

## **REPORT ON THE BEAVER COUNTY (OKLAHOMA) INTERACTIVE VIDEO TEACHING PROGRAM**

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Using funding from the NSW Principals' Council and the Griffith District School and Principals' Development Program, I was able to undertake a study visit of the above program from Monday 7 to Friday 11 October 1996. The purpose of the visit was to study the Interactive Video Teaching cooperative which had been developed over a period of ten years in the Beaver County area of the Oklahoma panhandle.

Ardlethan is the "hub" school of the Riverina Access Program covering it and Aria Park and Barellan Central Schools. The RAP schools use interactive audiographic links which allow the senior secondary students in the schools to operate as a single school. Subjects are taught from any of the schools using teleconference, computer and fax links. Like many schools we have been investigating systems that allow the use of visual links to complement these.

A "National Geographic" article about the use of fibre optics to link schools in Beaver County printed in about 1992 came to mind when I took up the position as Principal of Ardlethan Central in 1994. Initial contacts were made, an invitation to visit was extended, and funding and LSL used to make the trip.

Beaver County is located in the "panhandle" of Oklahoma state, that is, in the north western corner which is sandwiched between Texas, Colorado and Kansas. The Beaver County program began operation in 1988 with four schools involved, funded by grants from government, support from Panhandle Telephone Company, and the schools themselves.

The schools had decided that they didn't want geographical isolation to be a disadvantage to their students.

The local telephone company saw a benefit in a system which encouraged families to stay in the rural area it covered rather than move to larger towns for their children's senior secondary education.

Governments and other grant agencies saw a benefit in allowing the schools to work out teething problems in a practical but "cutting edge" situation.

The first thing that strikes you when you walk into one of the Beaver County schools are the fundamental similarities between our students (apart from the uniforms), teachers and general classrooms. Turpin School, which I used as my base even had the same school colours as Ardlethan Central so I immediately felt at home as I was wearing my ACS top on the first day.

However, after these similarities had been registered the great differences in physical facilities was obvious. Ranging in population from approximately 180 to 400 (K-12), each of the three schools I visited as samples of the dozen now on the program had magnificent gymnasiums, indoor heated pools, full-sized auditoriums, singing rooms and band rooms, cafeterias, computer rooms and football fields with large, permanent stands and press boxes.

The wealth base of US society was reflected in the interactive studios. Each school has at least one studio/classroom featuring two banks of four or five large television monitors. One bank is

on the wall behind the class in the room. The other is above the teacher's head. Video cameras are placed to cover the teacher at the front of the class, usually behind a work bench, and to cover the class in the room.

The teacher in the studio from which the lesson is delivered (it could be any one of the schools involved) can see all students in the schools involved in their lesson, while the students can see the teacher and the students in the other schools.

Small microphones are located on every second desk and pick up all conversation so students and teacher can interact as in a normal classroom discussion situation. Teachers and students have basically learnt to deal with identifying voices and cutting out extraneous comments. Students receive a lesson in their ITV subjects once per day for 45 minutes.

The ITV program is coordinated from Panhandle State University at Goodwell, a small town in the extreme west of the Oklahoma panhandle. Panhandle SU provides some degree courses (eg early childhood and primary teaching) but also associate diploma courses. It provides a number of these through the ITV system to adult classes in the system's schools after school hours.

A wide range of community courses are also provided by the schools for members of the various communities and these are extremely popular.

The system receives technical support from the local telephone/communications company based in Guymon. The company provided optic fibre connection to all schools and the technical expertise to install and maintain it. Basically the system is left open. The technology used to run the system has been recently updated and a stack of terminal boxes about 1.5 metres high has been replaced by a small unit about the size of a large video-recorder. This is the key to the system. I believe it is produced by a California-based company. Each of these new units cost about \$30,000 so the outlay is a major one. However this is much less than the initial set-up cost.

However, each school contributes about US\$53,000 per year and if it receives two subjects per day through the system it is economically viable compared, one assumes, to hiring teachers to staff the subjects.

I was made extremely welcome by the staff and students of the schools visited and am especially grateful to Turpin School secondary Principal, Ed (Buck) Chatham, Superintendent Mike Scott, and Betty Klotz, a delightful lady who is school secretary at Turpin and who kindly provided accommodation to my wife and I while we were in Beaver County. Internet contact between classes in the schools in Beaver County and the RAP schools is something administrators and staff in both countries are now eager to initiate.

## **INTERIM CONCLUSIONS**

1. The system is an very effective mode of distance education.
2. The system is very expensive in its setting up but is a viable proposition once initial set-up costs have been overcome.
3. The costs of the technology to run the system is steadily declining.
4. Students working through the program display characteristics of independent learning similar to those identified in NSW students working through the Access Programs.

5. New technologies and software already developed probably allow isolated NSW schools, especially Access schools, to achieve visually-interactive links to be established through desktop videoconferencing at a much lower cost than that involved in the Beaver County program.
6. Universities such as Charles Sturt would find the system easily adaptable to servicing the demand for courses from isolated adults using school facilities providing an Interactive Video system or desktop videoconferencing.
7. Our initiative that we have pursued over the past three years to establish a full interactive video program with television links similar to that in Oklahoma is well worth pressing especially as a state or national pilot program which can provide a test-bed for this mode of educational provision.

