Surfing towards the twenty first century

An educational multimedia network in Chile

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Abstract

Chileans are proud of their new democracy and anxious that every citizen should share in an expanding future. The government has responded to the educational needs of the country with some radical thinking about telematics education. They have linked the most poorly resourced schools into an interactive, multimedia, educational network.

This network is one aspect of a educational programme which is targeting all ten thousand state and grant maintained Chilean schools. The aim is to raise the quality and equity of education. This MECE programme represents a new direction in Chile society. For the first time in twenty years education will receive a larger budget than defence. The World Bank has loaned \$240 million dollars to this venture and is already seeing a measurable return on its investment in raising the quality of education as statistics suggest that MECE has raised achievement of minimal program goals from 43 per cent to 61 per cent.

The most innovative of the MECE pilots is The Enlaces Project started in Santiago, Chile's capital city. The network strategy the Enlaces team has developed is based on the universal Chilean experience of playing in the village or town square, La Plaza. This multimedia, networked software is designed to improve the quality of education, to decentralise curriculum development and to encourage teachers to be creative and innovative in tackling the problems they face. The network is proving a valuable tool for improving the communication skills and raising the self esteem of the student as well as providing in-service education for teachers.

The democratic teaching and learning strategies of the Enlaces project are a symbol of Chile's new political direction: it is an exercise in the management of change. As part of their own decentralisation policy the main team has moved to Temuco, the fastest growing city in South America. For some of the team moving from Santiago, where 40% of Chileans has been a wrench, but a sense of vocation motivates them. They know that Student-centred learning and problem solving approaches will not be introduced without tensions and resistance. Many unmotivated teachers in state schools are used to authoritarian methods of teaching. The teachers needs' are being met by sensitive assessment evaluation tools which have been in place from the beginning of the project. The results are used to adjust the training program continuously according to the teachers attitudes and reactions.

These software tools were used to test the attitudes towards computers students, parents and teachers before the project started so that all the data can be compared with a base line. There are few projects where such extensive data exists on school attitudes before the advent of computers. Built-in measurement tools also make data about the use of the network available to the schools and the team. Traffic is checked. Problems and successes are observed early enough to intervene if necessary.

The director of the Enlaces project, Dr Pedro Hepp, is eloquent about the project's mission; to motivate, to reinforce, to stimulate. The computer has proved to be one of the most effective vehicles the team uses as a catalyst to improve the quality and delivery of education. The schools have few books that relates to the lives of the teachers and pupils in remote regions. The networked computer is providing the school with a wide range of replicable teaching and learning materials. Much of the training through the network is incidental, but the teachers and students also receive formal training and advice and have access to self tuition packs. Integrating the computer into the classroom is challenging the conventional authoritarian teaching tradition. Teachers are being creative about using one computer in class. Classroom organisation is being considered and even the furniture is being moved to reflect the new thinking .

Most importantly the Enlaces project is a response to the technologically driven changes in communication and education. The Internet is a new metaphor for independent learning that will probably have the most impact on educational processes in the long run. With so much information available on-line, do problem solving approaches and information retrieval skills become more important than a good memory? Remote messaging and multimedia communication challenge the notion of writer and reader, of the authority of published text and the nature of publication itself.1 Many of the schools who are on the network are from the poorest and remotest regions. Teachers and children are now in productive contact not only with the team in Temuco but with their peers in Chile and all over the world. Collaborative projects using electronic communications will protect Chile from political isolation in the future.

The greatest benefits have been to the Mapuche Indians who have do not have a written language. Multimedia recording is allowing oral traditions to be maintained. Mapuche children who were only using Spanish are now keen to record a sound dictionary in Apuche and invent new words to keep the language alive. The irony is that they are moving from inadequate book information to a networked research culture which permits access to current databases on-line and CD-ROM storage. They are jumping 500 years of books and reinforcing a medieval oral culture.

This project is moving from the pilot stage to integration into the Chilean State education. The Enlaces team have avoided many of the pitfalls that have beset similar projects in the developed countries because they have used the best industry standard Apple multimedia technology available: combined good software and teacher training with the distribution of hardware: developed in parallel sensitive assessment and evaluation. The teachers and pupils received enough support as they learn to be able to launch out confidently and 'surf the net.' Adequate financial support and vision from the government is ensuring that Chilean children will be amongst the best equipped in the world to cope with the demands of the twenty first century.