A Framework for Improving Teaching and Learning Through Action Learning

Abstract
Teachers make a difference. Students’ learning outcomes improve with quality teaching. Lack of time is commonly blamed for the difficulty teachers have concerning reflection on and improvement of their professional practice. Teachers frequently operate as the lone adult in a classroom of children or adolescents, staff meetings are typically crammed with operational issues and teachers rarely have opportunity to network with colleagues or reflect on their teaching practice. From 2001-2003 the Australian Government funded the Quality Teacher Programme. In Western Australia funds were allocated in response to teachers’ action research proposals. The interpretive research on which this paper was based explored teachers’ significant action learning experiences. The approach taken was phenomenographic. Qualitative data was collected in the form of case studies. A number of experiential and contextual themes emerged from the data analysis and led to the development of a framework that identified elements conducive to improving teaching and learning as a result of teachers’ reflection on their practice.

Introduction
Historically there has been difficulty achieving sustained effective teacher development. The traditional approach to teacher professional development coupled with repeated waves of educational reform contributed to a culture of stagnation and resistance to change. Factors that contributed to the success of an action learning model of professional development were investigated in the research on which this paper was based.

The Quest to Improve Teaching and Learning
Intensive educational change was a recent phenomenon. Its first major review, in 1977, revealed a failure to produce enduring change in pedagogical practice. Pressure for reform increased but improvement was illusive. Multiple disconnected projects left teachers overwhelmed and ineffective. John Steinle, in 1978, South Australia’s Director General of Education recognised that the practice of implementing major policy changes through top-down line management processes did not work (Middleton and Hill, 1996).

Prior to the 1950s teacher professional development was relatively unknown in Western Australia. By the 1970s teacher professional development had reached a period of expansion. This was followed by a period of rationalisation in the 1980s. It was recognised by this time that although achieving change in practice at the classroom level was the hallmark of effective professional development, such change rarely, if ever, occurred. Since then school improvement has been sought through the introduction of teacher standards and registration, competency frameworks and efforts to transform schools from industrial organisations to learning organisations (Fullan, 2001; Reynolds and Clark, 1982).

The Australian Commonwealth Government was concerned with school improvement and in 1987 the Commonwealth Schools Commission initiated research into teacher professional development through the In-service Teacher Education Project. During the 1990s further deliberation led to the acceptance of the Adelaide Declaration on National Goals for Schooling in the Twenty-First Century (MCEETYA, 1999). From this arose the Commonwealth Government’s policy, Teachers for the Twenty First Century: Making the Difference (DEST, 2000) which consisted of four major strategies designed to improve educational outcomes in Australia. The Quality Teacher Programme was a key component of the Quality Teachers element of this initiative and began its implementation in Western Australia in 2001.

The Quality Teacher Programme
This paper was based on research concerning the first year of implementation of the Quality Teacher Programme in Western Australia. Teachers in Western Australia at the time were engaged in a period of intense educational reform with the Curriculum Improvement Programme (1999-2004) which was the chief strategy of the Department of Education and Training to implement the Curriculum Framework, which had been mandated by the Curriculum Council Act (1997) and outlined what all students should know, understand, value and be able to do as a result of their education. The Curriculum Improvement Programme (CIP) included the Curriculum Framework, the Outcomes and Standards Framework and the Curriculum, Assessment and Reporting Policy. Implementation of CIP was difficult. Early evaluation of the programme identified problems and in an attempt to remedy this situation CIP2 was launched (2003-current), with a more structured approach to the provision of professional support for implementation of outcomes focused education, standards and reporting.
The Quality Teacher Programme (QTP) was a national federally funded teacher-centred pedagogical renewal programme that was expected to enhance status of teaching in Australian government schools and update and improve teachers' skills and understandings in each of the priority areas of science, mathematics, literacy, numeracy, vocational education and information technology. The operating principles of the QTP were founded on the beliefs that teacher professional development must be directed by teachers and that the school site was the best location for sustainable professional development that focused on enhancing teachers’ skills. These principles were based on findings that teachers learned best from other teachers, that teachers wanted to be able to apply learning in the classroom with appropriate support and opportunities for reflective review and that in order to achieve this teachers needed ongoing access to pedagogical research and expertise in their schools (Cochran-Smith and Lytle, 1999; Dufour, 1997).

Schools participating in the QTP were required to engage in action research and work collaboratively in teams to investigate specific questions pertinent to their local setting. Action learning according to Auger and Wilderman (2000) enhanced teachers’ sense of autonomy, provided a framework to improve teaching practice and increased teachers’ ability to make observations strengthening their professional judgement. Collegial support experienced through strategies such as networking, mentoring, acting as a critical friend and active listening promoted the development of learning communities (Auger and Wilderman, 2000). Key factors such as time, a sense of being overwhelmed, lack of ownership and perceptions about research were identified as constraints to action learning. Partnerships between universities, trained researchers and school-based participants proved successful in engaging with action research that produced real changes in pedagogy as expert knowledge about research techniques and support to conduct research were combined with the quest to solve real issues that mattered to practitioners in the classroom (Auger and Wilderman, 2000; Ross, Rolheiser, and Hogaboam-Gray, 1999; Sax and Fisher, 2001).

**Evaluation of the Quality Teacher Programme**

Evaluation of the Quality Teacher Programme (2001-2003) in Western Australia was outsourced to Murdoch University in Perth Western Australia and Estill and Associates who were contracted to evaluate three aspects of the Western Australian implementation of the QTP: QTP projects; the Teachers’ Learning Support Network and Outcomes Focused Skills and Understandings. The evaluators utilised Owen and Rogers (1999) framework describing: proactive; clarificative; interactive; monitoring and impact evaluations, in the development of evaluation procedures (2001 Annual Report, 2002).

The 2001 Annual Report (2002) provided information about the implementation of the programme and how it could be improved. Data was gathered from middle level managers and project coordinators from across the state, in all districts and participating schools. During 2001 four progress reports were sought from schools and three from districts, through online surveys focusing on the following questions:

1. To what extent is action learning being used in the project?
2. Is the project on track?
3. How are all projects progressing?
4. What successes and barriers were experienced?
5. What are participants’ views of the value of the project?
6. To what extent is action learning being implemented in the school?

(2001 Annual Report, 2002 p. 4)

Results of these surveys produced themes that were identified by both Project Coordinators and District Leader Facilitators. Successes were allocated to seven categories: action learning, collaboration, partnerships, teacher development, enhanced skills and understandings, status of teachers and student outcomes. Issues that were identified included: time constraints, multi-school projects, people issues and communication.

By the end of Term 3, two thirds of respondents indicated that teachers were quite confident they understood action learning, with a small proportion indicating they were very confident. By the end of Term 4 understanding of action learning had grown to 91% of respondents indicating they were either quite a lot or very confident. Those schools where teachers worked together, or had good back up and assistance from outside sources reported better results. Over Semester 2, 2001 teachers’ implementation of action learning
grew from 50% to 79% of project participants using action learning processes in their projects. The most frequent comment was that it took time for teachers to become familiar with an unfamiliar concept, such as, action learning but once they became familiar with it their confidence increased. This varied across schools and districts. The most confident teachers had attended action learning training and demonstrated higher levels of engagement with their projects (2001 Annual Report, 2002).

Collaboration, ranging from networking to coordination and planning, was the most frequently reported success. Most projects indicated that they were working in partnership with at least one external body. Benefits of this included access to expertise, and being able to coordinate learning strategies and development models with other schools (2001 Annual Report, 2002).

Teacher development and enhanced teacher skills and understandings were reported to have increased as a result of participation in the QTP. Outcomes Focussed Skills and Understandings (2001) identified three focus areas of skills and understandings: productive pedagogical thinking and practice that reflected the principles of teaching and learning in the Curriculum Framework; facilitation of student learning through an outcomes focus to teaching and learning and curriculum provision and assessment of student learning outcomes through effective monitoring, assessment, recording and reporting. Survey results indicated that on average this had occurred to a considerable extent (2001 Annual Report, 2002 p. 45).

Identified successes included effective coordination of the project at the school level, the organisation of workshops and meetings and the planning and structure provided by a supportive school administration. Other benefits included working together, the application of new skills, sufficient funding and the successful use of technology. The three main factors of support, learning through the application of new skills in a relevant setting and collaboration and sharing were identified as influencing teacher development. Where one or more of these factors were present schools reported a higher level of professional development. Participation in projects allowed teachers to work together and share information and ideas. This assisted in improving teachers’ skills and understandings (2001 Annual Report, 2002).

The evaluation revealed that collegiate support, sharing of successes and failures, feedback and encouragement led to teachers’ recognition of their skills and knowledge. Community awareness, of teaching and the work of teachers to increase their skills and knowledge, was raised through publicity in the form of newsletters, publications and displays. Involvement in the QTP led to an increase in teachers’ skills, knowledge and learning of new teaching strategies. These three factors enhanced the status of teaching. Districts reported that positive feedback from parents and students supported their findings that teachers demonstrated increased ability to engage students in collaborative learning strategies, resulting in improved student social skills, attitude and academic outcomes (2001 Annual Report, 2002).

The greatest constraint to the success of projects concerned the issue of time. The duration and late start of the projects was seen as a constraint. Multi-school projects presented more problems and increased the difficulties associated with finding time to meet. Rural projects had the added burden of distance and isolation. Technology was no substitute for face-to-face contact (2001 Annual Report, 2002).

Changeover in teaching staff, administration and project coordinator interrupted the continuity of some projects. Differences in teaching styles presented problems in some schools. There were a number of communication issues (2001 Annual Report, 2002).

The impact of the QTP was significant. Projects reported teachers changed their pedagogy as a result of their increased skills and understandings of outcomes focused education and collaboration with peers. Districts attributed successes to factors including commitment, dedication and enthusiasm of key personnel. To maintain the momentum and effectively change school culture, schools requested permission to continue with this action learning form of professional development (2001 Annual Report, 2002).

**Action Learning**

Action learning emerged in the second half of the 20th Century. Lewin first coined the phrase when he envisaged it as a three-phase process of dismantling existing structures, changing them and establishing new structures. Since then many have adapted this process (Benne, 1976; Coghlan and Brannick, 2003; Coghlan and Claus, 2005).
Action learning was non-linear, possibly even chaotic. Its cyclical, dynamic nature demanded the incorporation of reflective processes to direct movement from one stage to the next. Effective action learning occurred when this process was continuous, evolving and complex. The identification of a problem or an issue was the starting point. Questions were drafted. Data was collected, analysed, interpreted and action taken. Reflection renewed the cycle. Action was essential, to merely answer the research question was insufficient. Because action research addressed relationships, communication, participation and inclusion, it had the potential to benefit all stakeholders (Richardson, 2000; Sax and Fisher, 2001).

Teachers, who were typically busy, turned to action research to create time and space to reflect on their work. It was common for teachers to experience a shaky start as they embarked on their action learning journeys. It took time to learn new roles and research techniques, which were typically viewed as academic pursuits. Teachers needed reassurance that their ideas were valid and could benefit others. Results might not be immediately evident but given time action research was the most natural method for problem solving and implementing change (Auger and Wilderman, 2000; Richardson, 2000; Ross, Rolheiser, and Hogaboam-Gray, 1999).

As teachers took control of their own professional development, through action research their confidence, sense of teacher efficacy and their ability to link theory with practice increased. The sense of community that developed as teachers researched common concerns as a collegiate group. It helped them build their own theories and put them into practice. Teachers became more powerful when they had access to research data and tools and they were more likely to translate research findings into practice if they had been personally involved (Auger and Wilderman, 2000; Ross, Rolheiser, and Hogaboam-Gray, 1999; Sax and Fisher, 2001).

Increase in teacher confidence could lead to an increase in the sense of teacher efficacy, the belief that teachers either individually or collectively made a difference to student learning outcomes. Teachers who anticipated success set higher goals for themselves and their students. They were willing to be risk takers and experiment with teaching strategies. They were not put off by difficulties and continued with implementation of new ideas and experienced higher student achievement. Teacher efficacy was consistently linked with collaborative school cultures and participative decision making processes. Respect from relevant adults was the strongest organisational link to teacher efficacy (Ross, Rolheiser, and Hogaboam-Gray, 1999).

Raising the status of teaching and working collaboratively with teachers as partners was foundational to improving educational outcomes. Many of the behaviours that typified teacher leadership as defined by Meredith (2000) were evident in teachers engaging in action research. Such behaviours included: risk taking, effectiveness, autonomy, collegiality and honour. Collaboration, an element of action learning, was the key to developing these behaviours (Meredith, 2000).

There was much evidence to suggest that partnerships enhanced the results of action research. Collaborative action research was defined by Ross, Rolheiser and Hogaboam-Gray, 1999, as systemic inquiry into teacher practice that was conducted by a team of teachers and university researchers working as equal partners. Partnerships alleviated the time pressures and lack of research experience that teachers often contended with while frequently providing teachers with respect from adults outside their own school setting thus increasing their sense of efficacy. Teachers and university researchers could co-create their own reality through participation, experience, action and a set of social values. Action research honoured teacher professionalism (Auger and Wilderman, 2000; Evans, Lomax, and Morgan, 2000; Ross, Rolheiser, and Hogaboam-Gray, 1999; Sax and Fisher, 2001).

**Research Objectives**

The objectives of the study were: to describe a series of case studies in which participants identified their significant experiences associated with the action learning cycle encountered in a pedagogical renewal programme; and to analyse contextual factors associated with participant defined successful outcomes in the pedagogical renewal programme.

**Methodology**

The researcher was the QTP District Leader Facilitator and encouraged participants to voluntarily write case studies, to reflect and document highs, lows and notable experiences of their learning and to capture what had
happened during the first year of the programme. It was believed that failure to do this would result in forgotten, evaporated learning and that even a humble beginning was valuable.

The researcher facilitated meetings with project coordinators to develop the case studies over a year, at the end of which time sixteen case studies were collected. A purposive sample was chosen to be the data used in this research. Consideration was not given to the perceived success of the project or the distribution between school types, although an even distribution between high school, primary school and multiple schools did eventuate. All perceptions of reality were valued. Emphasis was given to honest reflection. The Norms of the Australian National Schools Network were standard procedure for meetings facilitated by the researcher. The use of these Norms was compatible with the phenomenographic approach in that judgement was suspended, full and active participation encouraged without the fear of put downs or reprisals. In this supportive environment participants reflected deeply and produced written accounts indicative of their true perceptions of their action learning experiences in the Quality Teacher Programme. However for the purpose of analysis, consistency and credibility three selection criteria were established to select cases for inclusion in the research:

1. Narrative: It had to be written in WORD. One case study was a mind map constructed in Inspiration 6.0 and was therefore eliminated as comparative analysis would have been difficult.

2. Constructed as a result of conferencing with peers according to consistent guidelines: Several participants were absent during the Exhibition Protocol and/or the preliminary conferencing yet still submitted case studies. For district purposes this was acceptable but for research purposes these studies were excluded.

3. The result of a group of teachers actively engaging in the pedagogical renewal programme in 2001: Significant changes in the administration of one school meant that one group of teachers were not aware that they were involved in a QTP project. The school had a second project for 2002. It was considered valuable to reflect and document what had happened in 2001 to inform the direction of the second project. While a valuable experience, this was inconsistent with research procedures and this case study was excluded from the purposive sample.

**Data Analysis**

Bracketing of the researcher’s pre-conceived ideas was essential to good phenomenographic research. The researcher wrote a list of procedures to follow during the first level of data analysis which would encourage objectivity focusing on the reported experiences of participants. This method for interacting with the case studies focused on answering the following five questions:

1. What am I being told?
2. What am I not being told?
3. What motifs emerge? (What are the frequencies of usage of key words/phrases?)
4. Of what I am told, what successes are identified?
5. Of what I am told, what are the contextual factors?

The researcher enlisted the support of the assistant early in the data analysis process to allow maximum time for the assistant to fit the extra work into her schedule. The researcher briefly explained the context of the research including phenomenography, bracketing and procedures for data analysis. The researcher gave the assistant a copy of notes on phenomenography, the same guidelines that the researcher was using to guide the first level of data analysis, an example of a case study and the researcher’s analysis of the data in terms of “What am I being told?” and “Of what I am told, what successes are identified?” and two other case studies with identifying features obscured. The researcher asked the assistant to analyse the data in these two case studies in terms of the two sample questions. The results between the researcher and the assistant were similar. The researcher tended to be more succinct in the identification of categories and follow the structure of the original case. The assistant tended to list several key features which all fitted within the one category the researcher had identified and to summarise the case without following its structure. Consistency was established as both the researcher and the assistant identified categories depicting the same concepts after using the same instructions.
Results

The third aspect of phenomenographic research was concerned with the what and how of learning and enabled significant experiences and contextual factors to be synthesised. Analysis of the case studies in this research, at the experiential level, identified 57 themes, which were then grouped into eight overarching categories of significant experiences. Analysis of contextual factors associated with teacher professional development identified the relationships between conceptions and phenomena. The outcomes of this level of analysis identified that the contextual factors associated with teachers’ learning coincided with and elaborated on the experiential categories of organisation, environment, resources and collaboration.

Further analysis and synthesis allowed the eight overarching categories to be further grouped into the significant elements of teachers’ professional growth. The five main elements are context, collaboration, process, endurance and professional growth and represented in Figure 1 below.

Figure 1: A framework for improving teaching and learning through action learning

Context included environment, organisation and resources and was foundational to the what and how of teacher learning. Teachers identified that change at the contextual level was essential if teacher professional growth was to be sustained. Many professional development initiatives focused only on teachers and ignored the context in which they worked. The outcomes of this research supported the systems view that it was essential to consider the context in which the event occurred, not merely the event (Bowden, 1988; Senge, 1990).

Collaboration was identified as a contextual factor in achieving teachers’ learning. In this framework it was recognised as a significant element in producing teacher professional growth. Although it could be categorised as contextually significant, collaboration was so vital to achieving professional growth that it was identified as the conduit through which professional growth flowed. The learning organisation model of teaching recognised the significance of collaboration in the ongoing process of learning. Collaboration was the vital link between the contextual working conditions of teachers and the process of learning (Dufour, 1997; Fullan, 2001; Middleton and Hill, 1996; O’Sullivan, 1997; Senge, 1990). This research illustrated that the industrial model of teaching in which teachers worked alone was ineffective and could not produce the type of student outcomes required for participation in the society of the 21st Century.

Process included the content and process of learning and was essential to the what and how of learning. Content and process were inextricably linked. Learning did not occur without content, neither could it occur in a vacuum without a process (Marton and Ramsden, 1988). Participants in this research engaged in the action learning process as this was seen as the most effective mechanism for achieving transference of teachers’ learning into classroom implementation and experimentation. For participants in this study action learning was itself, not only the process but in some respects an aspect of the content of professional development. It took time for teachers to acquire the skills and understandings required to engage effectively in action learning. This was consistent with the review of the literature. Action learning often began with a hazy start, while teachers found the focus of their inquiry.

Teachers’ inquiry involved content. Reflection on adaptation and application of educational research at the classroom level demanded the input of content. Frequently collaboration and association with outside experts assisted the facilitation of teachers’ acquisition of content (Auger and Wilderman, 2000; Evans, Lomax,
While some of the project groups in this research had links to outside expertise the projects were initiated and driven by participants within the schools who then actively sought the involvement of outside expertise. This research, which focused on teachers’ experiences in the Quality Teacher Programme and its sample of self-directing participants, differed from examples in the literature.

Action learning was repetitive, iterative and cyclical. Continual application of action learning in this research fostered endurance. Endurance was identified as a significant experience of participants and a significant element leading to teacher professional growth. Other factors also promoted or hindered endurance and initial analysis of the case studies identified twelve themes relating to endurance. This was the greatest frequency of themes relating to a category in this study. Interestingly significantly more negative examples of participants’ experiences emerged from the category of endurance. For example, both commitment and lack of commitment were identified as themes in this category. Endurance connoted perseverance, continual application in the face of obstacles. Struggle and challenge were inherent in the concept of endurance. The application of endurance to overcome obstacles encountered in the context, content or process of the learning journey was identified as a significant experience leading to professional growth.

Professional Growth was evidenced by change at the classroom level in both a change in teachers’ pedagogy and student outcomes. The category of learning and teaching was identified as a significant experience of participants in the Quality Teacher Programme. Themes of student learning outcomes, curriculum improvement, assessment and impact on student behaviour were associated with this category. While the effectiveness of teacher professional development should be evaluated by the evidence of change at the classroom level, historically teacher professional development programmes rarely produced change at the classroom level. Instead teacher professional development was measured mainly in the affective domain of teacher attitudes and values (Fullan, 2001; Reynolds and Clark, 1982).

**Conclusion**

Teaching and learning could be improved when teachers engaged in action research. For this to occur, adherence to the framework for improving teaching and learning through action learning was recommended. The context in which teachers worked must be supportive of this form of professional development. Suitable times and locations for group meetings, effective administrative procedures, project management and adequate financial, time and human resourcing were essential to ensuring a context conducive to improving teaching and learning. Collaboration with peers and experts enhanced the outcomes of action learning. The process involved input of learning new knowledge, skills or approaches and practice allowing for transfer of learning and improvement of practice through action learning. Teachers were busy, schools were complex and changes were frequent. It was essential that teachers engaged in action learning develop the capacity to endure until they had achieved their goal. When teachers had ownership and continuity of their learning and commitment to the action learning project, they were more likely to demonstrate endurance that resulted in improved teaching and learning. Professional growth was evidenced not only by teachers commenting that they enjoyed the experience, but by evidence of improved practice and student learning outcomes.
References


