
Symposium: Archaeology in Cyberspace

Claire Smith and Sara Champion

Globalisation is dissolving the geographic boundaries which formerly shaped people's understandings of themselves and the world. It is establishing a context for changes in archaeology that are at an unprecedented rate and scale. Modern communication technologies provide the means not only for developing regional and global networks but also for establishing radically different ways of 'doing' archaeology. As archaeology moves throughout cyber-space, there arises the possibility of transforming archaeology in innovative and effective ways. This session will focus on how the use of cyberspace is affecting three inter-related areas of archaeology:

- Research
- Teaching
- Promotion

For archaeologists, this is a time opportunity as well as of risk. On the one hand, is the opportunity for archaeologists to promote the values of their discipline to new audiences and to empower themselves through quickly becoming familiar with each others quality innovations, successful strategies and conceptual advances. On the other hand, there are risks associated with the regulation and authentication of information and with the ownership, control and protection of intellectual property. Other important issues relate to access and equity, to the commodification of archaeology and to the impact of communication technologies on the roles and structures of archaeology.

Breaking the barriers: Archaeology, adult education and the Internet

Sara Champion

Standard 18 year-old entrants to Higher Education can increasingly be expected to be familiar with the use of computers, including accessing the Internet for scholarly purposes. Adult students come from a wide range of social and academic backgrounds, and thus have diverse prior experiences of using IT and the Internet when they join accredited university-level courses in archaeology. For students returning to academic study after many years, there may be lack of confidence in their ability to perform at university level. These same students frequently face another psychological barrier when introduced to the idea of using a computer during their courses, whether simply for word-processing assignments or for pursuing bibliographical or research material via internal university networks or on the Net.

This paper explores some of the strategies which may help to break the barriers for such students, which include tutor-led workshop activities, the embedding of IT and Internet use within archaeology course units, and peer group support, drawing on tutor and student experience in Southampton. The rapid increase in research material available on the Net which can support students' learning in archaeology enhances independent study and widened perspectives on the discipline, and also helps to develop transferable skills which may be used in other areas of students' working lives.

Teaching archaeological excavation without disservice: The TARDIS solution

Jay Hall

In Australia as well as other countries, teaching archaeological field methods and discipline to undergraduate students usually involves considerable classroom instruction and, in best case scenarios, some field experience within a directed and structured piece of research at a local site. More often than not however, students gain their excavation and other field skills in a more informal and less-structured manner by joining field crews as volunteers during their university vacations. This model is not only flawed pedagogically but is demonstrably destructive of the archaeological record, insensitive to indigenous cultural values, costly in time and resources, logistically difficult and suspect in terms of work place practice and safety. This paper will demonstrate, through the TARDIS case study at the University of Queensland, that the well-planned construction of a complex on-campus simulated teaching site provides a solution to all these drawbacks of the traditional teaching model. Furthermore it will more adequately and uniformly prepare students for the rigors of real fieldwork.

A world atlas of archaeology on the web

Kris Hirst

In early July of 1998, I began to amass information for a World Atlas of Archaeology on the Web, as both a tool for researchers and a way for the general public to gain easy, reliable access to archaeological information. Each country (or state or territory) has a separate web page. Each page contains the following five categories of information hotlinks, when available: a) archaeological sites with web pages; b) universities with country-specific research emphases; c) the home pages of academicians identifying themselves as researchers in that country; d) cultural histories; and e) general information. This paper will discuss the reasons behind the atlas construction; the data mining techniques used to obtain the information; reactions from the public and professional archaeologists; and the modifications to the world atlas since its inception.

Doctoral theses in the age of hypermedia: A case-study

Cornelius Holtorf

In this paper I will discuss the experience of using hypermedia technology and the World Wide Web in writing my electronic PhD thesis. Having been the first person in the University of Wales to write a doctoral thesis in HTML and submit it on CD-Rom, I will explain how senior staff in my Department and in the various University committees as well as my examiners reacted to my proposal, under which conditions it was finally approved, and how I passed. In the final part of the paper I will talk about my view of the problems and potentials of hypermedia writing in future archaeology. In particular, I will discuss the benefits archaeologists can expect (if any) from an exclusion of commercial publishers, a drastical reduction of printing costs, the possibilities of non-linear writing, expressing intertextuality, and the open-endedness of texts. I will also refer to the problem of guaranteeing permanence for publications in the age of hypermedia.

Virtual Archaeology and indigenous understandings: The construction of an interactive virtual archaeology site

Keith McConnochie

This paper describes the construction of an interactive virtual archaeology site providing indigenous communities and indigenous (and other) students with an understanding of the nature of the discipline of archaeology through a realistic simulation of the process of designing, implementing and interpreting archaeological research in one region of arid Australia.

The construction of this teaching site has three broad aims:

1. Improving levels of understanding between archaeologists and indigenous communities through a medium which is directly accessible to indigenous students and community groups as well as the archaeological community.
2. Demonstrating the complexities of the interactions between archaeological, environmental and ethnographic resources in constructing and interpreting human behavior in the past.
3. Describing the processes of archaeological research.

Within these broad teaching goals are four underlying themes:

1. Using the WWW to deliver high quality interactive teaching to remote students throughout the world.
2. Integrating on-going research with teaching.
3. Using problem-solving approaches and simulations to develop student skills and understandings.
4. Using GIS to provide a common framework for integrating disparate kinds of data.

The teaching program provides a wide range of environmental, ethnographic and archaeological resources related to one region of arid Australia, enabling students to design and implement a research project, obtain realistic "results", and undertake the interpretation of these results. The project has used a GIS platform to present these resources within an interactive and visually rich environment, and to construct a predictive model based on extensive survey work in the region. The paper explores the use of this technology to facilitate understandings of the nature and complexities of relationships between environmental characteristics of a region, ethnographic resources available and the interpretation of the spatial patterning of archaeological material across the landscape.

The paper will also consider the potential of these strategies for teaching other aspect of archaeology, including:

1. Survey strategies and sampling theory.
2. Applications of remote sensing and GIS analysis to survey design.
3. Use of GIS platforms in interpreting ethnographic resources

The virtual site will be demonstrated during the presentation and will be available for detailed examination during the conference.

Teaching archaeology in Cyberspace

Claire Smith

In this paper I outline an internationally collaborative venture in the flexible delivery of the FUSA topic 'Power, Ethnicity and Gender in Archaeology'. The topic is structured around active learning practices, with the aim of helping students develop communication, problem-solving and group-work skills. This approach is extended to make innovative use of Web-based materials to achieve a flexible course delivery that accesses global expertise in the topic area. Lecturers in this course are based in Australia, Indonesia, USA and the United Kingdom. The methods used in topic delivery include the establishment and maintenance of a Web site by students as part of their course work; the use of electronic mail to provide interactive consultation between students and outside lecturers as well as student-student contact; and the use of a Chat Forum so that participants can interact in real time.

I anticipate that this topic will be available in both CD and on-line delivery modes in 2000. This will be produced as an evaluated product which has been assessed at local, national and international levels. A substantive research component has been built into this project and this has been used to direct course evaluation and long-term development. The structure of this topic may serve as a model for others interested in taking active learning strategies into cyberspace. The Web site established for the topic (URL <http://adminwww.flinders.edu.au/archaeology/gender/gender.html>) serves to promote archaeology to a general audience.