



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Faculty of Education - Papers (Archive)

Faculty of Social Sciences

2000

The Development of an On-line Learning Community of Physical and Health Education Professionals

Lori Lockyer

University of Wollongong, lori.lockyer@gmail.com

Gregg S. Rowland

University of Wollongong, gregg@uow.edu.au

John W. Patterson

University of Wollongong, patto@uow.edu.au

Publication Details

Lockyer, L., Rowland, G. S. & Patterson, J. W. (2000). The Development of an On-line Learning Community of Physical and Health Education Professionals. In J. Bourdeau & R. Heller (Eds.), *Proceedings of ED-MEDIA 2000 World Conference on Educational Multimedia, Hypermedia and Telecommunications* (pp. 596-600). Charlottesville, VA, USA: Association for the Advancement of Computing Education.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au

The Development of an On-line Learning Community of Physical and Health Education Professionals.

Lori Lockyer
Faculty of Education
University of Wollongong
Wollongong, NSW, Australia
Lori_Lockyer@uow.edu.au

Gregg Rowland
Faculty of Education
University of Wollongong
Wollongong, NSW, Australia
Gregg_Rowland@uow.edu.au

John Patterson
Faculty of Education
University of Wollongong
Wollongong, NSW, Australia
John_Patterson@uow.edu.au

Abstract: While ad hoc, course-specific projects have allowed early adopters to explore possible innovations in the use of information and communication technologies in facilitating flexible learning situations, educational institutions are now exploring more integrated strategies to such developments. This paper describes the development of one such strategy that attempts to foster a community-wide approach for a group of professionals coming to terms with the most effective way to utilise technologies -- physical and health educators. The Faculty of Education at University of Wollongong is developing an on-line learning community to facilitate the pre-service education and continuing professional development of students, faculty and practicing teachers.

Introduction

Institutions of higher education in Australia are involved in the international trend to consolidate networked information and communication technologies (ICT), particularly the World Wide Web, into their teaching, research and community outreach endeavours. Web-based environments can create meaningful experiences where learning is fostered and supported (Khan, 1997).

In the main, these Web-based activities are particular to individual courses or specific research projects and only infrequently involve an organised change process which incorporates multiple activities and various stakeholders (i.e., members of the community) with a common interest.

The challenge

Within the physical and health education profession, the important members of the community include teacher educators, practicing teachers, pre-services teachers (i.e., students), the professional associations and employers of teachers. An existing example of partnership amongst the members of this community is the model for teacher education which utilised links between schools and universities to promote the communication of professional understanding through practicum experience (Goodlad, 1994). However, the effectiveness of the implementation of this partnership model has been the discussion of recent debate and calls for reform (Ministerial Advisory Council on the Quality of Teaching 1998).

While universities are encouraging the implementation of Web-based technologies into teaching and learning practices, employers of teachers (in this context specifically, the Department of Education and Training New South Wales) are expecting their teachers to have the skills to incorporate educational technologies (including Web-based technologies) within their teaching practices.

Pre-service educators within the Physical and Health Education program in the Faculty of Education at the University of Wollongong recognise the importance of exploring the use of Web-based technologies in their teaching. Recent experiences have proven effective (Lockyer, Harper, and Patterson, 1999; Lockyer, Patterson, and Harper, 1999; Lockyer and Kerr, In Press). However, such initiatives have been implemented on an ad hoc basis. As the Faculty of Education at the University of Wollongong evaluated their experiences, it became clear that a conceptually and practically organised implementation plan which included specific contact with the broader profession and its activities was necessary,

It has been noted that the key features of reciprocal partnerships include:

- a recognition of the interdependence and the unique contribution of the various parties;
 - constructive and imaginative problem solving; a will to work to change and improve;
 - a working relationship which permits risk taking; a tolerance for ambiguity, uncertainty and dilemmas;
 - joint responsibility for the planning, implementation and evaluation outcomes;
 - joint, commensurable benefits;
 - organisational structures which will facilitate the enactment of decisions;
 - appropriate resourcing; intercultural understandings
- (Groundwater-Smith, Parker, and Arthur, 1994).

Thus, the concept of an on-line learning community for physical and health education and which comprised these key features was born. Schwier (1999) explained the power of learning communities "resides in their ability to take advantage of, and in some cases invent a process for exchanging ideas and learning collectively" (p. 282). While the community of physical and health education professionals have traditionally fostered successful processes for the exchange of ideas and mentoring newcomers into the community of practice, change fiscal and social influences require new approaches to be investigated. The use of technologies in sustaining and invigorating the community is timely.

There now exists an abundance of literature to inform us of the nature of virtual communities. Fernback and Thompson help us to understand the value of the community that exists in cyberspace (i.e., using Internet technologies).

Ideologically, community within cyberspace appears to emphasise a shared belief in the principles of free speech, individualism, equality, and open access... Experientially, community within cyberspace emphasises a community of interests, usually bounded by the topic under discussion, that can lead to a communal spirit and apparent social bonding... they may promote action that is, virtual communities may manifest themselves in real political action, such as educational reform ... (Fernbank and Thompson, quoted from hypertext document)

The Concept

An on-line learning community for physical and health education has been conceptualised to incorporate these key features of a partnership.

This community will be facilitated by a Web-based environment that encompasses:

- on-line access to the Physical and Health Education program at the University of Wollongong;
- physical and health education teaching resources;
- facilitation of professional development activities; and,
- access to physical and health information sources.

This is a collaborative initiative involving lecturers, students and practicing teachers (Figure 1). The development of the on-line community is dependent on a student-centred learning model. Students propose learning contracts which involve collaborative projects that will add to the resource base of the community. It is envisioned that active participation by students in the development of the on-line community will facilitate a smoother transition into their chosen profession -- the community of practice of teaching. As Bruffee (1993) argues, collaborative learning in the university setting provides students with the opportunity to speak the language of their profession and, "speaking the language fluently defines membership in the community" (p. 130).

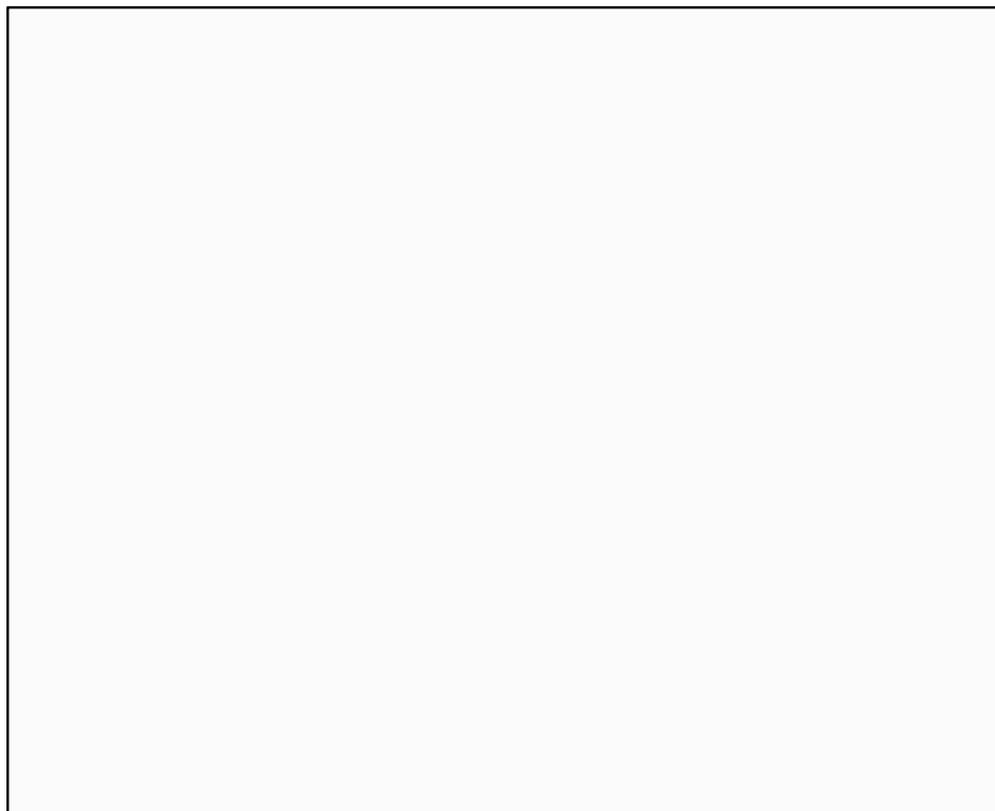


Figure 1: Key participants of the Physical and Health Education On-line Learning Community

Through their participation in the development of the virtual community, physical and health education lecturers will enhance their understanding of the use of Web-based technology for teaching and learning within the discipline. This translates into the integration of such concepts into the curriculum of the program. As Sherry and Wilson (1997) suggest "roles and concepts of teaching and learning [should] be restructured" as the Web extends the walls of the traditional classroom (p.67).

Practicing teachers are an integral component of the project. Physical and health education teachers will develop skills to implement Web-based technologies into their classroom and participate in the collegial exchange of ideas and applications of the innovations.

Phase I - On-line Practicum Support

The initial phase of the project has focused on discussion with stakeholder representatives; the design of the Web-based environment which will support the community; the prioritisation for implementation of components, activities or features; and the confirmation of learning contracts with students who will contribute to the development of the community.

Building on the existing collaboration between participants in the form of school-based mentoring and practice teaching for pre-service teachers, a first activity to be explored within the virtual community is an on-line practicum.

The Bachelor of Education (Physical and Health Education specialisation) at the University is conducted over a four-year program. In each year of the program, students engage in practice teaching experiences which involve local schools, supervising teachers and University-based faculty. Anecdotal information gathered from practicum participants (faculty, pre-service and supervising teachers) has called for greater and more consistent communication among participants; access to a variety of information (related to the program specifically and to the teaching profession generally) and access to resources and tools (such as lesson ideas).

The initiative of an on-line practicum provides a model for successive implementations within the community -- the first iteration explored through pilot study with a sub-set of students in the fourth (i.e., final) year of their pre-service teaching studies.

Building on the initial anecdotal feedback regarding the practicum experience, a formalised analysis is being undertaken to clearly identify the needs of the participants. Data collected during the needs analysis will assist in identifying the resources necessary to include in the Web-based environment and, most importantly, the structure that the on-line practicum will take. As suggested by Brehm (1999) it is critical that structure and expectations of involvement of all participants are effectively designed and clearly communicated.

Data collected during the pilot study (in the form of journals, logs of on-line discussions, and post-implementation surveys and interviews) will provide some evaluative indicators and a basis for consideration of extending an on-line practicum component throughout each of the four years of the program.

Concluding Remarks

It is envisioned that this on-line community will evolve to encompass increasing avenues for collaboration among the participants. The community is structured to provide an exciting action research environment for innovations in both initial teacher training and ongoing professional development in the area of physical and health education which can then be communicated to inform similar groups initiatives.

References

- Brehm, Barbara. (1999). Factors for successful telementoring of preservice teachers. Proceedings of ED-MEDIA99 World Conference on Educational Multimedia, Hypermedia and Telecommunications. (vol. 2, pp 1300-1301). Charlottesville, VA: Association for the Advancement of Computing in Education.
- Bruffee, K. A. (1993). Collaborative learning: Higher education, interdependence, and the authority of knowledge. Baltimore: The Johns Hopkins University Press.
- Fernback, Jan and Thompson, Brad. Virtual communities: Abort, retry, failure? Originally presented as "Computer-Mediated Communication and the American Collectivity: The Dimensions of Community Within Cyberspace," at the annual convention of the International Communication Association, Albuquerque, New Mexico, May 1995. [Online] <http://www.well.com/user/hlr/texts/VCCcivil.html>
- Goodlad, J.I. (1994) *Educational Renewal: Better Teachers, Better Schools*. San Francisco: Jossey Bass.
- Groundwater-Smith, S., Parker, J., and Arthur, M. (1994) Partnerships: Beyond consultation. *Australian Journal of Teacher Education*. 19(1), pp. 9-14.
- Khan, B. (1997). Web-Based Instruction (WBI): What Is It and Why Is It? In B. Khan (Eds.), *Web-Based Instruction* (pp. 5-18). Englewood Cliffs, New Jersey: Educational Technology Publications, Inc.

Lockyer, L., Harper, B. & Patterson, J. (1999). Health Education in a Web-based Learning Environment: Learners' Perceptions. Proceedings of ED-MEDIA99 World Conference on Educational Multimedia, Hypermedia and Telecommunications. (vol. 1, pp 56-61). Charlottesville, VA: Association for the Advancement of Computing in Education.

Lockyer, L., & Kerr, Y. (In Press). Learner as designer-producer: Physical and health education students experience Web-based learning resource development. In *Proceedings of ED-MEDIA2000 World Conference on Educational Multimedia, Hypermedia and Telecommunications*. Charlottesville, VA: Association for the Advancement of Computing in Education.

Lockyer, L., Patterson, J. and Harper, B. (1999). Measuring effectiveness of health education in a Web-based learning environment: A preliminary report. Higher Education Research & Development, Special Issue: Learning-Centred Evaluation of Innovation in Higher Education, 18(2), 233-246.

Ministerial Advisory Council on the Quality of Teaching. (1998) *Towards Greater Professionalism: Teacher Educators, Teaching and the Curriculum*. Sydney: Department of Education and Training New South Wales.

Schwier, Richard A. (1999). Turning learning environments into learning communities: Expanding the notion of interaction in multimedia. Proceedings of ED-MEDIA99 World Conference on Educational Multimedia, Hypermedia and Telecommunications. (vol. 1, pp 282-286). Charlottesville, VA: Association for the Advancement of Computing in Education.

Acknowledgements

The initial development of this on-line learning community is supported by the Faculty of Education and the Educational Strategic Development Fund of the University of Wollongong.