A cross-cultural learning resource

Claire Pidoto
Swinburne University of Technology
Lilydale, Australia
Email: cpidoto@swin.edu.au

Bruce Calway
Swinburne University of Technology
Lilydale, Australia
Email: bcalway@swin.edu.au

Abstract
Information technology (IT) is often seen as a driver for change and development in western culture, particularly with regard to education. In an interesting contrast, for younger school children, IT is also seen as an entertainment environment. The project reported in this paper is an investigation of the use of IT in a CDROM application developed to provide a cross-cultural learning experience for age group eight to nine years, typically Grade Three of Victorian Primary Schooling.

Our study concludes that CDROM technology is a viable cross-cultural communication resource, certainly for younger students and we expect transferable to tertiary level. An actual CDROM prototype was developed and tested with a small number of Year Three students who used and explored the resource in order to verify the effectiveness of the CDROM as a method of communication. The results are also summarised in this paper.

In terms of cross-cultural substantiation of the resource, the content of the CDROM was developed in collaboration with the Indigenous community. Specific protocols for the elucidation and communication of Indigenous culture were also adhered to, and appropriate permission's sought.

The CDROM prototype features an Indigenous artefact (painting) with a detailed description provided by the artist. The project and the CDROM resource provided a viable, culturally inclusive paradigm for future developments. This approach should be transferable to a wide range of possible applications including tertiary level resources, and forms the basis of future research in this area.

Introduction
There are many issues to be considered when presenting information about a culture that is not your own. In developing an educational resource that is cross-cultural these issues multiply. However, in spite of these difficulties cross-cultural educational resource development is worth the effort. This paper reviews an Honours project and suggests that CDROM technology is a viable cross-cultural communication resource, that if applied to set criteria, allows for the sensitive representation of various facets of a culture.

In the study 'An Educational CDROM for Grade three Students about Aboriginal Art' (An Aboriginal Art Journey) (Pidoto, 2000), various cultural components were identified as being important and or necessary to communicate to the intended audience. CDROM technology allows for voice, music, video, and graphics to be presented as a holistic resource. All of
these facets are important in presenting the various aspects of a culture, in our case, for Aboriginal cultures.

Cross-cultural substantiation of a CDROM resource can be gained through working with a community of that culture. There are numerous protocols that provide guidance in how to gather the information and how it should be presented and with what permission's. For 'An Aboriginal Art Journey', protocols developed by Dr Josie Arnold in 'Indigenous Inclusion in Curriculum' (1999) were utilised. This document also provides a checklist for curriculum development and theory. The checklist is specifically for Tertiary level curriculum, yet the points could be applied broadly to curriculum development. These criteria will be discussed in this paper.

Background

The study 'An Aboriginal Art Journey' was developed as an Honours Thesis (Pidoto, 2000). The thesis developed a theoretical framework that firstly accounted for cultural sensitivity and aimed to provide a means of meaningful communication of information and secondly, that incorporates learning principles of Piaget and developed a technological framework for multimedia delivery of cultural materials.

The author (Claire Pidoto) of this thesis was motivated to conduct this research project based on the belief that children, and for that matter the wider community, are not being educated sufficiently about Aboriginal cultures and hence support an ignorant view of Aboriginal issues and peoples.

The author recognised the early primary schooling years as being the critical time to teach children about such social issues. The subject falls under 'Studies of Society and Environment' under the heading of 'culture' in the Victorian Curriculum and Standards Framework. The thesis developed a multimedia CDROM (prototype) with the aim to increase student's level of understanding of Aboriginal cultures (and expose them to a positive culturally sensitive source). The CDROM that resulted from the study was then tested on a small number of Grade three students and its communication effectiveness was measured.

The objectives of the study were:

• Identify existing theories for grade three learning behaviour and synthesise these into a model for developing simple productions of a CD-ROM, based on information communication about Aboriginal art.

• Present the concept of an educational resource involving 'real' contemporary Aborigines and modern technology to communicate to grade three students information about Aboriginal cultures.

• Use information communication parameters borrowed from semiotics as a measurement framework for the effectiveness of the communication of these productions.
CDROM as a cross-cultural learning resource

The 'An Aboriginal Art Journey' project shows that CDROM's as a technical medium are capable of being used as the means to communicate culturally sensitive information. They are a familiar resource used in schools, for demonstrations, and as a multimedia tool. Their effectiveness as a communication tool is widely accepted (Vic 21).

Multimedia may include video, audio and music, interactive games and animation. The user of the CDROM is subjected to the multimedia and thus is taking an interactive approach to learning. Multimedia makes use of the concept of 'multi-sensory learning', which incorporates hearing, seeing and touching (doing) in the learning process.

It is possible to retain about three times as much information with multi-sensory input as with just one channel. It is thought that the retention rate after hearing is on average around 20%, after seeing around 30%, after hearing and seeing together 50%, and after hearing, seeing and touching around 70% (Multimedia in Education, 1999, URL).

Multi-sensory learning emphasises the importance of 'action' in the learning process, particularly in multimedia for a young audience (Multimedia in Education, 1999, URL).

Cross-cultural protocols for researching curriculum development

We can make specific reference to a number of protocols that were used and tested in the study 'An Aboriginal Art Journey'. These protocols specifically relate to researching and working in collaboration with an Aboriginal community. The protocols, we suggest, will be applicable in establishing a basis for the development of cross-cultural educational resources.

To avoid repetition, three sets of protocols have been condensed into one set. These protocols could be referred to as a comprehensive list for the development of tertiary resource development.

- Avoid stereotypes
- Check with local community as to the information you are teaching.
- Include any information about your local area.
- Check if it is historically accurate and relevant.
- Ensure the information is written by a person from that culture.
- Negotiate the conduct of the project, including such areas as content, budget and publication, with the relevant cultural group and obtain their agreement in writing.
- Address the ownership of research material and data and ensure it remains the property of the community concerned.
- Develop a safe holding place for the data and materials including archiving that is acceptable to the communities involved.
- Resolve questions of appropriate authorship whereby contributors are given equal alphabetical authorship.
- Ensure the research has been approved by the University Ethics Committee.
• Ensure publication rights have been approved by the relevant consultative community group.
• Properly record the contribution of the relevant community as authors/participators in accordance with specifically articulated University guidelines.
• Ensure that it is clear that no identification of individuals or communities will be published without their written consent.
• Ensure that data cannot be used except for the agreed research.
• Put strategies in place for the return or destruction of archival data.
• Put strategies in place for royalty payments equivalent to the individual or community contribution to the construction of a commercial text.
• Put strategies in place for media comments by the researcher(s) upon the data to be sensitive, and restrict it to the area of research and refer to relevant individual or communities.
• Ensure that there are proper strategies for the research explanations to be made to individuals or communities in appropriate language which will inform them of the details and implications of the research project.
• Ensure that payments to be made to researchers conform with the University's award system.
• Receive informed consent to the research by the community in which the research is to be carried out.
• Encourage individual or community participation in defining the research objectives.
• Respect cultural sensitivities and the community's decision if they refuse participation.
• Promote the benefit to the community, as well as benefit to the broader Aboriginal community.
• Promote the community and their expertise.
• Appropriate use of research results as agreed with the community.
• Make available the results of the research to the relevant community.
• Respect cultural protocol when it comes to the use of audio recordings, photographs/vision and identification of individuals etc.

( Aboriginal Education in Early Childhood, McMahon, 1996).
( Indigenous Inclusion in the Curriculum, Arnold, et al., 1999)
( Australian Institute of Aboriginal and Torres Strait Islander Studies, 1999)

If adhered to, this comprehensive list allows creators of multimedia CDROMs (as a educational resources) to ensure that the end product is both representative of the culture but more so accepted, recognised and consented upon by that culture. With these criteria the cross-cultural content can be represented in what is deemed by both communities as being the most suitable form, for example, an artwork is more than a picture, there is considerable storytelling and texture that needs also to be presented.
Conclusion

CDROM is a neutral multimedia vehicle that enables capture and representation of presentation of culturally sensitive material when appropriated using the research and curriculum protocols suggested in this paper.

Secondly the protocols provide a foundation of cultural sensitivity across a wide a set of learning styles and age groups and should form the basis of learning material development at a tertiary level.

References


*Multi Media in Education* - International Council of Museums, 29-10-99, URL, [http://www.rkd.nl/pblctns/mmwg/03-edu.htm#Multi](http://www.rkd.nl/pblctns/mmwg/03-edu.htm#Multi).

Pidoto, C., (2000), *An Educational CDROM for Grade three Students about Aboriginal Art*, Swinburne University of Technology, Lilydale.