

CHAPTER 4

Conclusions

Having in mind the high degree in which interactivity influences the quality of teaching practice, it is difficult to understand why most current projects use the Web only as an information source and communication tool. Clearly, telematic networking was not developed having the needs of the educational community as a priority. Therefore, to fully exploit this new technology for the development of interactive ODL methodologies, the design of specialised software add-ons is required, in order to stimulate productive transnational co-operation. The innovation of EU-sponsored e-Hermes project lies in the development of such an add-on, the “electronic tool” (e-tool) which has the form of an interactive Web page. Students from the participating schools collect environment-related data and enter their measurements into the e-tool, which can analyse and plot the data in real time.

The need to familiarize young students with the idea of communication and co-operation with students abroad, as well as the introduction of new subjects such as ecology or economics, that cannot be thought in a national restricted level introduces new possibilities and challenges to ODL in secondary education. In this case ODL cannot be seen as a substitute of the conventional instruction but rather as an add-on that has to justify its introduction through the qualitative upgrade it offers to the everyday school practice.

In order to plan such an ODL project one has to critically analyze and define the word “learning” in the term: from teacher-centered learning to student oriented learning the variety of didactical approaches is immense. It is commonly accepted that student oriented teaching, focusing on self-initiative and autonomy offers significant advantages towards a “learn to learn” objective. Most ODL projects’ currently running are strongly depending on a centered approach, by using the Web only as a communication tool and/or as an information transmitter. This proves that the exponential development of technology is not necessarily accompanied by pedagogical and methodological developments that would enable the integration of these modern technologies into everyday teaching. As a conclusion, there should be some reorientation and redefinition of educational practices that would take into account the new technological realities. The e-Hermes project has developed a pedagogical framework suitable for ODL’s implementation in secondary education. A

student-centered, decentralized project in the field of environmental education has been applied and monitored involving students' and educators' from many countries in Europe.

The goal of promoting transnational co-operation and at the same time the use of new technology to overcome barriers to physical mobility was accomplished by the e-Hermes project:

- (i) in that the researchers from the Pedagogical Institutes co-operate for the development of a pedagogical framework that utilises best the background and corresponds to the needs of the participating areas,
- (ii) in that students using ODL, exchange ideas in the sensitive area of environment, become aware of the particularities, similarities and differences of every country and understand the in-built universality that environmental issues entail.

The e-Hermes project has approached ODL in a multisided way. University professors and researchers, teachers and students were simultaneously involved in the project, providing a wealth of views and insights.

Monitoring students' and teachers' work during the final run of the e-tool application has been concluded according to an academically accurate scheme defined by the research groups of the participating University Institutes. This included both, questionnaires to be completed by the students, as well as on field monitoring students work. The project's main achievement was the growth of experience and the promotion of ODL especially at secondary – level education. It has improved the quality, friendliness and the ability for teachers to access ODL. It has researched the curriculum adjustments that are necessary for the wider use of ODL and to find out those pedagogical factors, as well as material and technical background, that are needed for its wider spread. These will give the education policy makers and the curriculum planners the arguments they need for spreading ODL. Students have simulated a small scientific society, reaching out to every aspect of modern scientific inquiry. They have been familiar with collection of data, construction of test statistics and by discussing subjects on a multi national aspect. They were sensitized about the global character of environmental issues.