

## Student use of knowledge building tools in networked communities.

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### Abstract

*This paper reports on an elective unit of study, offered to undergraduate primary and early childhood education students at the Queensland University of Technology. The course has as its main focus, the notion of online virtual communities, and explores students' current trends and practices with communication tools and networked communities with those currently being offered in a variety of educational contexts. After exploring and using a range of knowledge building tools, students then attempt to develop an online environment that espouses a sense of community amongst its participants. The students participate in the course through the use of various tools including multi user domains and bots, video and audio streaming including live video, chat including comic chat, threaded discussion lists, online gaming environments, email lists and instant messaging.*

There is a considerable pressure for teachers to understand the curriculum implications of network communities and to be able to participate in such communities (Williams, 1997). To respond to such imperatives, teachers must have appropriate knowledge, along with the technical and communications skills to participate creatively and critically in such communities. In turn, schools have an expectation that graduating teachers have such skills, and a critical understanding of the educational implications of network communities, so that they are able to take a leadership role in the professional development of peers and in the strategic planning of school resourcing and curriculum activity.

Evidence of the importance of these skills for teachers in Queensland state education schools in Australia can be witnessed from the launch of Education Queensland's Learning Place (<http://education.qld.gov.au/learningplace>, 2002). The Learning Place was launched at the end of April, 2002 and is intended as a place for staff, students and the community to learn online, participate in online communication and online communities. Some of the tools that Education Queensland has now provided for these members include online chat, comic chat, a MOO (Mud, Object Oriented), and Blackboard

and meeting tools. Hence, the nature of such an online infrastructure reinforces the need for teachers to have a wide range of skills in this field.

This unit of work is called Network Communities and is a work in progress currently being implemented during semester 1, 2002. It aims to provide practical skills and a cultural understanding of the impact of network communities for students in their role as pre-service teachers, professional peers and lifelong learners. In trying to achieve this, the course looks at the notion of community and what it means to be part of a community. Students are introduced to several communities including, Knowledge Forum, the Web-based Inquiry Science Environment (WISE), Tapped In, Oz Teachernet, Learning Circles and Webquests. They are asked to critique a number of the environments according to what they view as an effective learning environment with particular emphasis being placed on the notion of communities of practice. Further the course looks at how students currently use their current Internet connection and how these practices can be likened to that of the various networked communities they explore.

The unit not only presents students with lecture material pertaining to the use of various online virtual community tools, but also immerses the students in the use of these tools as part of the lecture program. This means that students are witness to both face-to-face environments as well as being part of a virtual community. Within this community of practice students also use instant messaging, chat, threaded discussion, MOO's and streaming video and audio to explore and learn about these knowledge building tools. For example students may use a virtual classroom within a MOO to discuss the issues pertaining to hosting an online event or discuss ways in which the use of video or chat is best used in the classroom.

The course is currently being undertaken at the time of writing this paper, however, there are a number of findings and reflections emerging from its implementation. Findings reveal that what students see as a networked community is very much a part of their everyday use of their internet access. Many of the students

undertaking the unit are already members of communities such as MSN Communities (<http://communities.msn.com>, 2002) and Yahoo Groups (<http://groups.yahoo.com>, 2002). These are communities that an individual can design or join to chat, share files, view pictures and video, use threaded discussion and help each other or even just lurk. Some students are also members of multi-user domains and gaming communities where it is imperative that you are involved in discussions or even various forms of argument. Students within the lecture group are also familiar with tools such as email lists, discussion boards and news groups to solve problems or help each other.

The course is designed so that students complete two pieces of assessment based on the notion of communities of practice in education. The first piece of assessment involves reviewing the literature pertaining to this area of study and evaluating a number of communities of practice and their tools. The second piece of assessment looks at the construction of a community of practice. Students attend lectures or tutorials in environments that are similar to what they are learning about. For example a tutorial or lecture about video conferencing and the tools used in this medium take place using face to face lectures, chat and video conferencing, while a lecture on MOO's will take place using face to face tutorials and using an actual MOO.

While it is still very early to reflect on the overall implementation of the unit it is also interesting to note that the students' familiarity with various knowledge building tools is quite high and their use of tools such as chat is quite mature. Students are currently developing online communities around the Australian theme "Year of the Outback". They have access to a variety of community building tools and have online access to an expert in the field. The expert is the current project officer for the online community Oz TeacherNet (<http://rite.ed.qut.edu.au/oz-teachernet>, 2002). The students find that this is a beneficial resource to gain access to various tools and to clarify their community ideas.

### **References**

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