

Networked Learning in Community Development

paper 5:

Videoconferencing for Deaf People A Case Study of On-line Education for Deaf People Using Videoconferencing

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Summary

- This paper is a case study of a BT funded project exploring and developing the use of videoconferencing for the education of Deaf adults. It is a result of staff development work within this FE College on the uses of ILT for teaching and learning.

Deaf people have worked at the heart of the project which has given the work a special relevance to their needs. Deaf education has too often denied Deaf people the opportunity to influence or use their first language for teaching and learning.

A series of pilot teaching sessions have been undertaken and evaluated. A great deal has been learned about the technological, pedagogical and access issues surrounding this work. It is hoped that this provision can now be developed to provide specialist courses for Deaf people taught by Deaf people.

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Background

- Gateshead College is a Further Education College located on the south bank of the Tyne, just south of Newcastle upon Tyne. In 1996/7 the College enrolled over 12,000 full and part time students.

During the last year, College staff have been involved in a series of staff development sessions exploring the use of the Internet and Multi Media Video Conferencing (MMVC) for teaching and learning. Partly as a result of this work and awareness of the potential of videoconferencing for Deaf (1) people a proposal was developed for exploring and developing the use of MMVC for the education of Deaf students. This proposal was successfully submitted to the BT Community Award Scheme and funding was received from BT Education Services.

The equipment used was a PC based VC8000 running Olivetti PCC Desk software and a Fuji FV10 digital camera as a document camera. For some sessions, we attached a standard camcorder as an alternative to a fixed camera. We used ISDN2 lines.

The Project

- The project began in September 1997 and ends in March 1998. At the time of writing (end of February 1998) there remains work and analysis to be done - the outcomes of which will be referred to in the final conference presentation in April.

The initial aim of the project was to videoconference existing college courses to Deaf people at remote sites using a sign language interpreter. This was seen as a way of increasing access to mainstream further education primarily for Deaf adults. This was gradually modified to focus on the delivery of specialist courses for Deaf people taught by Deaf teachers.

The modification of the project's initial aims was partly as a result of input from Deaf people and the unavailability of technology within the Deaf community. This meant that we could most easily

access cohorts of Deaf students by contacting FE Colleges and Universities rather than reaching Deaf people in clubs or societies.

The first part of the project was designed to make contact with Deaf people to identify their needs and preferences. This culminated in an Open Evening at which we demonstrated the technology. The reaction of the Deaf audience (most of whom had never seen videoconferencing before) was very powerful. As Oliver Sacks puts it: "Nothing is more wonderful, or more to be celebrated, than something that will unlock a person's capabilities." (2) For the first time in their lives, the people present realised that they could communicate over a distance using their first language of Sign.

For Deaf people, videoconferencing enables direct communication without codification or mediation through a second language (English) or a hearing sign language interpreter or a telephone operator (BT Typetalk service).

Part of this Open Evening was spent gathering views from the 30 Deaf people present regarding the subject areas of most interest to Deaf people using this technology. From these findings, a draft timetable was devised. The contacts already made meant that we had a number of good links with other institutions with Deaf students.

A Deaf Person's Perspective: Tessa Padden

- I am delighted to give a Deaf perspective on this exciting new venture for Deaf people. This is not only new technology but it is exactly what we Deaf people have been waiting for - for a very long time!

How would videoconferencing open up the world for us Deaf people? Please let me tell you about our way of life first. Our natural language here in Britain is British Sign Language, or BSL, being Britain's fourth indigenous language. It has no written or English form, like the Aboriginal language, which is passed on through stories, tales and rock drawings. For us, it is passed on through the generations through stories at boarding schools.

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Sign Language has been mentioned by hearing people in the Bible, history books and Deaf families.

Our Sign languages are as old as spoken languages. They are based on visual information and have their own grammar and structure, which are closer to Chinese language than to European languages. Each country has its own Sign language with its own dialects and accents, just like spoken languages.

Through history we have always been behind in society because our language was not widely known. We were disadvantaged again when Alexander Graham Bell made a big discovery which affected the hearing world. When he tried to make a hearing aid for his Deaf wife, he accidentally invented the telephone which changed all our lives.

But now with videoconferencing, it is based on vision - will that mean we are at last on a par with hearing people?

Another interesting factor is that we Deaf people, as a community, are again quite different from various hearing communities all over the world. We are scattered all over Britain, but we still meet up at various national and regional events like school reunions, sports competitions, dances and conferences. Therefore our membership of the Deaf community is of a different kind. We also meet up so that we can relax and have conversations and most of all to share information and experience in our own language. In order to mix with other Deaf people and to maintain our Deaf identity we have to travel far and wide. The main obstacle is, obviously, the cost of travel.

Even though we now have minicom textphones, many of us are unable to use it because we find it difficult thinking and translating quickly in English which is, if we are lucky, our second language. Most of us don't have fluency in English due to poor education. Most schools in Britain, due to paternalism and ignorance, use the wrong system for teaching us English as our first language rather than as our second language. We should be allowed to use our first and natural language as the main language of communicating and learning English through our first language, that being BSL.

This is not happening so that is why many Deaf people are unable to read and write English comfortably.

For us, who are dispersed all over Britain, BSL is a visual language so the use of communications through video and computer opens up a new and fantastic world for us. It means that we are able to learn, express and argue in our own language, which has so far been denied us.

There are several ways that we can use videoconferencing for ourselves in our own language.

Social - sharing news about how other people fare with their lives; everyday issues like making appointments with doctors and dentists, either directly or via interpreters who translate BSL into English and vice versa.

Professional - Deaf professional people can communicate with each other directly, at work, instead of via interpreters or the Tynetalk service, where an operator passes on minicom messages as voice messages and vice versa.

Educational - as for education using videoconferencing, again it would be a remarkable move forward in opportunities for us. Hearing people have plenty of choice of colleges and universities, while for us Deaf people the choices are restricted and limited.

I know some Deaf lecturers who have to travel far and wide all over Britain to run courses for Deaf people. With videoconferencing they could simply stay put giving lectures from their places of work! As part of this project, Deaf people in Cornwall and Norwich and many other parts of the country have asked for various courses. Who would be prepared to travel down there? Would they be able to get away to attend courses at Bristol or London? Here, videoconferencing would come to their rescue!

We can communicate with Deaf people from other countries using gestures like International Sign. So, through videoconferencing we can communicate with Deaf people from abroad with hardly any heavy translation needed! Would that mean our Deaf world would become smaller than your hearing world?

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Commentary

- To emphasise the importance of these points it is worth contextualising Tessa's account as part of the broader issues surrounding Deaf education. "The first half of the 19th century saw the rapid advancement of provision for deaf school children throughout the UK...the methods used were mainly the combined system with an emphasis on articulation and speech, though this gradually gave way by mid-century to an almost total reliance on sign as the mode of communication, and on written language as the means of access to English." (3)

"Deaf students of the 1850s...were highly literate and educated - fully the equal of their hearing counterparts. Today the reverse is true. Oralism [the practice of teaching speech and lip reading to Deaf children] and the suppression of Sign have resulted in a dramatic deterioration in the educational achievement of deaf children and in the literacy of the deaf generally." (4)

A survey of Deaf school leavers conducted by Conrad in 1979 showed that their reading age averaged 8.75 years, their speech was mostly unintelligible and their lipreading no better than a hearing child with no practice. "Oralism's failures were finally exposed." (5)

Therefore, it is not surprising that many of the adults we worked with on this project had deeply held and negative views of their previous education.

Teaching Sessions

Before the teaching sessions themselves were set up, we made a number of informal links between Deaf people in Gateshead and other parts of the country from which we learned a number of important points:

1. Distance from camera is very important. Facial expression is as important as gesture in Sign Language and so both need to be equally visible. With ISDN2 there is time delay as well as blurring of gesture.

2. Focused lighting is also very important to ensure clarity of facial expression.
3. A plain, dark backdrop (we used a dividing screen) also assisted clarity. Plain, dark tops were best for clothing so that hands showed up clearly.
4. When we connected with colleges who also had a VC8000 with Olivetti PCC Desk then we were able to exploit the software sharing potential as well. In particular, Text Talk was very helpful and Deaf users quickly made use of it as a live e-mail link or minicom text phone.
5. Group discussions were difficult on the PC based system just as they are for hearing groups since it meant that signs were barely visible from the distance necessary to include the whole group

Teaching Session 1

Deaf Culture

- This was delivered by Tessa to a group of four profoundly Deaf adult students (2 female & 2 male) at Norwich City College entirely in BSL. There was easy interchange between both sites and Tessa was able to pick up all the necessary subtleties and nuances of expression and engagement which she felt she could have achieved in a 'live' session.

One disadvantage turned out to be the seating arrangement of the students in Norwich who were seated in a straight line facing the camera. This meant the students at either end of the line could not see one another when they signed a response.

Students were asked to complete a feedback form. They felt a little nervous because it was a new experience and were unused to the technology. One student said she was "concerned about what to expect" whilst another was "curious". Two students thought it was "fantastic" and "better than minicom" They were also pleasantly surprised by the picture quality.

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In response to the question: "How did the lecturer establish rapport with the group?" the primary response was that rapport was immediate because this was "Deaf-to-Deaf therefore automatic". This is a very important point central to this work: the technology allows unmediated contact between Deaf people. Therefore, rapport is a natural consequence.

The lecturer's signing could be seen clearly enough but notes on the document camera were only sometimes visible. Some of the best aspects were cited as:

"Deaf to Deaf communication = immediate rapport"

"Direct access to information and strong delivery"

"Rapport better than minicom"

The worst aspects were:

"Screen too small"

"Picture in picture off-putting"

"Screen refreshment too slow at times therefore finger spelling confusing"

Teaching Session 2

History of British Manual Alphabet

- This 50 minute session was delivered to Gateshead by Rachel Sutton-Spence a hearing lecturer from the University of Bristol Centre for Deaf Studies. This was part of Bristol's BSL programme for sign language students and Rachel was lecturing to 17 students in Bristol entirely in BSL. A video camera was attached to Bristol's PC based video conferencing machine and pointed at Rachel who delivered her lecture to both sites simultaneously.

There were six students in Gateshead and we connected our PC system to a large TV screen which enabled all students to see it. Picture quality was excellent although handouts were difficult to see.

Rachel stood in front of a whiteboard on which she wrote key words and dates. These were clearly visible in Gateshead.

Lecturer feedback on this session was as follows: Rachel confirmed in her own mind that such a link was indeed possible and that "it felt - in a slightly odd way - as if they [students in Gateshead] really were there". She also identified potential benefits from the link with regards to course content. For example, two weeks previously, she had delivered a session to Bristol students about the regional dialects of BSL and would have enjoyed a live demonstration of the north eastern dialect.

Disadvantages were that there was some slight disruption amongst members of her class "but much less than I'd feared and I'm sure it would soon become familiar". She also disliked "losing 10 minutes of the lecture while men with wires ran back & forth before I could start."

"I'd like to know how well anything genuinely interactive would have gone. I feel, maybe, this would be more of a challenge than a 'mere' lecture!" she commented finally.

Teaching Session 3

Deaf History

- This was a one hour lecture on Deaf History delivered entirely in BSL from Gateshead College to Cornwall Business School. The lecturer was an experienced Deaf teacher and historian from York, called Robert Hofschroer.

This was a very collaborative session in which Robert constantly asked the students to clarify statements and to define clearly and carefully what they meant. His focus was on how to conduct research into Deaf history which proved highly relevant for the group. Right from the start, he demanded thoughtful responses from the group. At first, they were slightly uncomfortable and uncertain how to engage at this level. But Robert was able to draw them out, particularly through his enthusiasm for the subject as well as his anecdotal and relaxed approach.

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One observation from the hearing lecturer after the session is worthy of note at this point: "The challenging & well focused questions caused some frustration at times but because they came from a Deaf tutor, the challenge was more acceptable...When I taught them they saw me as a 'tough' challenging tutor (but hearing and that was why)."

Immediately after the session itself, Robert had many comments to make about the lecture from his perspective. He found it easier to be what he called 'professional' using this medium. By this, he meant that he was more easily able to ensure that students were focused on the topics and he could quickly suppress interruptions.

He did not like using the document camera and felt that he lost control of events when we switched to it. This was because his signing could not be seen by the remote site and he had to rely on spoken arrangements between hearing people at either site. This made him dependent upon hearing people as mediators. As Bailey, Kirkup and Taylor point out: "there are dangers for equality in always conceptualising open & distance learning within the binary model of production and delivery. In such a model...[Deaf people] may not recognise their experiences, learning styles, assumptions and forms of knowledge in a curriculum produced by dominant groups from within a dominant culture."(6)

It is interesting to see that the immediacy of the technology and the way in which it allows for direct sign contact between Deaf people encourages a challenging and effective learning environment substantively different from that between hearing and Deaf people. It is important to remember the sense of oppression which many Deaf people feel in relation to hearing people. It is clear that the further development of this work will have great potential for Deaf people's educational opportunities.

References

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