NETWORKING

EURO-MEDITERRANEAN JOINT TEACHERS' AND TRAINERS' DEVELOPMENT TEAMS: AN OPEN PROPOSAL

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Proposal

In accord with the objectives of the Euro-Mediterranean Partnership Policy we propose joint Euro-Mediterranean telematised teams for the development of computer mediated communications-based courses of studies. The development teams will be composed of teacher educators or in-service trainers from the different countries of the area. A collaborative approach requiring essential input from all partners to the joint final product will guide the establishment and working procedures of the different teams. Communications tools supporting joint work of these teams will be selected following an appropriate technology orientation. Appropriate technologies like email (store and forward, online/ offline), mail and file servers, email based working groups and virtual seminars allow full participation of developers established in countries where the telecommunications infrastructure still needs to be enhanced. The content of the CMC modules/courses of studies to be developed by the joint teams will focus on subject matters of mutual interest for Euro-Mediterranean countries, e.g.: translation and adaptation of existing modules to local needs; methodologies for introducing teachers to the use of the network in current educational practice; 'water' as an interdisciplinary focus of studies; a comparative approach to different sources of the common cultural heritage; training trainers in drug-prevention programs; and an historical approach to Mathematics (stressing the Arab contribution).

Background

The European Union in cooperation with its Mediterranean partners has established the Euro-Mediterranean Partnership Policy. The main objectives of the policy include the creation of an area of shared prosperity, and to promote a partnership in social, cultural and human affairs. The note from the Italian Presidency (5958/96 Scientific and technological cooperation between the EU

and MTC) emphasises that cultural cohesion is a basis for fruitful scientific and technological cooperation. It points to the need to promote initiatives which increase the mutual understanding and acceptance between the different cultural approaches in the Mediterranean basin. The intensification of relations (exchanges of persons, knowledge and information) is essential for this. The use of telematic instruments, such as Internet, are pointed out as useful for this purpose. The necessary information society related infrastructures have to be developed, and among them those able to support projects related to tele-training.

The lines of action suggested in the note include capacity building, joint research and technology transfer. For capacity building, stress is put on the appropriate infrastructural context. Networking and information society technologies will help to increase efficiency, provided that the necessary infrastructures are put in place. The socio-cultural context is emphasised for the intelligent transfer of technology and knowledge.

The following proposal aims at implementing these policy guidelines through the establishment of telematics-based development teams composed by teacher educators or in-service trainers.

The challenge

Many approaches to course development, distribution, and technology transfer may be adapted for specific technical/technological subject matters or highly structured knowledge areas. Approaches, implementing sophisticated multimedia or broadband broadcasting devices are limiting in the participation space allocated for professionals in whose countries sophisticated telecommunications and computing technologies are still being developed.

The creation of space for full participation may require an alternative/ complementary approach. Settings should be created where developers from countries of the area meet and jointly participate in the process of knowledge building and course development. Such an approach would recognise the societal basis for knowledge creation, legitimisation and distribution; it requires close collaboration between the partners from different cultural backgrounds. Each of the partners should be allocated some essential components towards completion of the end product. An additional requirement of such an alternative approach is that the working base for the development team and the end product should be the use of appropriate technologies. Such an approach would also be appropriate for less highly structured, or less technological subject matters. The end products, telematised modules and courses of study should permit their use by wide circles of learners, teachers and trainers.

A collaborative approach

Electronic communication enables teachers to form new working relationships with educators throughout the world. Teachers may join other teachers to work in teams to help solve real problems, to share cultural perspectives, and to learn from one another. This type of cooperative learning can change the life of teachers and with it their methods for educating students. Teachers working on educational networks consistently rank their own learning as the most important benefit of the program. Riel (1990) describes the following phases in setting up a collaborative framework for teachers:

(1) Forming the learning circle: a topic is selected and members of the group meet electronically exchanging introductions and general information. (2) Project planning: the group task is defined and planned and different roles allocated. (3) Accomplishing the task: members work closely with their local and distant peers accomplishing their agreed task. (4) Publication. (5) Sharing and evaluating publications.

The professional development benefits obtained by teachers who participated were:

(1) Acquisition of knowledge (2) The development of new instructional strategies (3) The development of self-esteem (4) The development of professional and personal relationships.

This model, originally applied to joint cooperative projects of teachers and students, is suggested as providing the basic scheme for the establishment and work of joint Euro-Mediterranean teacher educators and in-service trainers development teams.

Sheryl Burgstahler, reviewing electronic communities projects, points to the following elements that may affect their success or failure: (1) Organisation of the Work Group (2) Task Organisation (3) Response Opportunities (4) Response Obligations (5) Coordination and Evaluation. She adds that it is essential to assign responsibility to the participants (Brugstahler & Swift 1996). A genuine collaborative approach is the best way to obtain the best conditions leading to the success of this initiative.

Appropriate technologies

One of the outstanding principles of the UNDP Sustainable Development Networking Programme is that of appropriate technology. This principle states that computer and networking technologies should be adequate in relationship to the existing infrastructures and available human resources of the countries involved in the projects.

In the Mediterranean basin there is wide disparity in the quality and extension of telecommunications infrastructures available in different countries. Upgrading these structures is a major challenge to be accomplished in the next coming years. These infrastructures determine which telematics technologies may be appropriate for joint collaborative work between participants from different countries.

Two broad classes of telematics technologies should be distinguished. On the one hand there are those technologies requiring effective broadband communication and continuous online interaction between the user and a central computer and the applications supported in such environment: heavy graphics and telematised multimedia; WWW servers accessed through graphics supporting browsers; interactive video networked applications.

On the other hand we have those technologies that do not need a continuous online channel (online/offline modes of operation); its applications can be accessed using lower capacity channels; are able to operate with lower quality phone lines. Online/offline, store/forward, electronic mail systems are at the core of these technologies. Fortunately they are able to support one-to-one and one to many communication systems; they allow for asynchronous computer conferencing; the maintenance of mailing archives; search and retrieval of information from files archives and more. They are perfectly well adapted to support the computer mediated communications needed for the creation, maintenance and supporting environment of virtual working groups.

This set of technologies are the best adapted for the creation of a common ground for the involvement on an equal footing of all the Mediterranean basin countries.

Following a necessary survey of standing conditions a basic connectivity and training kit will be developed. It will be able to shorten the process of introducing teacher educators or in-service trainers to the network: create a connection and use email, email conferencing, news, and files retrieval. These are the basic skills needed for their professional expression in the framework of the development working groups.

Development teams at the Mofet Institute and the National Teachers' Colleges Network

The Mofet Institute is the central R & D Institution of the Teachers' Colleges in Israel. In cooperation with the Tomorrow 98 (MAHAR 98) program for scientific and technological education in Israel, it has established the National Teachers' Colleges Network in Israel. The network, part of the global Internet, will eventually serve some 6,000 teachers educators in the colleges and about 40,000 students. Already 20 of the largest 35 Colleges have been connected to the network.

An important tool in the work of the Mofet Institute is the establishment of curriculum development teams. These peer teams have as their primary objectives the improvement of curricula and the preparation of learning materials for training teaching personnel in all basic areas. The culminating goal, taking place over a period of two years, is the completion of a curricular module, or a series of modules which are then published and made available to teacher trainers. These include: a theoretical component, a full array of didactic features, recommendations concerning methodology and suggestions for student activities. More than 30 development teams were active in the academic year 1995-96.

The concept of a development team was adapted to the needs of a telematised learning environment when the National Teachers Colleges Network was planned and established. A development team for the network composed of 26 experienced teachers of teachers was established. In their initial year the team focused on the development of teaching materials and methodologies for network use. In their second year several telematised teams were established dealing with: Pedagogical Orientation and Support for inservice training of new teachers; Pedagogical orientation to would-be teachers supporting secondary students; Mathematics in the elementary school; English as a second language; the Bible; Water as the focus of an interdisciplinary curriculum; Literature (Poetry); and Theoretical and pragmatic considerations in the introduction of Computer Mediated Communications projects in schools.

The experience accumulated with these development teams lay at the root of the present open proposal. As part of the preparations for this proposal implementation a survey is now being initiated in the MACAM98 network to identify teachers educators willing to take part in joint development teams to be established with Euro-Mediterranean partners.

An open-ended approach

Several contacts were made in the following frameworks: the Intermed 96 Conference in Barcelona (January); the ERCIM preparatory workshop in Sophia-Antipolis - Research and Information Technologies; the NETTUNO preparatory workshop in Brussels - Technical Innovation on Education and Training. There is a readiness for cooperation and it leads me to believe that the above approach may succeed in a broad Euro-Mediterranean framework.

Projects originating from Italy, France, Spain, Greece, Turkey, Cyprus, Lebanon, Egypt, Tunisia, Morocco, Malta, and Algeria were presented at these meetings and some of them may eventually find a common denominator. We

already received several expressions of active interest in the establishment of joint development teams. Continuing contacts will be made in these different countries, in order to further define promising areas and projects for the establishment of joint development teams.

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