

Inquiry into Guided Inquiry

BY PRU MITCHELL AND SUE SPENCE, WITH GRATEFUL ACKNOWLEDGEMENT TO DR ROSS J TODD



Pru is Vice-President of the School Library Association of South Australia and co-ordinates Professional Learning. She is a teacher librarian, currently working part-time as Reference Librarian at the University of Adelaide and as Senior Education Officer with the EdNA team at Education.au. Her online activity is collected at <http://me.edu.au/p/pru>



Sue Spence has been a high school teacher librarian for more than 20 years and a classroom teacher for even longer. Her published articles on teacher librarianship and an array of PD materials can be accessed on her personal website, RBL online: <http://www.teachers.ash.org.au/rblonline> Sue is currently Curriculum Manager, Senior Secondary Reform Curriculum Services, Department of Education and Children's Services South Australia and has a particular focus on supporting schools to implement the Stage 2 research project in South Australia by 2011 — see the DECS Senior Years website <http://www.senioryears.sa.edu.au/pages/SeniorYearsHome/researchproject/> for related research project materials.

Imagine for a moment that you are preparing to return to your job as a teacher librarian after a few years' leave. What changes will you notice? What areas of professional learning will be most important?

When you left in 2007, who would have predicted the Building the Education Revolution (DEEWR 2009) and the fact that you might return to a temporary classroom awaiting completion of a new library building? You may have followed media reports of the *Digital Education Revolution* (DEEWR 2008) but can that prepare you for facing a class of Year 9s whose faces are cast downward at their laptop screen? Blogs, wikis and mobile phones that were automatically banned are now in regular use in many classes. Your professional association is using Twitter, the Education Department is running online conferences using a social networking platform and there's no such thing as a paper payslip in your pigeonhole.

What may be less immediately obvious are changes in thinking and practice about the core educational role of the school library. It might take a little while to pick up that, whereas for the past 20 years you have promoted *resource-based learning* and *the information process* as your special domain, there is now a new kid on your patch.

Guided Inquiry (Kuhlthau, 2007) is fast becoming the buzzword of school libraries for the 21st century. A strong indicator of this is the fact that in 2009 the Australian Library and Information Association (ALIA) and Australian School Library Association (ASLA) replaced the policy statement that has served the profession for 15 years, *Statement on resource-based learning and the curriculum* (1994). The new policy is entitled *Statement on Guided Inquiry and the curriculum* (2009) and has as its stated purpose 'to

adopt the Guided Inquiry approach to teaching and learning helps students to construct meaning, think creatively and solve problems'.

You might go looking for the rationale behind this change of policy. Was it based on evidence of widespread adoption of Guided Inquiry in Australian school libraries as reported in *international journal and conferences*? As a term, Guided Inquiry appears to be a very recent phenomenon, with articles first appearing in Australia in 2006 and 2007 in *Scan* (Heinstrom & Todd 2006; Scheffers 2008) and in *Synergy* (Todd 2007). Guided Inquiry was the topic of one paper at the 2007 ASLA XX Conference (Pick & Schutz 2007) and featured in four papers at the 2009 ASLA XXI Conference (Drury & Martin; Hay; Kurvink & Turnbull; Schinckel).

Pick and Schutz (2007) commented in their paper on Guided Inquiry that:

despite the fact that in NSW, at least, information skills have been an essential part of the curriculum since 1989, teacher librarians have struggled to gain widespread recognition as true partners in the learning experience.

This change is not about teacher librarians being desperate for something to assist them in gaining wider recognition. It is grounded in extensive research by the likes of Carol Kuhlthau (2009) who introduces the affective dimension of research and the notion of 'zones of intervention' during the research process.

It has undoubtedly been helped along in the past few years by the charismatic Dr Ross Todd (Kenny 2006) and colleagues and through national roadshows organised by professional associations and Syba Signs. We should acknowledge also those teacher librarianship educators, who have ensured recent teacher

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'... the Guided Inquiry approach to teaching and learning helps students to construct meaning, think creatively and solve problems.'

librarianship graduates are familiar with Guided Inquiry.

In South Australia, the exquisite timing of the new South Australian Certificate of Education (SACE Board of SA 2008) which introduces a compulsory research project at Stage 2 (usually Year 12) has provided rich soil for planting this seed of Guided Inquiry. There is potential for the research project to provide some significant changes to school culture and to learning from K–12 as schools prepare students for this extended independent research requirement.

So how is Guided Inquiry different from what we're doing now?

This question has been heard a number of times during workshops and in discussions on *Guided Inquiry and the SACE Research Project* in South Australia. There are many models and approaches to inquiry already in use in Australian schools, including:

- The Information Process (ASLA & ALIA 1993).
- Integrated Inquiry (Murdoch 1998).
- The 5Es model (Bybee 1997).
- The 4MAT model (McCarthy 2000).

In conducting a search across Australian education publications, you will find the term 'Guided Inquiry' used in the recent literature for science education (Zion 2007) and history (Suda 2009). Here is room for potential confusion (or perhaps shared conversation) with colleagues to address whether we mean the same thing across disciplines.

There will, no doubt, be ongoing debate over whether it is desirable to have a preferred, consistent or shared model or whether to expose students

to a range of inquiry models. What is the role of the teacher librarian in this debate at the school level, where most often this decision will need to be made? While there may be diversity and flexibility in the models used, the underlying skills remain consistent. The essence of Guided Inquiry is that it places demands on students' metacognitive capacity and literacy as well as information literacy skills.

Questions and more questions

Participants in the *Guided Inquiry and SACE Research Project* workshops, held in South Australia in May 2009, raised a number of questions. Responses were provided by Dr Ross Todd and also by Sue Spence of the Senior Secondary Reform Team, Department of Education and Children's Services.

What is the pedagogical basis underpinning this?

Sue: Both the research project and Guided Inquiry give students the opportunity to co-construct their curriculum, to connect it to their world and to 'make their own meaning'. The focus on process more than product clearly points to the pedagogy of constructivism.

Doesn't Guided Inquiry take longer? We are already stretched to get through syllabus requirements in the time allotted.

Ross: If our goal is learning and knowledge construction, the total time to reach deep learning is much the same, even though the process stages are different over the course of a research cycle. How often do teachers have to re-teach concepts after assessing students' work?

How do I start research off?

Ross: Teachers and teacher librarians need to provide students with structures for building background

knowledge. It is critical to allow personal choice in research projects. The collection stage should include some active, authentic collection of data, not just use of secondary sources. Inquiry is built around questions. When establishing questions ask: does it matter if they never, ever know this? Encourage students (and teachers) to construct real-world questions.

Sue: The exploring, defining or deciding phase is critical. Teachers need to provide direct instruction, modelling and opportunities for discussion so that students can (a) identify an area of interest and (b) refine that interest into a worthwhile and manageable research question.

Students constantly want to change their research plan or their question!

Sue: It is important that the 'plan' stage of the research project does not come too early in the process. The time frame needs to accommodate the early stages of the Guided Inquiry process — the exploring of ideas before selecting and focusing on a proposal or plan. However, in the SACE research project there is no requirement that a research proposal remain unchanged. Students may well change direction or focus as the research unfolds. This, in fact, represents some of the problem solving that is part of the learning capability and needs to be monitored by teachers and recorded (and reflected upon) by the students. At the same time, students should not spend too long making up their mind or changing it — persistence can be seen as another facet of problem solving.

The research project subject outline refers to 'emerging' findings and new learning so it is possible that some students may not 'complete' their research or come up with highly

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polished 'findings'. The focus is on the process and what students learn along the way, rather than the final 'product'.

Is there a requirement for students to create new knowledge per se, or just new knowledge to that student?

Ross: It's not an expectation in the SACE research project that all students will create unique knowledge or contribute original research findings, but don't assume that they are not capable of it. Encourage students and let them surprise you.

Do we have to teach a specific research model?

Sue: The subject outline for the SACE research project carefully states that:

the term 'research' is used in its broadest sense to describe the learning process. It can take many forms, such as applied practical investigations, formal research, or exploratory inquiries.

It sets out a research framework for the subject but research processes within that framework are not prescribed. Students will use different methods and undertake different activities according to their chosen research context and area of interest. The student making wrought iron gates will work differently to the one looking into the genetics of macular degeneration to the one involved in a community project or relating their research to their part-time job. However, they will all need to document, reflect on and evaluate their work and their learning to be successful.

How do students document the journey of inquiry and their learning from it?

Ross: Consider opportunities for recording online to provide a public audience for a powerful learning experience. This can provide feedback

loops — from peers, mentors and teachers.

Sue: Students could audio-record their progress or annotate a series of digital photos or add a commentary to video clips, create a wiki or use a blog — the mode options are quite flexible. The mode is actually less of an issue than the meta-cognitive capacity and literacy skills of students — how well they can think about and express their learning journey using the formal language of reflection and evaluation. That is where 'scaffolding' will be needed. Some students may, however, also require explicit teaching of IT skills to use some of these modes.

How are we going to check progress and assess performance?

Sue: Requiring students to keep a record of their planning and research and any evidence of learning clearly points to the need for some form of journal or blog plus a portfolio of evidence. Teacher capacity to scaffold research, thinking and literacy skills becomes an issue.

How will we manage more and more students doing research in the community?

Sue: It is of course important to build partnerships and establish links — with local public libraries and councils as well as local businesses, community organisations and the personal networks of students and teachers.

Ross: Teacher librarians will be a resource for teachers and students and need to take on a networking role that reinforces the importance of connections not just collections.

Professional learning priorities

With the introduction of an initiative such as the SACE research project and

the advent of a national Australian curriculum in 2011 (ACARA 2009) there is a priority to build inquiry across the whole school. This requires whole school planning and a strong teacher librarian involvement. Can teacher librarians, who are not involved in professional inquiry, successfully lead their school in developing an inquiry culture?

With the speed of technological change coupled with curriculum change, teacher librarians face structural challenges that require active engagement in ongoing professional learning. To ensure our whole profession is aware of changing practices and priorities, we need to find ways to extend the conversations started at face-to-face conferences and workshops.

SLASA has built on Dr Todd's *Guided Inquiry* sessions with informal workshops and meetings for teachers and teacher librarians to share ideas and questions. Other professional associations facilitate similar events and any teacher librarian can initiate a local group or contribute to the online communities of practice available, such as the Syba Signs (2009) *Guided Inquiry* online network.

As Ross Todd reminded South Australian workshop participants:

in the face of curriculum change, we have the power to develop creative, socially responsible students turned on to inquiry.

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