Integrating Internet in Adult Education Schools: The RedVEDA Project

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ABSTRACT

This report provides a review of RedVEDA (Virtual Network for Adult Education). The main goal in this project was to integrate Internet resources for use in adult school settings. The important outcomes involved training 43 teachers in the use of new technologies, the design and development of 15 different sets of multimedia materials for adults, and the design and management of project website.

Keywords

Adult education, Educational innovation, Internet in schools

Introduction

The usefulness of Information and Communication Technologies (ICT) at all educational levels is an accepted fact. However it's difficult to integrate technology into teaching for a variety of reasons. These difficulties are due in part to: negative predispositions to technology, lack of political support, financial constraints and inadequate teacher training (Olson, 1988, 2000).

Success in educational innovation depends on several factors (Fullan, 1990; Fullan and Pomfret, 1977):
➢ clear aims and goals;
➢ a planning process that addresses change management;
➢ appropriate training for all involved;
➢ encouragement and reinforcement of positive attitudes; and,
➢ access to appropriate materials and resources.

In this paper we present a project involving with the integration of Internet resources into adult classrooms. The analysis of this experience indicates some key factors that influence the educational change process when new technologies for adults are involved.

The RedVEDA Project

Context and partners

The RedVEDA (Virtual Network for Adult Education) Project was developed during 1999 and 2000. It was supported with Funds from the European Commission's SOCRATES program (GRUNVIT Action). The project's leader was *Consejería de Educación – Cultura y Deportes* from the Canary Islands (Spain). The cities of Landskrona (Sweden) and Kotka (Finland) provided supporting partners. The project was designed, supervised and evaluated by a research team from La Laguna University (Spain).

In September 1999, there had not been any previous experience in the use of Internet in adult education in the Canary Islands, even when most of schools had the necessary technical support (computer classrooms with Internet access). Online courses were not available. Most of the teachers needed specific knowledge and training to use Internet resources. There were few educational materials or courses in Spanish on the Web. The experience in Sweden and Finland was quite different as they had developed a set of good experiences for adult training with many online courses.

In the first year we dedicated most of the time, effort and money to involve adult education centers in the Canary Islands with the use of new technologies. This led to the second step of the project, which was to develop an European adult education network through the Internet.

Assumptions and objectives

From the beginning, we categorized technology integration as an educational innovation problem. We proceeded with these assumptions:

➢ The project development should be planned as an open process, in agreement with all the partners and educational agents (managers, technicians, teachers and politicians).
➢ The teaching staff had to embrace the project's aims and should be involved in the development process. Specific goals included having teachers develop a sense of ownership and achieve sufficient competence to carry on when the project ended.
➢ Required and sufficient human and material resources should be made available.

After a needs analysis, the research team designed a work plan to improve integration and use of new technologies in adult schools settings. This plan was accepted by educational administrators from the Canary Islands. The plan was presented to teachers and other members in the educational community through a meeting organized for this purpose. Main objectives of this plan included:

➢ Involve a group of teachers and schools in the process of integration of new technologies in educational practice in the context of this project.
➢ Train teachers in the use of digital resources for adult education.
➢ Design and develop specific educational materials for adult to be delivered through the Web.
➢ Create a website about Adult Education in the Canary Islands that offers educational resources and services (information from different establishments, electronic documentation, links, teaching materials, chat, searching service, distribution list, newsgroups, etc.).

Project Activities

Activities accomplished the first year included:

Teacher training

In all, 43 teachers in adult education from the different islands were trained. This training was performed during a six-month period. The main aim was to train teachers in the use of Internet and to enable teachers to create their own materials. The training that was developed consisted of a course, working group sessions and a videoconference.

Theoretical-practical course. The course contained these units:
Unit I: Introduction to Internet resources and services.
Unit II: Educational activities on the Internet.
Unit III: Design and development of digital materials for adult education.

Working groups. All the teachers met monthly to prepare curricular materials and develop classroom experiences. In these meetings, teachers showed progress on their projects. They also resolved doubts they had about software, hardware or technology integration.

Videoconference. We celebrated a collective working session with all the partners teachers from the Islands. This videoconference was really useful for them, since they met and reported on projects and progress.

Development of multimedia materials

The process of materials production was linked to teacher training. These materials support flexible learning for adults in the Canary Islands. All materials were designed and created by teachers. Teachers organized working groups in the form of small workshops. The university research team provided pedagogical support. Altogether 15 multimedia units were developed and delivered though the Web in Spanish.

Internet use with adults

This activity involved planning and conducting didactic sessions to familiarise adults with the Internet. The use of the Internet as a teaching resource was the first step in training teachers as designers of educational spaces on the Web.

Specific objectives included:
➢ Improve abilities, such as finding and selecting educational resources on Internet.
➢ Develop pedagogical approaches to help teachers make effective use of Internet resources.
➢ Improve abilities to organise and orchestrate learner activities around available resources.

In spite of the great interest in planning these experiences, we were able to put just a few of these into practice. Upon reflection and based on discussions with teachers, we found that teachers preferred to occupy their time in designing and modifying multimedia materials rather than becoming engaged with Internet-based activities, artefacts and tools. In that sense, we did not achieve all of our objectives, although this highlights the importance of our first two units of instruction. Regardless of these difficulties, important advances did occur, as indicated below.

The RedVEDA project Website

Another important activity developed during this first year was the design and development of a specific website for the RedVEDA Project aimed at teachers and students in the Canary Islands. The access to this website is free and open. All the partners designed their own websites linked to the project:

Partner	Website
RedVEDA-Canarias:	http://www.educa.rcanaria.es/redveda
RedVEDA-Landkrona:	http://www.gullstrand.landskrona.se/redveda2000/index.html
RedVEDA-Kotka	http://www.kotka.fi/kopisto/redveda

Table 1. Partner website

Results analysis

The RedVEDA Project had an important impact on the adult education teaching staff in the Canary Islands. In a few months, the situation changed from a point in which there were no teachers trained in new technologies use, no electronic teaching materials, and no online experience to a situation with a wide group of teachers keen on the idea of using Internet in their classes who then had some initial training. In this sense, the project's aims were met.

Reasons that helped to get these successful results included:
➢ The interest and positive attitude to new technologies shown by the teachers in adult education in the Canary Islands was crucial. Their involvement and motivation accounted for the success that was realized.
➢ Careful preplanning also contributed to success. Before each task began, the research team prepared a preliminary plan to offer and negotiate with all involved. This participatory design and user-centred approach was also important to success.
➢ Finally, there were excellent human relations between all the people involved (partners, research workers, administrators, and teachers) in the project during the whole work period. This is a necessary condition in an educational innovation project. It's very difficult to implement social change, especially in education, without cooperative human involvement with appropriate incentives and personal satisfactions.

Conclusions

The RedVEDA Project has been successfully completed. We have modified some of our prior assumptions about innovation processes involving ICT.

Our success consisted in trusting in an innovation model based on teachers as the primary agents of change. However, in spite of this success the RedVEDA Project is no longer in existence, so we fell short with regard to this particular objective. The reason for lack of continuation is primarily a result of economic constraints and

lack of proper political support. On the one hand, political administrators in adult education in the Canary Islands do not consider this project as one of their priorities; on the other hand, the European Commission did not adequately finance the project. However, the facts and information we gathered in the evaluation questionnaires passed to the teachers showed a high level of satisfaction with the results they obtained and the process they developed.

Which conclusions or lessons learned can we take from this experience? First, projects intending to incorporate the use of new technologies into schools require:
➢ *minimum technological support* – computer classrooms, telecommunication networks, servers and access.
➢ *human resources* – teaching staff, computer management, educational administration and evaluation. These people have to be qualified in the use of new technologies for educational purposes and they have to keep a positive attitude and be involved in all the innovative activities of the project.

Second, it's necessary to be aware of strategies and plans in order to facilitate the process of innovation (Fullan, 1990). Special care should be given to:
➢ training teachers and other educational agents in using Internet resources to support educational goals and activities;
➢ familiarisation with the availability of curricular materials delivered through the Web; and,
➢ creation of on-line resources for information exchange between the different partners in the project.

Third, it's necessary to remember that the RedVEDA Project was supported and financed, by public institutions and educational authorities. The development of such a project is strongly linked to criteria and decisions of political administrators. It's very important to negotiate every step and to keep relations based on reciprocal confidence between administrators and technical staff.

Finally, this experience can be taken as a pattern for educational communities that want to start a process of integration and innovation of Internet resources in teaching and learning.

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