

Generating Change Through Professional Development: A New Zealand Story.

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This is the story of how an information literacy course for teachers in New Zealand has proved to be a catalyst for change. It has resulted in students being better able to make sense of the endless information they can access, improved reading skills and led to more effective use of the school library.

The purpose of this paper is to provide an example of effective professional development for teachers whereby an information literacy course, delivered to teachers in New Zealand, has resulted in positive changes to the effectiveness of school reading programmes, a better understanding of the scope and potential for the use of school libraries to support learning and teaching, school-wide planned development of information literacy skills and in some cases, whole school change.

Firstly, this paper provides background on school libraries in New Zealand and information literacy in New Zealand schools and then it reports on the findings of research into this particular professional development course for teachers.

School libraries in New Zealand

Almost all of the 2,693 schools in New Zealand have a school library and there is evidence that some are highly effective in supporting student learning. However membership information from the School Library Association of New Zealand Aotearoa shows that most do not have a trained teacher librarian on staff who would be responsible for the development of reading programmes and information literacy across the school. Instead, primary school libraries are often managed by a teacher aide or parent helper who also helps in the office and the resource room. There is usually a teacher with responsibility for the school library but he or she rarely has any time allocated for carrying out this responsibility.

The same information also shows that while most secondary schools have a teacher with library responsibility this person often does not have any time allowance and may not

have had any training. The day-to-day library management is usually carried out by non-teaching staff who may not be trained librarians. Some schools do have trained librarians running the library and a few have trained teacher librarians who have the time and the skills and knowledge to lead concentrate on reading initiatives and school-wide information literacy development.

Indeed, research carried out by Moore & Trebilcock, (2003) shows that even in schools which do have knowledgeable school library team leaders, “*while elements of the ideal school library instructional programme do exist in these schools, they are fragmented and as a result students are not systematically exposed to crucial skills and knowledge of the information world*” (p111).

It would seem therefore that in New Zealand information literacy skills often need to be developed through other avenues.

Information literacy in New Zealand

There are many definitions of information literacy but this is one that it is the most widely accepted in New Zealand because it seems to encompass and take account of future developments as well as the present situation: “Information literacy is the ability to find, evaluate and disseminate information using traditional, currently available and evolving technologies for the purposes of investigation, education and the solving of real world problems.” (<http://dewey.cc.duq.edu/Workshops/ProjectOverview/sld003.htm> retrieved 28 September 2001, cited in Moore, 2002, p13)

Information skills have been identified in the 1993 New Zealand Curriculum Framework document as being one of the eight essential areas of skills that all students are to develop in an integrated fashion as they work through the seven essential learning areas of the curriculum. However just developing a whole lot of skills will not necessarily produce an information literate person unless such skills are also developed within an appropriate information processing framework.

It is heartening therefore that since the publication of the Curriculum Framework document, attention has been increasingly focused, as can be seen by the following initiatives, on student development of these skills and more recently, to the school-wide development of information literacy. This latter development has been driven in part by the rapid development of information and communication technologies and the New Zealand Ministry of Education's ICT Strategy (1998, 2003) which is aimed at helping teachers integrate the use of ICT into learning and teaching. Part of this strategy has seen the implementation of the ICT PD cluster system whereby schools, funded for three years, band together in clusters to offer professional development (PD) to the teachers of these schools. This has led to the increasing realisation that ICT skills need to be developed within a context and integrated into an information literacy framework, rather than being developed as separate skills. As Probert (1999) says, “Those who place an undue emphasis on ICT, looking only at hardware or software as ends in themselves will find ICT goes nowhere. There has to be a context or need to use them.” (p11)

Despite this increasing focus on information literacy skills though, the New Zealand National Education Monitoring Project (NEMP), which began in 1993 to assess and report on the achievement of all primary school students in New Zealand across all areas of the

curriculum, found that there was little evidence of change in year 4 and year 8 students' ability to find and gather information (Flockton & Crooks, 2002). This seems to suggest that although the principles and goals of information literacy are understood and accepted in New Zealand, they are not actually widely practised.

The school library and learning in the information landscape: Guidelines for New Zealand schools, published in 2002 by National Library of New Zealand and Ministry of Education, aims to help New Zealand schools develop their school libraries to better support students' learning. These guidelines are based around six guiding principles for school library development: Information literacy, Service, Reading, Access, Information resources and Place. Each of these guiding principles is described in a separate section with critical success factors identified for each principle. Each section also includes quotes or 'voices', describing examples of good practice from a number of different types of schools.

The section written around the guiding principle of information literacy points out that

“definitions of information literacy continue to evolve” and that “there is more and more emphasis” on, for example, “the cognitive skills that underlie information literacy, the processes used to construct personal knowledge, the relationship between information literacy and other literacies, the effect management of information, the ethical use of information and the economic and social relevance of information literacy” (p11).

Included are suggestions for ways in which school libraries can support the development of information literacy and also suggestions, in a later section of the book, for ways in which “schools can measure their library's impact on their students' achievement” (p45).

However, underlying this drive for the development of information literacy in schools is the assumption that all teachers are themselves information literate and that they are familiar with information-processing models and strategies that they can use with their students to help break down the process. We also assume that teachers understand how to apply higher order thinking skills when tackling complex information tasks. Research in Australia (Henri, 1999) has shown that this is not always the case and it was found that practising teachers had the same low level of skills that their senior students were demonstrating. New Zealand researcher Dr Penny Moore (2002), when working with students and teachers, discovered that many teachers took it for granted that students would somehow acquire information skills and that they did not need to teach them specifically while those teachers who did recognise that the skills needed to be systematically taught, needed training in how to teach the skills since it is teachers, as recent research demonstrates, (Baker, 2002) who make the difference. There is evidence that up to sixty per cent of variance in student performance may be due to differences between teachers and classes (New Zealand Ministry of Education, 2003).

Professional development in New Zealand therefore is increasing in importance with more and more schools requiring teachers to meet professional development goals as part of their on-going performance appraisal. This development is also influenced in some schools by the work of Hill, Hawk & Taylor (2002) who found that “the evidence is clear that quality professional development happens on-site, where teachers have access to the ongoing support and encouragement of their colleagues” (p15). Recent research by the New Zealand Council for Educational Research (NZCER) entitled *Teachers making a Difference: What is the research evidence?* also shows that while most schools allow some personal professional

development for individual teachers, schools consider that whole school professional development based on identified school priorities is a more effective use of funding (Mitchell, Cameron & Wylie, 2002). Developing a culture within schools where staff feel supported, encouraged and expected to extend not only their own teaching practice, but also their own professional learning is increasingly seen as fundamental to good school management.

It is this situation that has led to the ongoing development and successful implementation of the Auckland College of Education's Infolink: Information skills course whereby the whole staff of a school can enrol and have the course delivered at their school. Rather than having one or two people in a school knowledgeable about information literacy, all school staff can participate in training when they take this school-based course thus providing for grassroots-up rather than top-down development.

Infolink: Information literacy skills.

Infolink: Information Literacy Skills is the foundation course for the Graduate Diploma of Education specialisms in teacher librarianship and information technology offered by the Auckland College of Education. The aim of this course is to introduce teachers to a process approach to designing, monitoring and evaluating a resource based unit of work emphasising the development of information literacy in different areas of the curriculum. It is based on the 6 stage Action Learning model (Gawith, 1988). Because New Zealand education is based on constructivist theories of learning, inquiry learning approaches, including resource based learning, as used in the Infolink model, are becoming increasingly popular. This is why many principals, especially in the primary area have all their staff complete Infolink. In fact some principals require teachers who are joining their schools to enrol in the course as a condition of employment.

The course is offered at school based sites throughout New Zealand. Teachers meet in their own schools on a fortnightly basis to work with a lecturer who guides them through the content using a mixture of study guides, workbooks, readings and audio conferences. The course is also available to teachers online.

Teachers are expected to practise their skills with their own students between sessions and record and reflect on their experiences. During the course the different sites from across the country join together for teaching and sharing experiences either by teleconference or Internet discussion.

A total of 5000 New Zealand teachers have taken the course since it began and in the last two years it has also been offered to teachers in Beijing, China and also this year, to teachers in Tokyo, Japan.

Course contents and goals: Teachers identify and teach the information skills needed by students to undertake a resource based learning unit in a selected area of the NZ curriculum. They also design, introduce, monitor and evaluate the unit as part of their classroom programme and by the end of the course, they understand the relationship between information skills, information literacy and contemporary learning theory.

One major strength of the course is that it provides teachers and students with an information process model that is transferable across levels and curriculum areas within the context of the NZ curriculum framework.

And it works:

In a recent study, Vine (cited in Selby & Trebilcock, 2003) investigated the impact that Infolink has on teaching practice. The key research questions for her study were as follows:

1. How do school management teams and teaching staff collaborate in terms of their roles in the development of information literacy in classroom programmes?
2. What aspects of this collaboration could be attributed to the Infolink course?
3. What, if any, educational activities that school library teams, ICT specialists and curriculum teams have initiated could be attributed to the Infolink course?
4. How is the effectiveness of these activities evaluated in terms of student learning?

The researcher used a random sample of schools that have been involved in the course on a regular basis. The schools taking part in the survey were two elementary schools and one junior high school. All three schools were part of the Auckland metropolitan area although they represented different socio-economic levels. Semi-structured interviews and focus group discussions were conducted with the participants from the three schools who were principals, professional development co-ordinators, teachers, and teacher librarians. All the participants had taken part in the Infolink course as part of their professional development. The study reports that

“the course had impacted on the teaching practice in schools in the following ways:

- *Increased collaboration between teaching staff and management concerning planning, policy and vision*
- *Recognition of the importance of ongoing professional development to ensure that teachers continue to develop their own information literacy skills*
- *Enhanced development of a shared understanding of pedagogy and best teaching practice for information literacy*
- *Allowed teachers to develop professionally at various stages of their career in a supportive environment*
- *Produced a sense of a shared experience and feeling part of a team that learns and problem solves together*
- *Improved co-ordination and access to the schools resources*
- *The development of a shared responsibility for the selection of school resources.*
- *Increased collaborative planning activities*
- *Encouraged more cross curricular approaches*

- *Developed closer working relationships between classroom teachers and library teams in the development of student library and information skills*
- *Developed a clear understanding of RBL for library staff who are now able to support students through the research process*
- *Produced a paradigm shift in the way ICT is used in teaching practice. ICT specialists are no longer viewed as being responsible for teaching technical skill development but they have an active roll in meaningful integration of ICT into the curriculum*
- *Created a power shift between senior and junior teachers that led to the development of a mentoring approach to supervision*
- *The only negative impact reported was that some teachers felt resentment that participating in the course was compulsory and that it took away the aspect of choice for them.” (cited in Selby & Trebilcock, 2003)*

Vine herself concluded that “The study affirms the effectiveness of the course and provides evidence that the course can bring about substantial changes to the ways in which teachers and school managers view the teaching and learning practices within their schools” (Vine, 2003, p28).

Conclusion

This course successfully provides a professional development experience for teachers that aims to improve student learning outcomes through changing teachers attitudes and beliefs. If we are to make progress in the development of information literacy skills with our students, it is essential that teachers themselves understand the inquiry process and that they receive the scaffolding and support they need to guide their students in their learning.

We are hopeful, therefore, that an increasing number of students in New Zealand will leave school better equipped to deal with the increasingly information-centred demands of the future.

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Author note

Linda Selby has a background in primary and secondary teaching and has taught in New Zealand, Australia and Canada. Her research interests include the use of ICT in educational settings, teaching and learning with the internet, equity issues and computing, ICT and special education, information literacy and teacher professional development. She is currently a member of the New Zealand Ministry of Education ICT Research Advisory group and Editor of the journal, *Computers in New Zealand Schools*.

Liz Probert was a teacher librarian in a high school until joining Auckland College of Education in 2003. Liz was recently awarded a Multiserve Service to Education Gold medal for her school website project and provided ICT Professional development to staff at a cluster of schools for the first Ministry of Education ICT Strategy contracts. Liz is currently President of the School Library Association of New Zealand Aotearoa (SLANZA).