Teacher-Librarians and Information Literacy: Getting into the Action

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This article reflects on the process, actions, and outcomes of the extensive and ongoing action research that has been underway at Marist Sisters’ College, Sydney, Australia since 1991. This research has centered on integrating information literacy in the classroom and investigating its impact on student learning. It presents some guiding principles developed from this experience to enable teacher-librarians to get into the action. These include aspects of collaboration, intervention, reflection, learning by doing, and methodologies. The article also discusses outcomes related to decision-making and development in the school library, the role of the teacher-librarian, the wider valuing of information literacy, and the development of an information technology infrastructure in the school.

Action research, as a research methodology combining research outcomes and forward action in dynamic and flexible ways, is an important (though underused) agent of change for teacher-librarians. This article reflects on the process, actions, and outcomes of the extensive and ongoing action research project that I have been involved in since 1991. Specifically, the article presents some guiding principles developed from this experience to enable teacher-librarians to get into the action, and shows how action research has been a basis for decision-making and development in the school library. It identifies some critical factors that ensure that action research is really worth the effort. It is! Considering the rapidly changing nature of the information environment and its relentless impact on redesigning schooling and information services for the information age, action research is an essential component for teacher-librarians in planning and creating their preferred future.

Project Background

Our action research has been based at Marist Sisters’ College, a Year 7-12 girls’ secondary college of 800 students in Sydney, Australia, operated by the Catholic Education Office. Celeste McNicholas, the school’s teacher-librarian (now in a changed, expanded role titled Director, Information Services) has played an important part in this process. This ever-evolving research, centering on the role and value of information literacy in learning, has been well documented in the literature (Todd, Lamb, & McNicholas, 1993; Lamb & Todd, 1993; Todd, 1995a, 1995b, 1996; McNicholas & Todd, 1996). Begun in 1991, the broad objective of our action research program was to establish a
commitment to the practice of integrating information skills into the curriculum and to facilitate this by collaborative planning and teaching. The project initially sought to set up an infrastructure in the school to implement the process, and develop and implement strategies to widen the base on which information skills were practiced in the school. We wanted to place it outside the domain of the library and teacher-librarian and put it in a wider context where it was owned by all teachers and viewed as an integral and essential element of all teaching and learning in the school. Since that time, we have explored a number of avenues, particularly responding to the rapid onset of electronic information services and the demand for networked systems in schools and their information literacy implications. At the time of publication, the college’s information infrastructure combines the traditional, predominantly paper-based library resources and networked information technology. The technological component consists of an electronic library catalogue, a curriculum applications server, and 14 CD-ROM drives networked to 60 work stations throughout the college. The information technology provides users with access to the college’s library catalogue, desktop publishing, teaching-learning packages, Internet, and multimedia from all work stations situated in a computer laboratory, classrooms, staffroom, library, and information laboratory as part of the library facility. This infrastructure is one tangible outcome of our action research.

**Action Research: Our Framework**

We dared to dream, at the same time being realistic about the enormous and long-term challenge that confronted us. We saw action research as an essential part of this process for a number of important reasons. Action research has dual goals of action and research. Action research is immediate, local, and change-oriented. It intervenes, initiates, investigates, and improves. It investigates aspects of practice in a systematic way in order to improve that practice and the current situation. Dick (1993) asserts that “the action is primary” (p. 6) rather than a fringe benefit of research. Similarly, Kemmis (1993) views action research as emancipatory, “always connected to social action ... a concrete and practical expression of the aspiration to change the social (or educational) world for the better for improving shared social practices” (p. 2). Bennett and Oliver (1993) make the distinction between action and activity, and understanding this distinction is important in action research. Activity is simply motion; action is motion directed to a purposeful end. Action research is undertaken to investigate real concerns, to take action to solve real-life problems, and at the same time contribute to the knowledge base of the profession. It is grounded in the reality of the organization, its mission, its structure, and its processes. It is involved with the situation, rather than being detached from it. It aims at increased understanding of a particular situation or problem and provides a basis for making decisions,
establishing directions, and taking actions to make improvements. At the same time, it is research-oriented—systematic and planned in its approach, with clear goals and data collection methods, to be documented and shared in the wider educational community.

Although action research has a 50-year history in social psychology and educational research, the debate about its potential and power to address educational problems and issues is ongoing. Because of its action orientation and its often short-term nature, action research has often been maligned as condescending, as "research on the run" (Dick, 1993) that had no long-term credit; or as "amateur or 'poor man's' research, to be distinguished from the Real Thing" (p. 6). We too have experienced the argument that "any form of research that admitted and encouraged amateurs could not be sufficiently pioneering and high-status" (Kemmis, 1993). In one sense, it is research on the run, but it is so because it is responsive to immediate concerns and issues. Action research is concerned with systematic data collection, but unlike much formal research, it does lead to action and change. It does not leave the school untouched. Rather, the school is moved to more effective levels of performance, innovation, and change.

Our experience affirms the importance of a planned approach. The literature on action research generally identifies five basic phases: identify, plan, act, observe, and reflect, and these have been the process phases we have worked with. First, an issue or problem of practice is identified where there is a mutual commitment to wanting to improve what is already happening; second, the team develops a systematic plan to investigate the concern; third, the team implements critically informed actions designed to improve the situation; fourth, the team observes the effects of the actions; and fifth, the team reflects on these effects as a cyclic basis for ongoing planning, action, and evaluation. In these phases, the importance of understanding the immediate and wider contexts of the concern and identifying assumptions are fundamental.

What follows is a number of guiding principles and a reflective commentary on the action research we have been involved in. It focuses on attributes of process, action, and outcomes, and is presented to encourage and assist teacher-librarians in getting into the action.

Processes and Actions

Action Research is Participative and Collaborative

Action research is collaborative in nature. It is a group activity, and all those involved share the responsibility for the outcome of the project. The problem at the heart of the action research must represent a shared concern of all group members and be acknowledged as an important professional concern. We have found that this is important for ensuring commitment to the research process and its outcomes. The number of participants and the nature
and extent of the collaboration has varied from project to project, although invariably involving the teacher-librarian, classroom teachers, and classes and/or groups of students. In our initial project, as presented in a keynote address the IASL Conference in Belfast in 1992 (Todd et al., 1993), we deliberately established an interdisciplinary team to guide the process, to provide multiple perspectives, and to provide support and encouragement. However, given our focus on the impact of information literacy on student learning and how it might be more effectively integrated into classroom teaching, we have always considered the perceptions of students to be vital and have involved them as key partners in our research. Indeed, they are our research. Seeing the world of learning through their eyes has opened many avenues of reflection and further inquiry for us, and has challenged many deep-seated attitudes and assumptions about the learning process.

The roles of the partners in our action research have varied with each project. For example, in some instances my role has been external academic adviser, other times it has been a classroom teacher, other times a negotiator with the school executive, or an observer. However, we have found that action research teams work best where there is a sense of equal partnership, where distinctions between roles have disappeared. In some projects, the students have been the researchers and have had a major part in identifying appropriate actions. We have found that the interpretation of the data is richer when participation is greater, because it brings multiple viewpoints from multiple standpoints. Sometimes, finding the common ground has been challenging; however, this is an exciting part of the process. School staff have seen the profile, benefits, and interest that involvement in our action research projects have brought, both in the school and in the wider educational community. They have become motivated to be involved, and we are at the point now where it is not difficult to seek out potential partners for new projects. They find us with their concerns, looking for a solution through action research.

We have found that it is important to get key school personnel involved in action research, such as the school executive, curriculum coordinator, and heads of subject departments. By encouraging such leaders (and people of influence!) to be involved in the process, or at least having them part of a reference group that complements the research team to whom the researchers turn to for advice, has had great dividends. Too often I hear teacher-librarians claiming that their school executives do not support them in their efforts, or even do not understand what their role is. Encouraging their involvement in action research is a valuable strategy, not only for demonstrating commitment to educational change in the school, but for ensuring ongoing belief in, and commitment to, the school library program. For our projects, this commitment has been long term and has had a power-
ful impact on motivating the rest of the school to rethink some of their perceptions and actions in relation to the school library.

**Action Research is Responsive and Interventive**

Action research is well suited to aspects of education where rapid changes and innovations are taking place that are not preceded by extensive supporting research. We have capitalized on this. A typical example is the Internet. The integration of the Internet into learning is an unknown quantity, and it has been accompanied by the assumption that somehow, mysteriously, improvements in student learning will take place through being connected to the Internet. Our most recent action research, as reported in McNicholas and Todd (1996), sought to investigate the question of the impact of the Internet on learning: on the learning process, on the learning environment, and learning benefits for students. We wanted to find some answers to questions such as: Is it really worth the investment? Does access to the Internet, for example, live up to its many claims in the educational literature? Can the Internet be used to engage learners actively and empower learning by doing and learning by reflection? How do we make it happen? In this case, the concern was being expressed in a number of education, teacher-librarian-ship, and parent-community forums, and we wanted to respond to these quickly.

We used naturalistic observation of two classes to track student use of the Internet, and student discussion groups to probe barriers, benefits, and attitudes at a number of stages in the process. This input provided the basis for interventive action. As major barriers were exposed, such as poorly designed search strategies, lack of understanding of search engines, and problems of making judgments about the quality of information, interventive classroom strategies were initiated, and these were evaluated as part of the process. Any literature search will show the absence of formal research findings. Action research can play an important role in leading this research by identifying issues and formulating hypotheses for further testing.

**Action Research is a Constructive Process**

Action research is a constructive, creative process. It builds on previous experiences, both positive and negative. In this way we have found it to be an energizing and liberating process for teachers who, through their involvement, have developed skills at diagnosing learning situations, who are more willing to admit that something is wrong, who are able to let go of these negative experiences by developing creative options and setting up alternative pathways to discover how the situations and experiences might be improved. Although action research is cyclic, with certain steps recurring, it provides a practical sense of moving forward—capitalizing on understandings gained in earlier work, learning from mistakes, and developing and evaluating new actions. In Lamb and Todd (1993), we document one
teacher's negative experience of integrating information skills into a Year 7 philosophy class, and how intervention—in the form of damage control—rectified this unfortunate situation. In the context of our action research program, the teacher (long experienced, though inexperienced with information skills) was able to reflect, react, intervene, learn, move forward—and keep smiling.

**Action Research Encourages Reflection**
One of the greatest values of action research to the everyday work of teaching is its reflective component. Action research mandates critical reflection. Choices made depend on responses that have come before these choices, and this involves introspection and reflection. It is the basis for effective choice-making and forward movement, because it provides time for interpreting, challenging earlier ideas, refining, taking stock of losses and gains, critiquing what has happened, discovering alternative viewpoints, identifying options for immediate action, developing future scenarios, formulating new plans, and predicting outcomes. In the busy, daily grind of classroom teaching, this kind of dialogue often happens only superficially. We look back on our program of action research to date in the school and can affirm how it has generated a more reflective spirit of challenge and debate, and not just limited to the question of information literacy and learning. The role of the library and information services has been discussed more openly, and this has broken down barriers and dispelled some misconceptions and prejudices. Being able to ask “So what?” and “Where to now?” and “Why, why, why?” and to respond freely is an energizing characteristic of a learning community.

**Action Research is Experiential**
To undertake action research does not require participants to be professional researchers. It is a developmental process, one of learning by doing. Participants develop researchers’ skills and knowledge by being reflective practitioners, active and reflective team members willing to contribute to the problem identification, collecting and analyzing the data, providing viewpoints on various options, and taking an active role in implementing the chosen course of action and evaluating its outcomes. At times, we have found teachers initially reluctant to be involved in action research, because they feel they do not have a sound knowledge of statistics and research methodologies, or studied research methods at teachers’ college several decades ago. We have needed to put energies into breaking down these perceptions.

In all our projects, we have held a strong commitment to sharing our action research with the professional community. This has meant that all participants have been involved in documenting process, actions and outcomes, as well as presenting these to school staff at professional conferences.
and in various publications. In many cases, this too has been a case of learning by doing. Although the thought of professional review and critique has been daunting, if not off-putting, it has brought a number of rewards: developing writing and presentation skills, professional esteem (both for themselves and their school), a real sense of pride in their teaching, and a motivation for excellence. At the same time, the school library and its information literacy function has been given a public prominence. At Marist Sisters’ College, one of the extracurricular roles of one teacher is school publicity, and, through her, our action research has been given front-page newspaper publicity across Sydney.

**Action Research Involves Many Methods**

In our action research projects, we have used many different methods to collect data, both qualitative and quantitative. In some, we have used multiple sources of data. These include interviews (of students and teachers), focus group discussions, naturalistic observations, homework, generating concept maps, formal achievement scores, attitude tests, simulated tasks, and logs of activities, thinking-aloud tasks, activity feedback, and assignments. Some measures have been formal tests with established reliability and validity, for example, tests to measure general academic ability. Other measures we have made up ourselves to suit the purposes of what we were investigating. For example, one of the major dilemmas we have faced, given our focus on information skills, has been the absence of any established measures for determining a student’s competence with information skills. So we developed one, as outlined in Todd (1996). This was a simple, easy-to-apply approach to gathering information about students’ abilities to define, locate, select, organize, present, and evaluate information. We have used it as a pre- and posttest, so we could identify developmental changes. It is rudimentary (research does not mean complicated data collection methods), but it has provided us with substantial insights to identifying gaps in students’ learning and to diagnosing further action. We have learned the importance of carefully thinking through data collection methods before actually doing them—in some cases we were overwhelmed with huge quantities of videotapes or students’ work that demanded an excessive amount of time in analysis. We have learned to set realistic limits to the data we collect and analyze.

What data collection methods you use will be a function of the nature of the situation, time available, and of course the objectives of the research. Some will be quantitative, like collecting test scores, calculating averages, and tabulating scores on formally prepared tests, such as attitude tests (they generally have instruction booklets to tell you how to do it). Others will be qualitative, enabling you to probe into the subjective experiences and attitudes of learners, respond quickly to changing situations; to dig beneath the
layers. Don’t be afraid of imprecise answers, feeling you didn’t get the information you wanted. This contributes to further refinement of your methods—again, learning by doing. According to Dick (1993), “There are times when the initial use of fuzzy methods to answer fuzzy questions is the only appropriate choice. Action research provides enough flexibility to allow fuzzy beginnings while progressing towards appropriate ending” (p. 7). Research perfectionism is a barrier to doing it—such as getting the question right, pilot testing, and refining questionnaires. Although I do not deny the importance of these steps, they can often mean missed opportunities and a loss of the spirit of action and forward movement that is the essence of action research.

Outcomes
Because action research is all about generating useful action to improve performance, issue, or concern, what have been the outcomes of this process for us? This section highlights some of the tangible outcomes, first to the educational community, and, second, to the school in question.

For the broader educational community, we have been able to demonstrate that an information literacy framework integrated into school curricula, with an emphasis on developing students’ intellectual skills in handling information, makes a positive difference to student learning. Teacher-librarians have always believed that information skills instruction is a vital part of schooling and that these skills should be taught in the context of the school’s curriculum. However, the impact of information skills on student learning is largely based on intuitive recognition and anecdotal reporting, rather than on systematic investigation. Our action research, as well as experimental research, provides an important move forward. A full summary of the findings is published in Todd (1995a) in the first issue of School Libraries Worldwide.

Since beginning this research, we have seen a gradual move to whole-school ownership of integrating information literacy into the curriculum, with a widening acceptance of information literacy both philosophically and in practice. The findings of the action research are viewed seriously, because they have been generated locally—the research is seen to have a reality that often research conducted elsewhere does not. This localism has been a major prompt for teachers to implement information literacy-related actions they otherwise may have been reluctant to do. In addition, we are beginning to see a stronger spirit of valuing research in the school, with more attention being given to the formal research published in the educational literature and a willingness to think through its outcomes in the local context.

Action research has been an important basis for decision-making in the school library program and overall school library development. It has facilitated diagnosis of barriers and needs in relation to implementing informa-
tion literacy, and this in turn has provided focus for strategic planning and direction for staff development. For example, our Internet research, identifying significant learning barriers and information literacy implications, has been used as a basis for implementing formal staff training on integrating the Internet into their class activities.

The school library and its information services is acknowledged as a key learning center in the school—one of excellence and innovation. This has brought on not only increased levels of funding for resources, but the demand for the teacher-librarian for cooperative teaching and learning has led the school executive to appoint a second teacher-librarian for three days a week to ensure continuity of quality information services. The school executive has continued to promote information literacy as an important framework for all teachers.

Given the central role of the teacher-librarian in these projects, a key outcome has related to the enhanced credibility of the role of the teacher-librarian as an educator. Changing the perceived image of the role of the teacher-librarian from that of keeper of the books to that of a learning-centered curriculum expert is an important challenge for the profession. In our research, I have seen growing recognition of the teacher-librarian as an educational change agent, not just in the school, but in the wider educational and librarianship community.

One of the most dramatic impacts relates to the school’s information technology infrastructure. On the basis of the documented evidence of our action research that highlighted the positive impact of information literacy on learning (including conference papers and publications in the professional and educational literature), we applied at the eleventh hour for substantial government funding for an integrated information technology network to further our information literacy cause. At that stage, the library had only a computerized catalogue. We dreamed big, but in our wildest dreams did not expect to get funding to enable a fully integrated network of 48 work stations to be installed throughout the school. Our action research paid off, and the network is a testament to the dedication of the action research teams who identified, planned, acted, observed, and reflected, and documented, documented, and documented!

Conclusion

Action research, in my experience, is an important process in realizing professional ideals. Because its primary focus is action and change, and its process is interventive and constructive, participation in action research is both empowering and professionally rewarding. As demonstrated in this article, it is one way of enhancing the profile of the teacher-librarian in the school and has potential to open doors to new opportunities and unexpected outcomes. It has enabled the teacher-librarian in the school to be an effective
and ongoing change agent, and has facilitated considerably the growing acceptance of information literacy as a meaningful framework for developing students’ competence with information in many curriculum areas. Action research has also opened up important dialogue in the school about complex learning matters and provided a useful framework for diagnosing ongoing learning needs.

References


