessons from the past
- to explore the diachronic course of social development of Greek refuges coming from Asia Minor and their contribution to the development of the Greek contemporary culture
- To examine the state of being a refugee, at general, and empathize with foreign people who have come to Greece as political and economical refugees.
- To develop a different perspective of the Aegean historical continuity, as a sea that unites people.



## INSTRUCTIVE APPROACH

Instruction is based on the principles of the social constructivism, as well as on the ideas of the exploratory, collaborative and interdisciplinary approach to learning, and the principles of teleconference design have been taken into account. The central theme of the Asia Minor culture was connected with parameters and fields of exploration from various academic subjects of the 6th Grade, such as: history, literature, geography and aesthetic education. The activities presuppose a team-collaborative organization and operation of the classroom, as well as the synergy between the educators of different schools, who play the role of the facilitator and coordinator, as well as that of an animator for facilitating the creation of a warm atmosphere between distant collaborating groups of students who have not met before.

Instruction consists of four teleconferences of 80 minutes and, as it has been mentioned above, it is based upon.

In brief, teleconferences include:

**1st teleconference**- ***Acquaintance of the two classes*** Introduction, projection of 2 videos, one from each area, recapitulation and conclusions drawn by the students with the guidance of the educators, "bridge" - preparation of the next teleconference.

**2nd teleconference**. ***Digital Classroom***: Introduction and motivating students' participation, introductory interdisciplinary activities in which groups from both schools took part. Successive interchange between passive and active audience, brainstorming and suggestions for topics, recapitulation and closing of the teleconference.

**3rd teleconference**. ***Teleconference (1)***: Introduction and explanation of teleconferencing details to the students, student's forming 4 groups according to the topic chosen and suggested during the previous teleconference, collaboration of the teams on the exploration and work that needed to be conducted and on the arrangement of a possible face-to-face communication, ending teleconference.

**4th teleconference**. ***Teleconference (2)*** Introduction, presentation of the teams' work in the way each one of them prefers, conclusions drawn from the presentations and closing of the instruction. End of teleconferences, suggestions on possible future collaboration or meetings. Farewell among the groups of students.

## EVALUATION

The application of the educational software used during this project has received some assessment, whose results will be taken into account for making the necessary improvements and modifications of its initial design that will lead to the inclusion of certain activities of some higher learning order.

Some aspects of the particular telecommunication mode of instruction with the use of the teleconference technology have also been studied in order to evaluate the learning outcomes of this innovative project. Students' evaluation of the whole process has also taken into account.

The study of the whole learning and psychosocial process of this intervention has shown some significant changes in all the fields mentioned above, especially at the level of the students' critical historical judgment, as well as at the level of attitudes, values, and motivation to learning as a result of their experience in the particular innovative learning environment. The conclusions and the discussion of these results are to be announced in a forthcoming paper by our research team.

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