Together is Better? Primary Students' and Teachers' Experiences of Collaborative Learning Online.

Patsy-Ann Street
Programmes and Learning Manager
Christchurch City Libraries, Christchurch
New Zealand

This presentation shares the research process and findings involving students and teachers in two primary schools in Christchurch, New Zealand. The project undertook to research the use of the Learning Activity Management System (LAMS) as an online learning environment to teach a collaborative unit of work on Vandalism.

There has been much research on collaborative learning at various levels of the school sector (e.g., Brown & Thomson, 2000; Holloway, 2003; Holmes, 2003; Holzer, 2004; Lourdusamy, Myint, & Sipusic, 2003; Peel & Shortland, 2004; Whatley & Bell, 2003). However the use of online environments for collaborative work is a new and largely under-researched area for primary school teachers as most studies in this are have involved the secondary or tertiary sector (Chih-Hsiung & Correy, 2003; Hakkinen, 2003; Hron & Friedrich, 2003; Neo, 2003).This project helps to address this gap in the research literature.

Research support was provided to encourage the participating teachers to develop as critical professionals reflecting on their practice using, action-research. In particular the project had teachers use a hybrid model to deliver part of their classroom teaching and learning programme and reflect on this process (Collison et al. 2000; Draves 2002; Ko & Rossen 2001).

At the completion of this project the unit and sequences were modified and offered again across classes in two learning centres. The project was funded through The New Zealand Council of Educational Research, Teaching and Learning Research Initiative.

Project Aims

The aims and objectives of this research project were:
- To identify how involvement in a collaborative online environment affects students' and teachers' experiences of learning;
- To give teachers the opportunity to expand / add to the variety of teaching and learning strategies they use in their classroom programme;
- To produce recommendations for teachers using the LAMS online environment.

The research questions were:
1. How effective is the LAMS programme in providing an online environment for collaborative learning experiences?
2. What is the nature of students' experience of learning in a collaborative learning online environment?
3. What are the critical success factors for students and teachers in developing and using a collaborative learning online unit of work?
4. How does involvement in a collaborative learning online environment affect teaching practice and strategies?
5. What was the contribution of the technology to the teaching and learning experience?
6. What did the teachers and students think of LAMS as an online collaborative learning tool?.

The overall research project could broadly be categorised as a case study.

The two schools are at the lower end of the socio-economic scale (both Decile 3) and diverse in their communities (inner city and suburban). The research involved interviews with three classroom teachers and their respective Year 6/7 classes involved in the collaborative unit of work operating in an online environment, observations, anecdotal notes from reflective journals of the teachers and students, and samples of student contributions on LAMS sequences. The project looked at the reflective practices of these teachers and to this end involved fortnightly feedback/discussion sessions over the 10-week unit of work. These feedback sessions were intended to support the teachers and facilitators in their action research and to inform subsequent teaching sessions and learning sequences. Close collaboration between the practitioners and the research team was an essential component of the research design.

In summary the main findings of the research project were:
- LAMS enables teachers to develop learning sequences using a variety of activity tools that all have the potential to contribute towards a collaborative learning environment. However the quality of the learning environment was clearly affected by the teacher's development of the content and purpose of the activities chosen within a sequence.
- There are most definitely groups for whom this environment is more effective than others in relation to higher order thinking skills as some students do not have the academic readiness to think beyond the lower levels. Also, reading and literacy skills determine how effective the LAMS environment is for some students.
- The critical success factors for students and teachers in developing and using a collaborative learning online unit of work are time, professional development, confidence and capability, access to computers, a support network and effective teaching practices.
- In order to be able to provide a programme of work that fosters collaboration and caters for a wide variety of individual and collective needs of the students, teachers need to be flexible in their approach and utilise a wide range of strategies.
- That despite there being a number of issues to contend with, the contribution of the technology to the teaching and learning experience was seen as positive overall.
- The use of the LAMS environment was a source of motivation for both the teachers and students in fostering collaboration despite technical issues having to be overcome.

With the rapid change and development of conditions and learning needs of students, teachers often find themselves in very unfamiliar situations about teaching and learning. The teacher is often being asked to develop skills in facilitating learning which bear no relationship to how they themselves were taught. This means that they need ongoing professional development and support to replace old strategies with ones that reflect the environment young people live in today.
The literature on professional support recognises the importance of teachers learning from each other (Howard, 1999). The development of sharing in a school community and the sense of belonging are a growing topic in the literature on teacher professional development and support.

In the experience of the teachers and students LAMS was seen to provide a user friendly and safe online learning programme that gives teachers access to another teaching and learning tool. However the quality of a learning environment is clearly affected by the teacher's development of the content and purpose of the activities chosen within a sequence. The teachers developed a series of recommendations which focus on teachers being able to utilise LAMS to foster collaboration, allow inclusion of all students in discussions around a topic or issue, and make the use of online environment manageable in a typical primary school classroom.

References

Brown, D., & Thomson, C. (2000). *Cooperative learning in New Zealand schools*. Palmerston North: Dunmore Press.

Chih-Hsiung, T., & Correy, M. (2003). Building active online interaction via a collaborative learning community. *Computers in the Schools*, *20*(3), 51–59.

Collison, G., Erlbaum, B., Haavind, S., & Tinkler, R. (2000). *Facilitating online learning: Effective strategies for moderators.* Madison, NY: Atwood Publishing.

Draves, W. (2002). *Teaching online* (2nd ed.). River Falls, WI: Learning Resources Network (LERN) Books.

Hakkinen, P. (2003). Collaborative learning in networked environments: Interaction through shared workspaces and communication tools. *Journal of Education for Teaching*, *29*(3), 279–281.

Holloway, J. (2003). Student teamwork. *Educational Leadership*, *61*(4). Retrieved 8 June 2004, from EbscoHost http://www.80-web10.epnet.com.ezproxy.cce.ac.nz/citation.asp?tb=1&_ug=dbs+tfh+ sid+AE43FADE%2D8E23%2D40CD%2DAB64%2D7BC38359DODD%40s

Holmes, R. (2003). Collaborative projects: A study of paired work in a Malaysian university. *Innovations in Education and Teaching International*, *40*(3), 254–259.

Holzer, E. (2004). Professional development of teacher educators in asynchronous electric environment: Challenges, opportunities and preliminary insights from practice. *Educational Media International*, *41*(1), 81–89.

Howard, S. (1999). Mentoring—transforming school cultures. Retrieved 3 August 2004, from http://www.aare.edu.au/99pap/how99257.htm

Hron, A., & Friedrich, H. (2003). A review of web-based collaborative learning: Factors beyond technology. *Journal of Computer Assisted Learning*, *19*(1), 70–79.

Ko, S., & Rossen, S. (2001). *Teaching online: A practical guide.* Boston: Houghton Mifflin Company.

Lourdusamy, A., Myint, S., & Sipusic, M. (2003). Collaborative learning tool for presenting authentic case studies and its impact on student participation. *Journal of Educational Technology Systems*, *31*(4), 381–392. Retrieved 8 June 2004, from EbscoHost http://www.80-web10.epnet.com.ezproxy.cce.ac.nz/citation.asp?tb=1&_ug=dbs+tfh+sid+AE43FADE%2D8E23%2D 40CD%2DAB64%2D7BC38359DODD%40s

Neo, M. (2003). Developing a collaborative learning environment using a web-based design. *Journal of Computer Assisted Learning*, *19*(4), 462–473.

Peel, D., & Shortland, S. (2004). Student–teacher collaborative reflection: Perspectives on learning together. *Innovations in Education and Teaching International*, *41*(1), 49–58.

Whatley, J., & Bell, F. (2003). Discussion across borders: Benefits for collaborative learning. *Educational Media International*, *40*(1–2), 139–152.

Author contact details

Patsy-Ann Street
Programmes and Learning Manager, Christchurch City Libraries
Christchurch City Council, Christchurch New Zealand
Email: pat.street@ccc.govt.nz