

VIRTUAL EDUCATION NETWORK

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Virtual Education Network (VEN) is a successful Socrates Project, done by teachers of different types of schools in Lower Austria, students and lecturers of the Danube-University Krems in collaboration with the Institute of Technology, Oulu, Finland and the Technological Education Institute, Athens, Greece. The project started in 1998 and was completed in February 2000.

In the project several dimensions of distance teaching were researched:

1. Can different school types be served by the same teaching materials?
2. Can teaching materials be developed for different culture areas?
3. Does a broadband teaching network with central storage facilitate the work of local teachers?

All the questions touched on are of supranational importance and decisive for the positioning of the European Union in the area of the deployment of new media in the education system. In cooperation with colleagues from Finland and Greece an attempt was made to create a representative project for Europe.

The Finns were responsible for Northern Europe

The Greeks for the Mediterranean area and

Austria for Central Europe.

Teaching programmes from three regions were evaluated in these three countries, taking into account cultural differences. After specification of the aims, communication was largely via the Internet and video conferences. There were, however, direct discussions and visits to each of the individual countries.

What was our consideration?

The project had three essential aspects:

- 1.) Firstly - different school types:
 - a vocational school
 - a lower secondary school
 - an upper school for general education and
 - a primary schoolshould be linked to each other.

These different school types - they addressed different interest groups and different age groups - were to work on common central topics of interest. This different approach to a subject produced different insights. The schools learned mutually from each other. "Learning mutually from each other" was a central point.

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2.) Secondly this project - different school types working on the same theme in the net - was to be carried out in two other European countries.

What was the aim?

- evaluation on an international level
- exchange of experiences
- comparison of different cultural approaches

3.) Thirdly - planning and installation of a communication network connecting the individual, national educational facilities.

ABOUT THE COURSE OF THE PROJECT

The project ran on two levels:

- as a "project in itself" on a national level between different school types
- on an international level on which the national insights were exchanged and evaluated.

The target was to develop content independently in the three project countries which would be suitable for different school types. The application in different school types was then to be tested in Austria, while international acceptance followed via exchange and application of the individual national programmes in all three countries.

THE TECHNOLOGICAL ASPECT OF THE PROJECT

The ADSL network and its practical applications in the VEN Project – the abbreviation "ADSL" stands for "Asymmetric Digital Subscriber Line" and solves a hitherto problem with the supply of broadband applications to businesses and households - particularly in rural areas.

ADSL makes a series of new uses and advantages possible for example for Telelearning: thanks to ADSL telelearning is possible in completely new dimensions. Multimedia instruction with interactive elements can be achieved without compromise.

CULTURAL DIFFERENCES

Apart from the objective of using educational tools for different school types, there was a second target: to use these educational aids in different cultural areas of Europe. We selected Finland as the representative of Northern Europe, and Greece as the representative of the Mediterranean countries.

We were involved with three language areas. What united us was a fourth language: English. The individual programmes and tools were developed in each country's own language and then translated into English to make them accessible to the other project partners. However, simple translation is not enough since there are also cultural differences of interpretation which are not communicated in

this way. Misunderstandings purely based on translation errors can be easily and rapidly cleared up. Most problems arise in the intercultural area

The different languages were an obstacle to our project, but it was one that could be overcome. In any case, it represents an additional cost factor for international cooperation. Expenses that do not exist in the U.S.

We were confronted with, as John C. Condon calls it, the "Shadow of Babel", and that is a general problem in the European Union. In addition to all the other communication problems, the language was certainly a substantial barrier. Basically, we noticed that the problem of translation was unavoidable in primary schools, whereas English was sufficient in higher grades. Even here though, differences were noticed in the different countries. Small language groups, as we had them with the Finnish partners in the project, are to a higher degree dependent on internationally popular languages like English or German, and therefore have fewer problems with English teaching material.

SUMMARY

This field test showed

- that different types of schools can be served with the same teaching materials, which reduces the cost of development
- that pupils of different school types can learn from each other - sometimes more efficiently than from their teacher
- that teaching materials can be developed for different cultural areas (Greece=Mediterranean area, Finland=Northern Europe, Austria=Central Europe) and
- that by the broadband network a new form of distribution of teaching materials is established.
- Language is an obstacle. There are many materials like pictures or films that can be employed in a self-explanatory-way and thereby can lower language barriers. English programmes can only be used for higher school levels. In all other cases the individual texts must be translated into the national language, which means higher costs and misinterpretations.
- Some of the programmes prepared and tested were only suitable only for face-to-face instruction. Thus one must generally differentiate to what extent virtual education programmes are suitable - as support for face-to-face instruction and/or for interactive study by pupils.
- A clear prerequisite definition is necessary as an introduction. What basic knowledge is needed to use a particular programme. An individual didactical introduction giving a clear guideline from a pedagogical point of view should be given to the content sequences for special use in different school types and grades.

This project has already been further developed and the experience gained in it is flowing into subsequent projects and is creating new content in the area of teaching.