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TEACHING INTERPERSONAL COMMUNICATION SKILLS WITH DIGITAL VIDEO

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Abstract
In this case study the authors discuss the creation of a digital video resource delivered via the WWW and CD-ROM for the teaching of interpersonal communication skills to distance students involved in a Masters of Library and Information Studies (MLIS) programme. The learning objectives of the resource, a walkthrough and an examination of the production of the digital video material are provided.

Keywords
Digital video, interpersonal communication, librarian education

Introduction

The profession of the reference librarian combines the challenges of interpersonal communication with the need to efficiently determine information needs of a diverse client base. The combination of skills required (Table 1) means that teaching these skills remains a significant challenge in Librarianship training (Cullen, 1998) as in many other professions (Hauck & Hussey, 1997; Krapels & Davis, 2000; Woods, 2000). The task is particularly complicated by the need for both audio and visual information to be communicated clearly and unambiguously if students are to learn effectively.

Non-Verbal Skills	Verbal Skills
Body Language	Open Questions
Tone of Voice	Neutral Questions
Eye Contact	Appropriate Language
	Reflecting Back
	Following Up

Table 1: Interpersonal communication skills needed by reference librarians

Training students in these skills is an important part of the curriculum of the Masters of Library and Information Services (MLIS) programme at Victoria University of Wellington (VUW). Experience with teaching these skills has revealed that many students find professional communication challenging and teaching the skills in the MLIS is further complicated by the need to support a large proportion of students who are taught at a distance. The experience of the Open University (Bates, 1983; 1987) suggests that videotape can provide a means of effectively delivering this material, and such tapes have been used historically in the VUW MLIS programme (WCE, 1989). A significant advantage of video clips is that they can be crafted to show very specific good or bad behaviours that might be difficult to observe in

reality or which need to be studied repeatedly. This is particularly relevant when the material of interest relates to human communication skills. Early use of video material for teaching interpersonal skills found that the video material had significant advantages over traditional classroom approaches (Shulman, 1986; Cronin & Cronin, 1992; Campbell *et al*., 1995).

Bates (1987) identified a number of particular advantages that result from the use of recorded video material in instruction:
• Ability to segment material
• Ability to provide clear stopping points for reflection or review
• Ability to integrate instructional activities
• Indexing of provided material
• Close integration with other course materials such as text or group discussions
• Ability to concentrate on AV aspects of material.

Despite the usefulness of these tapes, the need to regularly update them with more modern material reflecting the use of new tools such as electronic databases, and the opportunities for interactivity and control offered by digital video technologies such as Apple's QuickTime software has encouraged the adoption of an even more flexible approach. Digital video provides a number of significant advantages over standard videotape for instruction:
• It can be delivered over the WWW, removing the need to distribute tapes in advance
• It can be quickly and easily edited on desktop computers by both academic staff and students to remove unnecessary material
• Material can be broken down into many small clips that can be accessed directly rather than requiring a laborious fast-forward/rewind search
• Additional annotations such as text, foreign language tracks, index points, or alternate levels of AV quality can be included easily
• It can be readily combined with other media, such as text or still images, to provide context or additional activities
• It can be made interactive.
• It can easily be updated and extended.

From a student perspective, digital video also supports a more social and constructivist approach to exploring the material as rather than being presented with a linear narrative and presentation of material, they can explore aspects that directly interest them. The video provided acts as a reference point both for the teacher explaining concepts which are hard to express as words, and for the students in their own discussions by reducing ambiguity when acting as a conversational artefact (Pea, 1993). When the students then use the understanding derived from the video material supplied to express the concepts learnt in their own video productions, they engage in an authentically constructivist experience (Kearney & Treagust, 2001; Squires, 1999)

In this paper we present the design and evolution of a web and CD-ROM based digital video resource for the teaching of interpersonal communication skills to library students, both locally and at a distance. The challenge was to provide a resource that could be used within the classroom both by students and the teacher and also at a distance in order to recreate aspects of the classroom experience for those students. Additionally, the intention was that the resource would be extended and developed over a number of years and thus it had to be easily maintained and expanded as required. Aspects of the development of this resource that relate to the interactivity and web delivery have been presented elsewhere (Marshall & Cullen, 2003).

Teaching environment

The MLIS programme is the sole graduate qualification in library and information studies in New Zealand, and is offered nationally in three modes - on campus in a conventional classroom setting; by distance using a weekly audioconference seminar; and in Auckland, using classroom sessions taught by lecturers who travel to Auckland for the purpose, and audioconferencing using a local tutor for support.

There are approximately 50 students in the on-campus class, and 50 in each of the other modes. All modes are supported by printed course materials, and other electronic forms of communication, such as a Learner Management System (LMS), email, listservs, and CDs and disks (these include the resource presented in this paper as well as cataloguing and database software demonstrations) The challenge of distance teaching is further complicated in New Zealand by the comparatively poor telecommunications infrastructure of many regions (Doesburg, 2001), which prevents the use of many online teaching approaches beyond email and limited web page access.

Learning and teaching goals

Training in interpersonal skills is regarded as critical to successful reference/information service work. Several studies have shown that the key factor in enquirers receiving an accurate answer to their information need is good communication between user and librarian (Ross *et al*., 2002 and references therein), and all courses in librarianship include this in their core curriculum. Despite this, skill levels in the professional community are still lacking and continuing professional education often focuses on this kind of training as well.

Although the resource has evolved in complexity and in quality since its original conception, the learning and teaching goals have remained relatively static as they included right from inception the idea that the resource should grow as technical limitations were overcome and as money became available to pay for the creation of additional video material. The resource was required to meet four main objectives for the students in the MLIS programme:
- demonstrate particular aspects of interpersonal communication clearly and effectively through a library of good and bad examples
- provide detailed examples of interactions which could be analysed
- provide an opportunity for students to experiment and reflect on effective communication
- support the creation of videos by students by illustrating what a short video clip demonstrating communication looks like.

It is important to appreciate that the assessment of the student learning was done separately to this resource and depended on the students preparing a short video similar to those on the CD that displays their understanding of the material and an appreciation of the skills that they need to demonstrate as library professionals.

Overview of the resource

Titled *"Interpersonal Communication: mastering verbal and non-verbal techniques for the reference interview,"* the resource is delivered both via the WWW and on CD-ROM to students and is used in conjunction with the University commercial LMS. Interested readers can access a limited demonstration version online at http://www.vuw.ac.nz/utdc/research/libripc/. The material is divided up into three major sections: a skills section, a case study section and an interactive section.

Skills Section

The *skills* section contains thirteen small clips ranging in length from 10 seconds to one minute 15 seconds, which illustrate good and bad communication practice. The material is organized into eight sections - three non-verbal and five verbal (see Table 1 above). Each clip is clearly identified with a unique name so that it can be referred to during discussions and this material is also used during lecturing to illustrate particular points. When the video clips are displayed, the student is also provided with some text material to help them focus on important aspects of the interaction (Fig. 1).

Figure 1: Example of the skills *section*

Case Studies Section

The *case studies* section contains six detailed clips that average two and a half minutes in length and provide more in-depth interactions between a client and librarian. The cases provide more information about the context in which the communication occurs and let students see how the conversation is controlled by the librarian to achieve the desired end. The case study videos are also useful as exemplars of the type of video material that the students are required to produce as part of the assessment of the course.

Figure 2: Example of the case studies *section*

Interactive Section

The *interactive* section extends the ideas of the *case* section by giving the students the opportunity to control the flow of the conversation, choosing between different responses. The system provides a short introduction which sets the scene and then students choose which response to make. Responses include different tones of voice and manner of delivery as well as different choices of words. The student gets to preview the different response choices and once they decide, the conversation continues until the next decision point (Fig. 3). Upon completing the conversation, the student is presented with a detailed report of the choices that they made along with specific feedback about the responses and the way in which the conversation was conducted (Fig. 4). Students can then review the choices they made and watch the individual segments of video again and they can also look at a model answer for the particular conversation. Specific details of this process are given in Marshall and Cullen (2003).
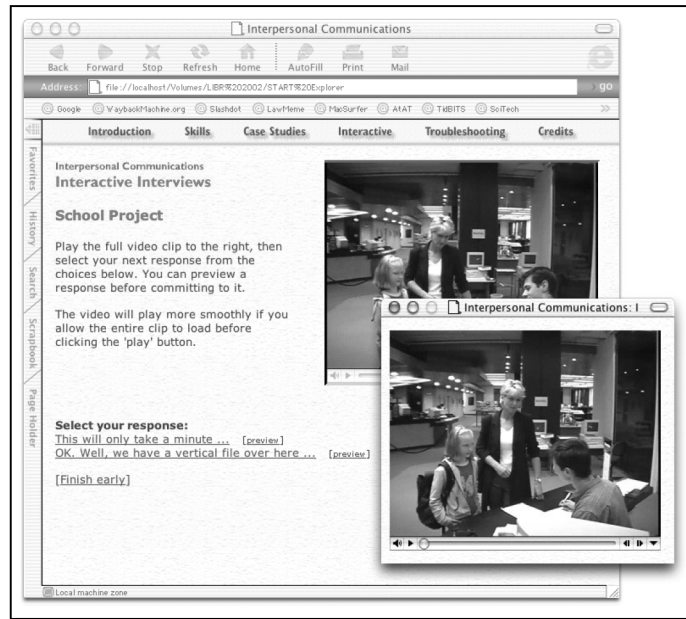
Figure 3: Example of the interactive *section showing the choices and a popup window with a preview of one possible choice*
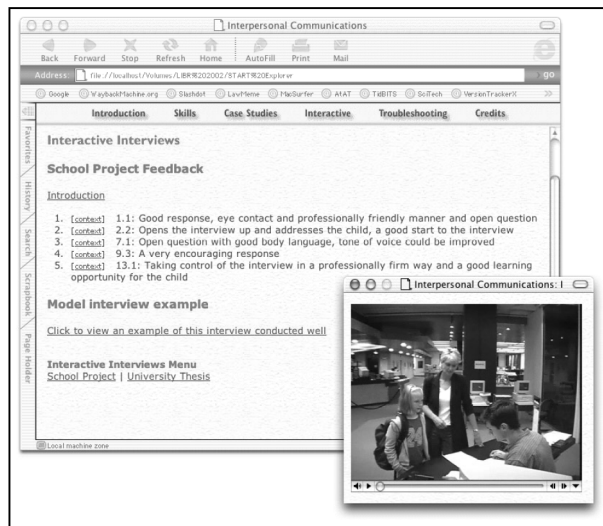

Figure 4: Example of the interactive *section feedback page with detailed feedback, popup window of a section being reviewed and an opportunity to look at a model answer*

Creation of the video material

All of the video used in this resource was created specifically for this project, amounting to approximately one hour of original material. Creation of this video was complicated by the problem that the weakness of strong communication skills in the profession, self-consciousness, and a lack of modelling good behaviour as well as privacy concerns meant that the video could not be obtained by recording librarians live. Additionally, there was the need to ensure that the video contained a clear pedagogical message related to the project objectives and the desired student learning outcomes.

Our experience with the creation of original material for this resource suggests that the following elements will help with the production of effective AV material:

- **Clear scripts for all participants**. Depending on ad-lib performance is likely to result in uneven material that will take much longer to tape and edit than well scripted material and may result in inconsistent messages to students.
- **Good locations**. These need to be free of distractions such as unrelated background activities, noise and inappropriate signage/furniture. An ability to control the lighting is needed. The sun should not shine directly into the scene. Additional lights can brighten the scene and remove any visible shadows that change over the time spent filming.
- **Professional/trained actors**. While it is tempting to work with colleagues or students, actors make the process of filming significantly more efficient. The ability to ask someone to deliver identical lines in different ways repeatedly is crucial to getting a final video that conveys precisely the message required by the pedagogy. Employing actors also provides an opportunity to select particular characteristics such as age or sex that contribute to the lesson objectives.
- **Experienced directors/camera operators**. They will ensure that the technical aspects of the filming are under control and that basic mistakes in scene composition or taping are avoided.
- **Microphones**. Avoid the built-in microphone provided with video cameras - these are generally useless. Also pay attention to where the microphone is positioned so that it is not filmed and not near sources of noise such as fans or computers. Ideally perform a sound test and check the quality of playback in a quiet room to ensure that your equipment is functioning properly and that there is no interference from other equipment.
- **Use the best camera you can**. Digital compression inevitably degrades the video quality; the only way to avoid this is to have the best possible quality to begin with. We have had very good results with consumer DV cameras, which have significant cost advantages over professional SVHS or Betacam equipment. Whenever possible use a tripod rather than holding the camera in your hand.
- **Provide visual interest**. Varied camera angles and editing provide visual interest without distracting from the core material and helps maintain student interest and motivation. This does not mean the use of flashy transitions or special effects - our material only made use of simple cross-fades - but rather care in the filming and careful editing. While filming, several shorter clips generally work better than attempting to film all of the material in one take. This has the added bonus of providing more flexibility when editing and composing the final clips.
- **Keep detailed notes during taping**. Label all tapes clearly and indicate takes while recording. This will greatly simplify the process of digitizing and editing.
- **Allow plenty of time**. It can easily take an hour to get one section of two-three minutes of video recorded.
- **Have backup equipment close to hand**. Particularly any cables, tapes, and batteries needed for the equipment being used.

This advice really only brushes the surface of video filming and editing; more detailed information can be found in the numerous books available such as Rubin (2002) or Long and Schenk (2000).

Evaluation of the resource by students

The resource has been very well received by the staff responsible for the teaching of this material, and it has been usefully employed now for five years in the delivery of the MLIS programme. The flexible design has meant that staff can incorporate particular examples into their teaching and also use the resource for workshops as well as for individual student learning. Informal feedback from the students has been very positive and included a number of unsolicited comments during the course of teaching. The rapid development of the resource and the substantial changes that occurred have made formal evaluations difficult however on completion of the current interface students who used the resource at a distance were invited to participate in a formal evaluation that was conducted online. The evaluation questionnaire consisted of seventeen questions in multichoice, Likert style scales and free-text comment format and is available at http://www.utdc.vuw.ac.nz/research/libripc/evaluation.shtml. Response numbers were quite low, consistent with the normal experience of online evaluations (Sheehan, 2001), with only sixteen completed evaluations, however these were generally positive and students were particularly

positive about the use of the material to support their creation of a video as part of the assessment process:
  "Being able to see rather than just read about the communication techniques was good. Also, it made me think a lot more about non-verbal communication."
  "Familarisation - 'so that's what we're supposed to be doing!'"
  "Role model for the assignment based upon this model"

When asked whether the resource was useful in their learning, only 6% of the students disagreed and 80% of the students found the resource useful in the preparation of their own video material.

Conclusion

Over the last five years the MLIS programme has benefited from the use of the resource presented in this paper. The ability to teach effective interpersonal skills in a manner that allows for reflection and detailed examination by distance and local students has been a key benefit of the resource. A key to the success of the project has been the use of digital video that has given the resource the flexibility to be useful both to students and academic staff and has allowed for an incremental growth in the range of video material provided and in the teaching use made of the material. The resource has supported student's adoption of a constructivist method of learning in the following ways:
- the provision of a range of video material designed to convey particular concepts and support exploration rather than the linear narrative adopted with traditional analogue video;
- the creation of conversational artefacts to support discussion and debate between students as well as delivery by the teacher;
- the modelling of assessment which requires the students to synthesize the concepts into their own video production demonstrating their practical skills and understanding.

The response from both the student population and the staff teaching the programme has been positive and the project has definitely achieved the original objectives. Looking to the future, the flexibility of design adopted provides us with confidence that the ongoing evolution and growth of the materials will continue irrespective of the pedagogies adopted in the delivery of the MLIS programme.

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