Action Learning:

What Works?

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Contents

Executive summary

Abstract

An evaluation of the Australian Government Quality Teaching Program (AGQTP) activity coordinated by the NSW Department of Education and Training (DET) was conducted by a collaborative research team from the University of Technology, Sydney and the University of Wollongong. The evaluation brief was to investigate the conditions which influence teachers' implementation of an inquiry-based approach to changing teaching practice. The projects investigated involved 82 NSW government schools participating in 50 projects that successfully tendered for grants to implement school-based and school-driven action learning within the Quality Teaching in NSW Public Schools framework. Using school project self-reports, analysis of journals and case studies, the evaluation found that action learning promoted collaboration, produced action, fostered reflection, facilitated ongoing change, cultivated quality teaching, stimulated changes to practice, enhanced the achievement of school learning outcomes, and advanced teacher understanding, concern and utilisation. Factors that expedited and constrained the action learning are identified, the broad findings are reported and recommendations are provided.

Action learning

Action learning is concerned with improvement and change. Schmuck (1998, 28) provides a description which could be applied to action learning: "(the) study (of) a real school situation with a view to improving the quality of action and results within it. It aims also to improve one's professional judgment and to give insight into how better to achieve desirable educational goals. … (It) offers a means for changing from current practice toward better practice."

The focus on improving action and providing answers to significant questions is expressed succinctly by the more recent picture Yates (2004, 173) provides of what good practitioner inquiry looks like: 'it … provides a "way of seeing" or an approach to, or a guide to action on, or answers about "something that matters".'

There are several noteworthy characteristics of action learning:
- It is applied so that the practitioner uses the investigation as a methodology to gain understanding about how to improve practice.
- It is often both subjective and objective: it may involve self-reflective inquiry and inquiry-oriented practice directed towards obtaining meaningful data.
- It most typically occurs in school-based teams and involves dialogue with significant others about the nature of practice and the process of learning.
- It operates through cycles of reflecting, planning, acting, data collecting, analysing, reflecting again, re-planning, and so on. (Dick, 1997; Schmuck, 1998)

Quality Teaching framework

The NSW Quality Teaching framework (NSW DET, 2003) incorporates the NSW model of pedagogy. The 18 elements of the NSW model of pedagogy may be applied to all learning areas and all stages. These elements are incorporated into three dimensions relating to classroom practice:
- *Intellectual quality,* involving deep understanding of important skills and concepts; and a view of learning as actively constructed and requiring higher-

order thinking and the ability to communicate understandings. The elements of this dimension are: deep knowledge, deep understanding, problematic knowledge, higher-order thinking, metalanguage and substantive communication.

- *Quality learning environments,* involving productive learning environments focused on learning, positive relationships and clear expectations between teachers and students. The elements of this dimension are: explicit quality criteria, engagement, high expectations, social support, students' self-regulation and student direction.
- *Significance,* involving meaningful learning that connects learning to prior experience, multiple perspectives and contexts beyond the classroom. The elements of this dimension are: background knowledge, cultural knowledge, knowledge integration, inclusivity, connectedness and narrative.

The NSW model of pedagogy has been widely adopted in NSW as a model for teachers to focus their discussion and reflect on practice. While the teaching of outcomes remains the priority, teachers also target some or all of the 18 elements. For instance, in Science, teachers may focus on teaching the problematic nature of knowledge. In other learning areas, deep understanding and connectedness might be a priority.

The study

The study is an evaluation conducted by a collaborative research team from the University of Technology, Sydney and the University of Wollongong of the AGQTP coordinated by the NSW DET. The evaluation brief was to determine the conditions for a year-long project (2004-2005) involving 82 NSW state schools that successfully tendered for 50 project grants to implement school-based and school-driven action learning within the Quality Teaching in NSW Public Schools framework. In tendering for the grants, schools were required to nominate an academic partner to assist in formulating and guiding the learning project. Progress was monitored through the provision of mandatory progress reports, and supported by three conferences in September 2004 and April 2005.

The nature of the projects was highly variable. For example, the following are brief overviews of the projects of some of the case schools:

- A highly multicultural secondary school working with three of the local 'feeder' primary schools to strengthen learning through a literacy focus in English, Science and PD/H/PE. The team focused specifically on the elements of deep knowledge and deep understanding in the quality teaching dimension of intellectual quality.
- A secondary college focusing on developing quality teaching and learning strategies to cater for the needs of two students with profound deafness. However, the action learning involved in achieving this purpose provided a far-reaching consideration of pedagogy beyond the scope originally envisaged.
- A primary school focusing on integrating ICT in teaching and learning; improving ICT skills through engagement with the quality teaching framework; and developing cooperative programming. The project was designed around the contribution of a specialist ICT teacher who worked with regular classroom teachers.

- An SSP school for children with moderate to severe intellectual disabilities in which three separate teams were applying the quality teaching framework to targeted programs in the special education context.

Method

Data were collected in four ways:

- All 82 schools participating in the 50 projects were required to complete a survey in September 2004 at the Quality Teaching Action Learning Planning Conference. Clusters of questions elicited responses about school commitment, project development, the role of the academic partner, prior school initiatives in the project area, and facilitating and hindering factors in program design. Response options comprised a five-point Likert scale with bi-polar verbal designations ('a little' to 'a lot').
- Nine schools were purposively selected for case study analysis. They included primary, secondary and a special school from city and rural areas. Focus groups were conducted in each of the schools on two separate occasions in February 2005 (at the stage of project consolidation) and July 2005 (towards project completion). The focus groups targeted project team members who varied in number from a few to a majority of staff, and non-team members to ascertain the impact of the project in the school
- Project team members in the nine case schools completed mini-journals at strategic times throughout the project. The three dimensions utilised in the journals included 'Stages of Concern' (Hall and Loucks, 1979), comprising stages of awareness, informational, personal. management, consequence, collaboration and refocussing; 'Hierarchy of Understanding'' (Dlamini et al, 2001), comprising awareness, perception, utilisation, personalisation and production; and 'Typology of Utilisation' (Dlamini et al, 2001), comprising drop-out, struggler, domesticator, succeeder and innovator.
- Documents from the nine case schools were analysed. These included the original successful project tenders, project reports including the final report submitted to DET, minutes of team meetings, and resources and support materials produced as part of the project.

Findings

The following outcomes of the inquiry-based approach (action learning), combined with the NSW model of pedagogy, were identified. The Quality Teaching Action Learning (QTAL) initiative:

- *promoted collaboration, both within teams and between schools. There was overwhelming endorsement of shared planning and professional dialogue*

- *produced action in terms of achieving stated outcomes, and producing quality teaching resources*

- *fostered reflection as an automatic part of teaching practice, and fostered an increased recognition of the need to gather evidence to authenticate that reflection*

- *facilitated ongoing change involving the continued use of the action-reflection cycle, and the embedding of projects in 'the school culture'*

- *cultivated quality teaching through an enhanced understanding of the quality teaching framework*

- *stimulated changes to practice, notably in relation to the increased use of teaching strategies and resources, and the willingness to 'take risks'*

- *enhanced achievement of student learning outcomes, particularly when those outcomes focused on specific units of work rather than on pedagogy alone*

- *advanced teacher understanding, concern and utilisation.*

A profile emerged of teachers who, while they maintain their initial concern with mastering the processes of action learning, are also concerned with extending and adapting those processes to their project, and who increasingly discern ways of applying the new learning in innovative ways to their own teaching.

Conditions which expedited the implementation of the inquiry-based approach (QTAL) included:

- The availability of funding that bought some teacher release and enabled teachers to focus on their practice. This was typically mentioned as the single most important factor.
- The building of a community or a culture of collaboration within teams, within schools or among schools in cluster projects. This was made possible by the release from face-to-face teaching.
- The development of a focus or setting of a goal in tendering for the project, and the maintaining of that goal or its adaptation to achieve more realistic goals. Changing focus was not a limitation and tended to be generated by the action learning process itself. In fact in some cases, an inflexible adherence to a particular goal proved to be frustrating. Conversely, there were cases of overly narrow goal setting that did not enable teachers to address the quality teaching elements in depth.
- The contribution of academic partners. While a small number of schools (five) were critical of their academic partners for lack of contact, overall the value of partners was commended for their challenging of ideas and structures, their aligning of evidence with the quality teaching elements, their recommendation of appropriate resources, their attendance at the planning conferences with school teams, and their reassurances that change is an acceptable part of the action learning cycle.
- The responsibility that teachers were required to take for their own professional learning. This was regarded as a strength by all schools, and is typified by the reporting of one primary school: '…it allowed for individual teacher needs, and was driven by the individuals involved. It enabled teachers to be actively involved in their own learning and it wasn't something done to them but rather something they had ownership of and could control'.
- The value of prior experience of action learning. The three school teams that reported prior experience, attributed the successful outcomes of the project to familiarity with the model.
- The structure provided by the Quality Teaching framework. It is impossible to attribute the success of the QTAL projects to either action learning or the Quality Teaching framework. Offered separately to schools, either may have produced significant professional learning. However, in this project they were

mutually supportive. The factors that contributed to action learning as a process of school change are inextricably linked to the nature of the NSW model of pedagogy.

- Peer observation, when perceived by teachers as a 'developmental' process, was associated with an openness and trust that promoted exchange of ideas and fostered professional learning.

Conditions which constrained the implementation of the inquiry-based approach (QTAL) included:

- The need for ongoing funding. While 12 school teams argued the need for additional funding for data collection and collaboration, there was disagreement as to whether funding should be centrally provided or obtained from existing school resources.
- The starting time of the projects. The QTAL projects operated for three terms. They began in term 4, and as a result there were significant losses of staff from school teams at the end of the year. Twelve school teams reported this as disruptive.
- The lack of whole school support. The project was impeded when it did not have the support of school staff, and when there was inadequate sharing or poor communication with non-team school staff.
- Peer observation had been an intended strategy of many projects, yet most teams had postponed this. When perceived by teachers as a 'judgemental' process, this inhibited participation and limited professional learning.

Recommendations

Main recommendation

That the NSW DET continue to support and expand action learning in NSW schools.

Recommendation 1:
That schools be required to demonstrate need and prior work in the field for which action learning projects are proposed.

Recommendation 2:
2.1   That in the application process schools be encouraged to consult with others about goals.
2.2   That projects be designed and assessed on the basis of having clear, achievable goals.

Recommendation 3:
That applications require schools leaders to demonstrate sufficient support and commitment to the project.

Recommendation 4:
That applications need to demonstrate leadership capability and potential of the designated project leader(s).

Recommendation 5:
That schools give careful consideration to the composition and size of their action learning teams.

Recommendation 6:
6.1   That schools focus on the implementation of the project: start small but start – focus on something that can be done and do it.
6.2   That school implementation teams include teachers involved in the development of the application.
6.3   That schools carefully consider the potential, optimum size of their projects and, in so doing, take into account the nature of their school community.

Recommendation 7:
7.1   That participants in the action learning projects communicate the progress of their action learning and seek feedback and input from all school staff.
7.2   That action learning projects begin with the willing.

Recommendation 8:
8.1   That the provision of academic partners be maintained.
8.2   That the selection of academic partners ensure that they are well matched to the project needs of their school.
8.3   That access of the school to the academic partner be flexible, depending on needs and progress of the project rather than a fixed schedule.
8.4   That the project brief be thoroughly negotiated between academic partner and school.

Recommendation 9:
That the NSW DET promotes the use of project funds for teacher release time in action learning and encourage recognition of its benefits.

Recommendation 10:
That provision to communicate and celebrate projects be made available at school and systemic levels.

Recommendation 11:
That there is benefit in providing a framework (such as QTM) but schools should not merely adopt it, but seek ways to adapt it or use it selectively to meet their needs.

Recommendation 12:
12.1 That schools plan ways to continue and sustain action learning beyond the life of the project.
12.2 That schools plan ways to continue and sustain the focus of the project (e.g. literacy) beyond the life of the project.
12.3 That NSW DET continue to fund selected action learning projects from this and subsequent rounds.
12.4 That there be greater flexibility in the funding duration of school projects and the times for application (e.g. two rounds per year and allowing projects to extend over two years or more).

Recommendation 13:
That schools provide opportunities for and recognition of collaboration and shared leadership.

Recommendation 14:
14.1 That NSW DET commission research to ascertain student outcomes from action learning projects.

14.2   That schools ascertain student outcomes from action learning projects.

Recommendation 15:
15.1   That NSW DET disseminate information about projects.
15.2   That schools take initiatives to share project processes and outcomes within and beyond the school.
15.3   That NSW DET actively publicly acknowledge school teams and individuals.

Recommendation 16:
16.1   That NSW DET continue to fund sharing conferences.
16.2   That NSW DET convene a sharing conference at the conclusion of the projects to celebrate and disseminate project achievements.

Recommendation 17:
That projects begin towards the start of the school year.

Recommendation 18:
18.1   That peer observation and/or direct sharing of classroom experience be encouraged gently, among well informed participants, conducted with sensitivity, and initiated by and among trusting colleagues – but not imposed.
18.2   That teachers who have participated in these practices be encouraged to share the positive and negative aspects of the process.
18.3   That future research case studies of QTAL, should they occur, select samples to ensure a representation of alternative practices to gather evidence about teaching (including peer observation) to inform professional dialogue.

Conclusion

The Quality Teaching Action Learning project was a highly effective way of developing inquiry-based projects and promoting teacher professional learning. A range of conditions facilitated and/or constrained teachers' implementation of the QTAL approach to changing teaching practice**.**

Introduction

This report is an evaluation conducted by a collaborative research team from the University of Technology, Sydney and the University of Wollongong of the Australian Government Quality Teaching Program (AGQTP), coordinated by the NSW Department of Education and Training (DET). The evaluation brief was to investigate the conditions which influence teachers' implementation of an inquiry-based approach to the changing teaching practices of 50 year-long projects involving approximately 80 NSW state schools that successfully tendered for grants to investigate school-based and school-driven action learning research within the *Quality Teaching in NSW Public Schools* framework.

The evaluation team regards action learning as a process through which people come together either spontaneously or by design to learn from each other and share their experience. While this has happened in the past, usually on an *ad hoc* basis, we tend to think of action learning as involving a team of people addressing a common task or problem. There may or may not be a 'coach', critical friend, mentor or facilitator, although this is increasingly the case.

Action learning is closely related to action research, which tends to be a more formal, structured approach to learning and problem solving. Action learning has tended to be used more often in the corporate world, while action research has been more commonly used in education and community settings. Increasingly, however, the two terms are used interchangeably. A related term is that of experiential learning which, as above, can be *ad hoc* or more formal, with some form of external facilitation.

In action learning, action research and experiential learning, a key aspect is that of a cycle of action and reflection. If improvement is desired, then the cycle tends to repeat, i.e., action-reflection-review-action, and so forth (see Dick, 1997, *Action learning and action research*, www.scu.edu.au/schools/gcm/ar/arp/actlearn.html). Each step informs following steps and, hopefully, an upward cycle of improvement is set in motion.

Action learning provides an appropriate and sustainable way of building the capacity of schools to improve practice. It is improvement-oriented, is interactive, uses multiple methods and is characterised by validity, viewed as constructing, testing, sharing and retesting exemplars of teaching (LaBoskey, 2004). Some of the advantages of action learning are those of inclusiveness, flexibility, respect for the knowledge and experience of participants, involvement, collegiality, empowerment and ownership. Challenges include building the capacity of schools to support action learning, maintaining commitment, developing effective leadership, creating productive partnerships with mentors (where they are involved); and extending participation from small teams of key personnel to a whole-school engagement with professional learning.

This evaluation addresses the above concerns. The model of pedagogy contained in the *Quality Teaching in NSW Public Schools* discussion document has provided an important rubric and framework for action learning around pedagogy in schools.

The model has been designed to be used by principals, school executive and teachers 'to lead and focus the work of the school community on improving teaching practice

and hence student learning outcomes' (*Quality Teaching in NSW Public Schools*, 2003, p. 3). The model has been designed to be an aid and framework for reflection, action and evaluation and includes three dimensions of pedagogy (p. 5):

- pedagogy that is fundamentally based on promoting high levels of ***intellectual quality***
- pedagogy that is soundly based on promoting a ***quality learning environment***
- pedagogy that develops and makes explicit to students the ***significance*** of their work

Intellectual quality is comprised of the following elements: deep knowledge, deep understanding, problematic knowledge, higher-order thinking, metalanguage and substantive communication.

Quality learning environment is comprised of the following elements: explicit quality criteria, engagement, high expectations, social support, students' self-regulation and student direction.

Significance is comprised of the following elements: background knowledge, cultural knowledge, knowledge integration, inclusivity, connectedness and narrative (p. 9).

The elements of the model are elaborated on pp. 10–15 of *Quality Teaching in NSW Public Schools.*

Method

The evaluation progressed through six phases.

Phase 1. Planning and Design. August 2004 – September 2004

- Planning, liaison with DET

- UTS Ethics Clearance application

- Design of instruments and protocols: questionnaires, focus groups, mini-journals

- Recruitment and training of research assistants.

Phase 2. Preliminary Research. September 2004 – December 2004.

- Collection of ethnographic data from all participating schools by questionnaire completed at the Quality Teaching Action Learning Planning Conference (data gathered re personal and demographic detail, professional background, understanding of action learning, degree of participation in project design, commitment to project, perception of overall staff commitment)

- Analysis of successful proposals of participating schools (focusing on project design, risks and assumptions)

- Selection of nine case study schools

- Analysis of first progress reports from participating schools.

Phase 3. Initial Case Study Research. January 2005 – March 2005.

- First visit to nine case study schools to conduct focus groups (participating school teams; and non-team members in participating schools)

- Collection of initial mini-journals from team members within nominated case study schools. The mini-journal (see Appendix 3) records reflections of engagement in professional learning

- Analysis of school documents relevant to the investigation (policies, records of procedure, minutes of team meetings).

Phase 4. Mid-Term Review. April 2005 – May 2005.

- Research team sharing/processing of aggregated data

- Analysis of second progress reports from participating schools

- Collection of data (field notes) at the DET mid-project conference.

Phase 5. Final Case Study Research. June 2005 – July 2005.

- Second visit to nine case study schools to conduct focus groups (participating school teams; and non-team members within participating schools)

- Collection of further mini-journals

- Writing of case studies and research team sharing of common findings/insights

- Analysis of final progress reports from participating schools

- Examination of all school documents relating to the conduct of the research.

Phase 6. Validation and Analysis. August 2005 – October 2005.

- Content analysis of action learning project reports
- Writing of final evaluation report
- Final report submission.

<center>**Results and Discussion**</center>

There was great consistency in the findings from the various data sources. This Results section reports and discusses analysis of data from selected data sources in the following order:

1. Content analysis of Schools' Quality Teaching Action Learning progress and final self-reports and participant survey data
2. Nine school case studies – first, cumulated data from mini-journals is reported, followed by extended case reports of each of the nine case study schools
3. Key findings and recommendations are outlined.

Schools' Quality Teaching Action Learning progress and final reports

> *This project has impacted significantly on teacher professional learning and practice in four school communities. Most importantly, it therefore impacts significantly on the achievement of student learning outcomes. Perhaps this is best summed up by one of the participants, a teacher with twelve years experience who said: 'Nothing has changed the way I teach and my understanding of teaching practice as significantly as this project.'*

> (extract from a school cluster final report)

This section reports an analysis of the progress and final reports submitted by participants in the AGQTP Quality Teaching Action Learning project. In particular it examines the extent to which various forms of support enable teachers to:

- develop their professional knowledge and understanding through action learning
- understand the potential of action learning for professional development and whole-school change
- build their capacity to use an inquiry-based approach to teaching and learning
- enhance learning experiences for students.

The contribution of this analysis is to provide a vista across outcomes over the full range of projects, which included 50 project teams from a wide variety of school contexts, and encompassed projects as diverse as incorporating philosophy into early primary teaching to integrating information technologies across secondary Key Learning Areas.

The Quality Teaching Action Learning project ran from the beginning of Term 4, 2004 to the end of Term 2 in 2005. Project teams were asked to submit 3 reports, in December 2004, April 2005 and June 2005. Reports used a scaffold developed by the management team. The questions varied slightly between the first and second progress report and final report but each report addressed:

- Project details
- School context
- Collection and analysis of evidence
- Professional learning and changes in practice
- Role of the academic partner
- Role of the project manager
- Adherence to timeline
- Resource development

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- Conclusions
- Other comments.

The conclusion included answers to the questions:

- What is working well and needs to be sustained?
- What needs refining and building to strengthen teachers' professional learning?
- What are the next stages in the learning process?
- If you were you to undertake a similar project again, what, if anything would you do differently?

Responses to the above questions taken from the three reports form the basis of the following analysis.

Method of report/analysis

The analysis used here is consistent with typical qualitative content analysis techniques (Lincoln & Guba, 1985). At each stage – progress 1, 2 or final report stage – the reports were read and summarised. Recurrent themes were identified and trends were recorded.

The first set of progress reports from all schools was analysed in May 2004. Following this analysis a research report was prepared that examined the progress of all teams in implementing their projects in relation to contextual and organisational factors, namely:

- School size
- School type
- School location
- Team composition
- Team organization
- Topic of focus.

The findings from this study of the first set of progress reports indicated that progress up to December 2004 (about 8 to 10 weeks into the project) was not consistently associated with any of these factors. This informed analysis of the subsequent reports. In particular, this initial research report demonstrated a need for a broad view of what it means to be 'successful' in an action learning project, as success needed to be measured in ways other than merely determining whether aims, stated *a priori*, were achieved. In a process of action learning the pathway that is most productive is not always that which is defined in the planning phase, and the impact of the project on the school-based teams was not always evident in an assessment of the extent to which they had achieved their stated goals.

In the analysis of the final report three broad outcomes were used to group projects to provide categories for interpretive comparisons:

- Progress in achievement of stated goals
- Degree of incorporation of Quality Teaching
- Impact of the action learning project.

Final reports were rated against each of these indicators and categorised into one of the following groups:

Group 1.
Low rating on above indicators. Project teams in this group had indicated little progress in achieving the set outcomes; there was limited evidence of learning in relation to quality teaching and the project had only slight impact on the schools involved. Eight projects were placed in this group.

Group 2.
Mixed ratings on the indicators. In this group a project team may have been delayed in reaching the goals set but either the impact of the action learning process was great, or the school was able to show evidence of deep understanding of Quality Teaching. Fifteen projects were placed in group 2.

Group 3.
High rating on all indicators. Twenty-two teams presented evidence that they had achieved the project goals, had developed an understanding of Quality Teaching and had carried out a cycle of action learning that impacted on professional learning.

Final reports were scanned for consistent trends and themes. Once recurrent themes were identified, a list of assertions was generated and projects were mapped against each assertion. For example, a list of contributions made by the academic partner was created, and reports that supported each assertion were recorded. Tables were generated for project outcomes, strengths of the project, weaknesses of the project, contributions of the academic partner and limitations of the academic partner. The results of this analysis are shown in Appendix 1.

Reports from project teams were then combined to elucidate the 'story' of the project as a whole. Three stories from the sample are used to illustrate obstacles encountered, and how these were overcome. From the combination of tables and stories, a picture emerges of the influences that are associated with productive, professional learning.

Limitations

Some limitations of this process are worth noting. The analysis depends on what is written in the report, and this varied between projects. Teams were asked to provide evidence, and much of this was attached as an appendix to the report. It was not possible to cross check all of this material against claims made in the body of the report, and thus the project team's own estimation of what worked and what did not work has been accepted as valid. No attempt has been made to judge whether a school achieved more or less than it claimed.

It is noteworthy that there was great variation in how much evidence was offered within each report. Some teams included scanned work samples, tables and quotes from reflective journals, while others presented a few lines in summary.

All indications are that the reporting tended to undervalue the achievements with teachers setting high expectations and recording disappointment and dissatisfaction when these were not always met.

In short, the conclusions drawn in this section are based on self-reports with varying levels of evidence and little opportunity to check data reported. On the other hand, the reports of the nine case study schools, where extensive checking of self-reported experiences and outcomes against other data sources was possible, indicate a consistency of findings across data sources. Thus, where triangulation has been

possible, it indicates that the school reports are trustworthy, though shallow in their description compared to in-depth case studies).

How does action learning contribute to professional learning with quality teaching?

Here the outcomes of the Quality Teaching Action Learning projects are examined and the ways in which action learning contributed to professional learning are discussed.

Collaboration

Increased collaboration and communication among teachers was reported as a desirable outcome of action learning projects by the majority of teams (30, 65%). This trend was evident from reports at all three stages. Many teams (28, 61%) reported the value of shared professional dialogue regarding teaching, often noticeable in staff rooms as a replacement for discussion about lesson content or student behaviour. Comments were often enthusiastic and illustrated the positive nature of the dialogue, for example:

> What worked was the real team work and collaboration within the executive and between staff members that has generated professional discussion and the ability to try new ways of doing things' (Kangaroo High School).

> (In) teacher reflection journals, all teachers were positive – 'professional dialogue was invaluable to the project, bouncing ideas off each other and learning from each other', 'working together to achieve result', 'student enthusiasm was evident', 'videotapes as well as buddy system was beneficial' (Bandicoot Public School).

> 'Teachers were able to celebrate their successes and were able to seek advice in a positive atmosphere' (Quoll High School).

A statement from the team at Echidna High School illustrates some of the advantages accruing from this increased collaboration and discussion:

> A definite positive change is team members' willingness and enjoyment of shared planning, shared teaching, shared reflection and shared informed future planning, that was resultant on their sustained team teaching activities throughout the project.

At Echidna High School collaboration occurred at the level of reflection on teaching practice, planning of lessons and the teaching of those lessons. While a number of reports also noted an increased confidence in being observed by their peers (11, 24%), or in shared teaching (5, 11%), there were variations in the extent to which teachers were willing to collaborate, particularly with regard to peer observation. Other reports mentioned the reluctance of staff to share their teaching. For example, the Wallaby Public School cluster project, reported:

> A number of staff noted that initially they were wary of being watched by other staff members when teaching, but later they became comfortable with it. A number of schools just spent time with reflection and planning but did not go to the lesson observation step. A significant development in all schools centred around the development of professional trust in colleagues, particularly for those teachers involved in lesson observations.

Positive outcomes of collaboration between schools were observed by the seven teams (15%) which were involved in cluster projects. For example, two project teams worked with feeder primary schools to improve literacy across the transition stage, and both reported on the value of shared development of units of work. Both schools emphasised the importance of time to engage in professional dialogue and shared planning. In the words of the team from Ironbark:

> This discussion allows for the development of a shared understanding and a common language, the 'cross-pollination' of ideas and strategies, and the development of trust and collegiality. It also ensures shared ownership of developed units and therefore minimizes the possibility of perceived failure or judgment of individuals.

The gains in confidence and sharing were not always restricted to those directly involved in the project. Eight teams noted an improvement in morale throughout the entire school, and this was attributed to increased confidence, trust and respect between staff, resulting from increased collaboration, communication and sharing fostered by the Quality Teaching Action Learning project. Overall, the Quality Teaching Action Learning project was very successful in promoting a collegial culture that impacted positively on professional learning.

Action
Owing to the diverse nature of the projects undertaken it is difficult to summarise the outcomes that resulted from the 'action' stage of the action learning. The production of resources is perhaps a poor indicator but it is one outcome often reported by schools. In many cases (24, 52%) resources were developed as a tangible outcome. These took many forms, including units incorporating Quality Teaching elements, coding pro-forma for peer observation, videotapes of exemplary teaching, and staff development kits, to name but a few. The following example from one school illustrates the interaction of such 'curriculum' outcomes with other outcomes from the project.

Quoll High School reports that an outcome of successful team building was:
> … extensive teacher learning and teacher growth in risk taking and in confidence. Teachers who felt very hesitant about ICT in the classroom have developed new programs, which they are trialling, incorporating ICT and QT principles… These teachers have learnt new skills with the technology, and are using a greater range of resources.

The report states 'teachers were engaging with the Quality Teaching Dimensions and Elements in a meaningful and practical way.' This report then lists a wide variety of individual teacher 'actions' implemented at Quoll High School as part of this project.

In general, schools were successful in meeting their stated goals and were able to provide evidence that an action or intervention related to their topic of focus had been undertaken. Table 4 gives an indication of the range of fields (including curriculum, pedagogical, leadership and student needs) fields in which action was implemented.

Reflection
Increased reflection on their own teaching was reported as an outcome by 25 (54%) teams. One of the tools for action learning offered by the Quality Teaching Action

Learning management team was the reflective journal, and many reports cited these as evidence of teacher professional development. There was also evidence that participants in the project have found that reflection on teaching practice had become an automatic and normal part of their teaching process. As noted by the team at Goanna Public School:

> Through action learning there has been an increased focus on and opportunity for reflection on practice. It has been a valuable and intensive process through which teachers have developed habits of reflective practice.

An increased recognition of the importance of evidence gathering to enhance the depth of reflection was also reported by five teams. The Koala project team commented on the difference between 'debriefing' and a deep form of reflection that allowed experience to be transferred from one situation to another. For them:

> The use of data as a predictive and planning tool has increased in depth as the year has gone on. It has extended from identifying that 'yes there is a problem to be addressed' to 'what does the problem mean and where do we need to make an intervention'.

The implementation of a structured data gathering cycle like that offered by Quality Teaching Action Learning assisted project teams to go beyond their previous habit of staff room 'chat' and engage in meaningful analysis of their teaching.

The finding from this analysis of the Quality Teaching Action Learning reports is that increased reflection on teaching practice, both individually and collegially, was a feature of the project.

Ongoing change

The action learning process involves action and reflection, and when improvement is desired the cycle tends to be repeated (Dick, 1997). One outcome of the Quality Teaching Action Learning project was that 25 (54%) project teams were intending to adopt the action learning process as part of the professional development program in their school(s). Some comments made in reports were:

> The project will no longer be called a project but will become part of our school culture (Red Gum Public School).

> It is anticipated that with further practice the planning, reflecting and teaching skills developed through the project will become an automatic part of the teaching-learning cycle (Numbat Public School).

> As a strategy for school change it has been a slow process but will be ongoing and should have a wider impact over time (Brolga High School).

The benefits of adopting action learning as part of each teacher's professional development are illustrated by a comment from one of several schools where new teachers had joined the project after the initial planning and trial stage. At this school:

> The teachers involved in the first phase of the project received the most benefits, as they were able to generate ideas, test these ideas and then regenerate ideas that would improve their teaching and then share these experiences (Cockatoo High School).

The finding is that when teachers participated in the full cycle of action learning their understanding was deeper than that of teachers who joined the project in the latter stages, or who were 'in-serviced' by the project team.

Embedding Quality Teaching – Authentic engagement

The most commonly reported outcome of the Quality Teaching Action Learning project, explicitly listed by 37 (80%) teams, was the increased understanding of the Quality Teaching Model that resulted from an action learning project. In many cases this authentic engagement was compared with the superficial understanding offered by school development workshops or one-day meetings. For example, in the first report Wollemi Public School noted:

> In staff evaluations of Quality Teaching training, there was commonality of opinion that time limited the development of teaching resources and assessment tools. Therefore this project will provide collegiality and a practical avenue to develop these resources and expertise.

The project offered a range of 'practical avenues' for engaging with Quality Teaching. Through action learning, resulting in the increased collaboration, action and reflection already noted above, the teams were able to focus on the elements of the Quality Teaching Model. As noted by one team:

> Use of the quality teaching lesson plans and observation guides ensured there was a quality teaching focus. Use of these tools helped teachers engage with the quality teaching model and incorporate selected QT elements into their lessons (Blue Wren High School).

In all, 21 (46%) reports presented evidence of improved planning, with an integral focus on Quality Teaching elements. For ten teams, an increased understanding of Quality Teaching elements in relation to the focus topic allowed teachers to plan and implement programs with a Quality Teaching focus in other KLAs.

Changes to practice

A range of changes to practice was reported**.** To some extent the degree of impact of the project on practice depended on the topic of focus. One outcome reported by a number of teams (18, 39%) was an increased use of a variety of strategies in the classroom, and in many cases the word 'risk-taking' was used in this context. Teachers were willing to go beyond their 'comfort zone', for example, in teaching inclusive lessons for deaf students (Peppermint Grove Secondary College), or incorporating hands-on strategies for teaching science (Egret Public School). This trend toward student-centred teaching, reported by 15 (33%) teams, is illustrated by a comment from the team at Rainbow Finch Public School:

> Teachers are not focusing on quantity but rather on quality in planning and programming. There is far less reliance on busy work, with more focus on student engagement, relevance, connectedness and ownership, e.g. teaching 360 and 180 degrees by relating them to skateboarding and surfing.

A number of teams (13, 28%) made a deliberate effort to access student voice in their projects, by asking students for their opinion on quality teaching through surveys or interviews. In some cases changes were made in response to student feedback and students were given ownership of the learning. The following comment illustrates

how teachers changed their practice in a number of significant ways during a project on writing across stages 3 and 4. After the project, teachers were:

> … supporting the development of deep knowledge and metalanguage by using the teaching learning model to 'build the field' with students before expecting them to write, and providing writing tasks that require students to manipulate information and ideas (Blue Wren Public school).

Similar indicators of changed practice, including increased use of metalanguage (6, 13%), greater range of questioning (6, 13%) and a greater range and scrutiny of resources (6, 13%), were evident in other reports.

A number of teams (10, 22%) also noted an increase in teacher confidence in teaching a new content area, where this was the project focus. For example, the Egret Public school team reported:

> Staff have become more aware and have a greater understanding of science and technology and recent documentation. Teachers are more confident and willing to teach science and technology and the collaborative planning of units had increased … Staff generally enjoy teaching science and technology, as compared to not enjoying it earlier.

Similar gains in confidence were reported for a range of focus areas, including mathematics, writing and ICT.

Student outcomes

Depending on the topic of focus, some project teams observed outcomes at the student level. Increased student understanding of the unit/lesson content was reported by ten (22%) teams, and increased student engagement in the learning was listed as an outcome for seven (15%) projects. Learning outcomes were more evident when the topic of focus was a unit of work or a content area, rather than pedagogy. For example, the Echidna High School project team planned and implemented a unit on 'Values' and they were able to design an assessment task that indicated that significant learning had been achieved. An impact on student learning or engagement as a result of teacher professional learning would be difficult to measure after only three terms.

Six (13%) project teams indicated that students showed evidence of an increased ability to self-evaluate. These projects placed an emphasis on involving students in data gathering, using tools such as student reflective journals or surveys of student opinion of Quality Teaching. For example, at Blue Tongue Public School this evidence gathering came about because:

> Through participation in the action learning, teachers have been motivated to develop whole units of work encompassing the QT elements with far greater attention to student voice.

At this school:

> The evidence (both formal and informal) indicated that children had greater input into their learning, there were more hands-on activities and tasks that were relevant not only to their interest but to their world; there was more engagement in discussions and dialogue in the room that enhanced learning;

and children felt more motivated and generally had an improved level of responsibility for their own learning.

Some schools placed strong emphasis on student involvement as the topic of focus. For example, Shingle Back High School, where senior students gathered evidence of implementation of a rich task in the junior school, and Skink Public School, where the project was about 'inquiry-based learning'; student voice contributed significantly to the final report.

Summary of outcomes

A summary of the assertions relating to outcomes of the Quality Teaching Action Learning project is given in Appendix 1, Table 1. Overall, the broad outcomes that were observed were:

- Increased collaboration between teachers
- Increased reflection, both individual and collegial
- Authentic engagement with Quality Teaching
- Incorporation of Quality Teaching elements into classroom practice
- Increased student involvement in the learning
- Ongoing commitment to action learning for professional development.

Factors that contribute to or inhibit action learning as a means of professional development

The aim of this report is to determine what and how features of the Quality Teaching Action Learning project contributed to improvement, particularly with regard to teacher professional development. The purpose of the research study is to investigate the conditions which influence teachers' implementation of an inquiry-based approach to changing teaching practice.

The assertions that form the basis for the following discussion are summarized in Appendix 1, Tables 2 and 3.

Money buys time

The majority of project teams (25, 54%) reported that a significant strength of the Quality Teaching Action Learning project was that it provided funds that could then be used to release teachers from their busy schedule, allowing them time to focus on their practice. For example, the Toad team felt:

> The one significant thing that this grant gave us was time. Time to reflect, time to plan, time to develop assessment and time to gain knowledge of Quality Teaching.

This factor of time was often emphasized as being the single most important factor in the success of the Quality Teaching Action Learning projects. In the words of one team:

> Action learning funds enable us to purchase **time** for teachers to work together and improve their teaching. It makes ALL the difference. It is SO important in light of our overcrowded curriculum, ever-increasing demands on teacher time and increasing levels of accountability (Finch Public School [emphasis in original]).

Successful community building

Time was critically essential in facilitating professional learning. One of the main outcomes made possible by an increase in release from face-to-face teaching time was the building of community – within teams, within schools or among schools in cluster projects. Some comments that were made include:

> Action learning thrives in a high school setting through team teaching. The collaborative nature of action learning is lost when teaching is independent and only reflections, rather than experiences, are shared (Bearded Dragon).

> The collaborative approach was embraced enthusiastically by all, and it proved to be the catalyst for many other aspects of the project – such as peer mentoring, group planning sessions and collaborative classroom observations. Collaboration seems to have built a sense of team spirit at Cicada and this in turn led teachers to bond in a way they would not have experienced otherwise. The ability of staff from various schools to have time to meet, reflect and carry out stage based planning together has been one of the highlights of this project (Cicada).

These comments illustrate the enjoyment that teachers derived from their ability to work together, something that they felt they usually did not have time to do. This coming together then fostered new ideas and created a supportive atmosphere that encouraged the risk taking and shared learning that was evident in Quality Teaching Action Learning projects.

Thus, it can be argued that the collaboration that characterises action learning contributes, in a fundamental way, to its effectiveness as a means of professional development. The story of one project can be used to illustrate the often complex journey toward effective community.

Toad Public School is an example of a school that ultimately achieved a great deal, but felt that obstacles had been encountered which had to be overcome. One problem had been the breadth of the initial aims; another was that some teachers did not want to be included in the project. This team found the timelines difficult to adhere to, and often had the feeling that they were struggling. It was only when they reviewed the project that 'the evidence revealed just how far we have come in terms of quality teaching and how our practice has improved as a result of this project.'

One problem that this school faced was the opposition of teachers to peer review. The team reported:

> At first the timetable seemed threatening to staff, as there were concerns about being observed and videotaped. As the progression of the action learning unfolded, staff felt comfortable being observed by a partner and realised that the purpose was not to be judged and critiqued by a peer, but to further enhance professional development and understanding of the quality teacher elements.

Having overcome this obstacle of reluctance:

> The observations were seen as very positive. It was found that it was much easier for an observer to write down Quality Teaching elements that they had observed than for the teacher to try to reflect and try to remember them at the

end of a lesson. This built self-esteem and reiterated the fact that staff were displaying quality teaching elements in their practice that were not just the focus elements.

This team noted that even 'sharing and discussing [their] failures proved to be of a valuable nature'. The journey at this school makes the very important point about the nature of this project and action learning; that obstacles should be expected and that most professional growth occurs in overcoming them. Thus, there is a paradox: obstacles are good. Yet problems and obstacles are double-edged swords because they can also prevent progress. Nevertheless, those teams which reported that they had had to struggle were often, like Toad Public School, among the most, not the least successful in this study. As they remarked, 'It's not about ticking the box – it's the journey that matters and what you learn along the way.'

Keeping the focus: goal setting

The need to come together, apply for funds and develop a Quality Teaching Action Learning project gave the professional development a focus. The finding from the analysis of the reports is that this 'goal setting' had advantages and disadvantages. For some, the focus was a valuable way of organizing their learning. They could 'start small' and then transfer the process to other areas. For example, the incorporation of Quality Teaching elements into a unit on science led to transfer of the understandings gained to other KLAs at Toad Public School. However, others found that their initial goals were too broad, or in some way unattainable, and therefore they needed to change their focus during the project.

Changing focus was not disadvantageous, although the achievement of the stated aims was often delayed. For example, Red Back High School found that the Quality Teaching elements that they originally chose to work with did not challenge their learning, and since term 2, 2005 'teams have changed their focus and chosen elements that are challenging and more relevant to the teaching and learning they are using in their classrooms'. Following this change of direction, teachers began to exhibit 'confidence, competence, cooperation and flexibility'.

It is a strength of the action learning process that when the change of focus came from within, as in the case of Red Back High School, the outcomes in terms of professional learning were significant. This school is now very positive about action learning, noting that 'it has become embedded in their practice as a tool for planning and evaluating of programs, individual units and planning of lessons'. A similar consolidating of focus to suit the schools in the cluster proved beneficial at Cicada Public School, though it interfered with the timeline targets. On the other hand, a change in focus was also implemented at White Tail Public School, where, as a result of a clash of understanding with the academic partner, the team decided to work with Quality Teaching in mathematics rather than science. In this instance the change of focus resulted in considerable loss of enthusiasm for the project.

In some projects where the focus remained constant throughout, teams did not make the progress that they had expected. Some attributed this to setting goals that were too extensive. These teams reported that if they were to do a similar project again they would set more manageable goals, even though the learning was considerable. For example, Cockatoo Public School reported that their project had 'a huge impact on all students'. Rich assessment tasks were developed and it was reported that most teachers were open to other ideas and positive towards the teaching units and

assessment challenges developed. However, this team also believes that the plan was 'far too ambitious' and next time they would expect less to change as a result of the project. Similarly, the Blue Wren Public School cluster listed many gains in teacher practice across all of the schools, but still felt that if they were to do this again they would 'scale down the project to include fewer schools and fewer team members in order to make the project outcomes more achievable'.

In other cases the goals set by the team were sufficiently narrow that they appear to have inhibited a full appreciation of action learning or the Quality Teaching Model. For example, having as a focus the development of a unit, or integration of ICT, often did not require teachers to address the Quality Teaching elements in depth, or to engage in an action learning cycle. In these cases, the outcomes reported were often in gains in skills in using technology or the production of a unit rather than the fundamental change to pedagogy achieved through action learning that was enjoyed by other teams. For example, at Huntsman High School the focus was on developing a cross-KLA unit, 'Me and my place in the world'. This unit was presented in the report, although the team indicates that 'the next step is to ask the whole team to reflect on the process and to plan their teacher learning'. Possibly due to delays in getting the project underway, this school is still at the 'inaction' phase of an action learning cycle and while it reports that it has gained an awareness of 'what action learning is', and an awareness of 'how it is encompassed into classroom practice', the engagement with the process, and the feedback of learning into authentic engagement with Quality Teaching is less than in most school projects.

A similar situation was reported at Eagle High School, where the focus was on increasing integration of ICT into the school. This school also reports that the 'action phase is still proceeding', the outcomes are still at the level of awareness of what action learning is, and design is at the task level. There is little evidence of authentic engagement with Quality Teaching elements or action learning cycles of reflection and analysis. In the team's opinion:

> We did discuss at length early in the project how action learning can provide a more rigorous structure of planning, acting, observing and reflecting than is normal in day to day teaching practice. Because of the long planning phase of the project there is a sense that the other phases of the action learning cycle have received less focus, at the time of writing this report, and hence the benefits of action learning for school change may not be fully realised for all team members.

Dolphin Public School also reported a long list of activities and resources developed, and the focus was on generating these products. The delivery of products was equated to success and the school was happy with their output, but overall Quality Teaching and action learning appeared to have had little impact at this school. Neither Quality Teaching nor action learning is mentioned in the final sections of their report. The only comment made about action learning is 'the action learning process is a process that demands constant reflection and modification and fosters continuous improvement', which seems to have become a not uncommon mantra, yet there is no evidence that this school authentically engaged with this process.

In general, a feature common among schools that were deemed less successful (according to the criteria listed previously) was a lack of engagement with Quality Teaching and action learning and this reflected a seeming lack of commitment by the project teams or staff involved. The problem for some project teams appeared to be

not that action learning is incompatible with writing a unit or integrating ICT, but that these content-based or product-based initiatives distracted them from a focus on pedagogy and action learning, redirecting them to an often mechanistic designing of a program of work. It was only in later stages of report writing that the importance of action learning and the Quality Teaching Model assumed importance. The most outstanding example of this was the Magpie Public School cluster which reported:

> It would be good to align the final products (lessons and units of work) more directly with the Quality Teaching framework. This was attempted on the last day with the use of a one page sheet, but could be developed more coherently.

Blue Tongue Public School is a school where this 'traditional' approach to change through a focus on the content was overcome through the Quality Teaching Action Learning project. The project team became committed to action learning but:

> We found staff expected a 'product' as a result of our action learning and failed to recognize the importance of the process, and that the team became a resource in themselves.

The experience of Quoll High School, where the focus of the project was on technology, suggests that collaboration and leadership were important in regulating the focus:

> Having regular report back sessions not only kept the project focused but also meant we kept returning to QT issues and did not just focus on the technology.

Other teams (13, 28%) commented that one contribution of the academic partner was to maintain the focus of the project.

In summary, Quality Teaching Action Learning contributed a focus to the action learning which was valuable, provided that:

- teams were aware that generating a product was not the principal aim – it was the process that mattered
- the goals set were not too broad
- any change of focus was generated as a natural result of the action learning process rather than imposed.

Academic partner

The following list was provided by Wollemi Public School in response to the question, 'In what ways did your academic partner support your project?':

- Challenging structures and ideas
- Reassurance that change is OK and part of the action learning cycle
- Assisting with the understanding of the Mathematics K–6 Syllabus and QT framework
- Aligning evidence (interviews) of students with QT dimensions
- Providing a clear focus on maths outcomes across stages
- Recommending appropriate resources
- Positive and motivating influence
- Attending conference with project leaders.

This list almost summarises the findings from an analysis of all of the reports, as shown in Table 2. The range of functions that the academic partner was expected to

fulfil was broad, and what is notable is the extent to which these 'critical friends' were successful in meeting so many demands. Only five teams (11%) were critical of their academic partner, and the most commonly reported failing was lack of contact. In some of these cases the problem was the distance between the school and the institution where the academic partner was employed.

A number of teams (13, 28%), although satisfied with the academic partner, indicated that they desired to find more time to meet. One team commented:

> The role of the academic partner has not been easy to manage. Action learning requires constant reflection and communication but, with the late start to our partnership due to the change in partner and the travelling distance between us, we didn't get together enough to be able to align our purposes nor respond to changing needs as they naturally must in the action process (Peppermint Grove College).

This need to align purposes was also reported by three other teams. The team at Bandicoot Public School valued the expertise of their academic partner in 'Educational Change' and the partner was able to support their action learning with constructive feedback. However, the teachers in the project felt that they needed guidance in their focus area of mathematics and would have preferred an academic partner with expertise in this area. In general, if the skills of the academic partner did not match the needs of the project, this inhibited the smooth working of the relationship and limited the value of their contribution.

Although the academic partners were valued, and the reports contain many glowing tributes to their contribution, their presence did not appear to be critical to success. Those project teams that reported dissatisfaction with the academic partner were very satisfied with the outcomes of their projects.

Having ownership of the learning

The way that the Quality Teaching Action Learning projects were instigated allowed the teachers involved in the projects to take responsibility for their own professional learning. This was regarded as a strength of the project by a number of teams. For example, the Seagull Public School team concluded:

> Action learning proved to be a successful mode of delivery for teacher professional development as it allowed for individual teacher needs, and was driven by the individuals involved. It enabled teachers to be actively involved in their own learning and it wasn't something done to them but rather something they had ownership of and could control.

The team at Blue Wren Public School suggested that this ownership is essential as:

> Schools change when individuals change and improve their professional practice. The combined use of the quality teaching lesson plan with the observation guide and follow up discussions and personal reflection had an impact on changing individual teaching practices. School change is a slow and incremental process; action learning is an effective agent for change since those involved in the research have ownership of their professional development.

As they had control of the learning process, teachers were able to apply the learning to their own classroom contexts. The Quality Teaching Action Learning project did not operate like a training session in pedagogy, but was a situation where 'professional development has occurred in the authentic context of the classroom and school' (Silver Eye Public School). Thus, a strength of action learning was regarded as 'enabling work based learning in a real context with meaningful experiences' (Rainbow Finch Public School).

Individual ownership of the learning was found to be an important element in the success of action learning as a means of professional development. A contributing factor to the creation of this sense of ownership is the collegial nature of the project team structure. As the report for Lorikeet Public School stated, 'negotiation, choice and consultation empowers the participants, resulting in commitment and connectedness to professional learning'. The level of satisfaction with the project outcomes would suggest that, overall, the teams were successful in devolving ownership to their members. Most project teams were comprised of teachers and school executive, but this does not appear to have resulted in problems of inequity. For example, the experience at Finch Public School was that:

> Initially some members of the group were fearful of the workload and were concerned that the executive members of the group might act as 'supervisors'. Even though the 8 members included 4 members of the school executive, the group did not have a 'supervisory' feel. All group members found the whole experience non-threatening.

The experience of Butterfly College highlights the importance of shared leadership in any project that aims to embed action learning as a means of professional development. The focus of the project at Butterfly College was the development of student understanding in numeracy. Although the project did reveal gains in some areas, such as increased discussion about pedagogy, the outcomes fell short of expectations and the leader of the project team reported:

> The perception that most staff have of what they are able to do in the classroom appears to be quite different from what is actually happening as revealed by student surveys. The staff survey of their confidence in incorporating literacy, numeracy and technology strategies in day to day teaching is not reflected in actual practice. The executive needs to confront this situation and develop strategies to supervise more closely the teaching and learning going on in the classroom.

One obstacle to success was seen as:

> The difficulty that a number of teachers have in being confident enough to be self critically reflective of their classroom practice which also equates with a reluctance to allow peers to observe their teaching practice.

This reluctance arose from another problem with the project at Butterfly College, which was that initially the project carried a centralized view of change and did not involve the teachers. The most significant learning outcome of the project has been:

> That change is determined/vocalised by the staff, rather than by the executive/senior executive determining what is needed to improve student outcomes through improved teacher practice.

In this case the project succeeded in convincing the project team that action learning was valuable, but the school did not progress to the stage of incorporating action learning and thus did not succeed in embedding Quality Teaching. Their report implies that the challenging nature of a school environment is an obstacle; however, other disadvantaged and high non-English-speaking background schools were represented in this study and many reported very successful projects. The lack of teacher commitment impacted on other areas of the project. For example, the academic partner was 'often confronted with negativity as a result of the school climate when he visited the school, and subsequent discussions were often not as productive as they could have been'. In general, the example of Butterfly College illustrates the need for participation of a group of committed staff in the learning process so that there is authentic engagement with Quality Teaching, and highlights the importance of ownership in effective professional learning.

Prior experience with action learning

Three teams reported prior experience with action learning, and each of these teams attributed the successful outcomes of the Quality Teaching Action Learning project to their familiarity with this model of professional development. For example, the Ibis Central School team noted:

> Our staff has been exposed to a great deal of training and development which has action learning as one of its main components. Incorporating the dimensions and elements of QT has not been difficult for us as so much of the re-assessment and reorganization has derived from the T&D conducted previously.

Ladybird Central School had also been using action learning for four years and the Quality Teaching Action Learning project had only 'formalised' this process. The school acknowledged that 'the importance of individual and collegial reflection has been realised'. The school intends to continue with action learning as a strategy for school reform. These examples reinforce the value of action learning as a long-term strategy for professional learning.

The reciprocal role of the Quality Teaching framework and action learning

The provision of the Quality Teaching documents meant that teachers had a framework available to them that could help them understand and implement an action learning cycle. In a reciprocal fashion, the availability of an action learning scaffold helped to embed Quality Teaching elements. In any analysis of the Quality Teaching Action Learning projects it is difficult to separate the role of action learning as a process from action learning as it was presented in the Quality Teaching documents. Similarly it is difficult to discuss the embedding of Quality Teaching separately from the action learning that was required as part of this project. Each could have been offered separately to the schools and may have brought about considerable professional learning. However, in this study, the factors that contributed to action learning as a process of school change are inextricably linked with the nature of the Quality Teaching Model that was offered to NSW schools.

Many teams reported a similar view to that of Blue Tongue Public School:

> The action learning cycle provides a framework to plan and implement new ideas/strategies in teaching and uses evaluation to inform the next phase in the

cycle – this is invaluable in sharing new ideas, building self-esteem, refining teaching and developing as learners ourselves.

What the Quality Teaching Model contributed was ideas, an analytical/reflective tool and (to a lesser extent) practices with which the teachers could grapple. According to the Cicada Public School team:

> The cycle of collaborative planning, teaching/observation, reflection, adjustment to plans and then teaching again proved an invaluable tool as we were able to 'expand the horizon' into more complex tasks. We now have teachers programming quality teaching elements into other areas of the curriculum, a real change in our school culture.

There were many project teams for which the focus was simply the embedding of the Quality Teaching Model in their teaching. In these cases the model provided the targeted outcome of the action learning as well as the framework that structured the professional learning. Possum High School is one example. The team reports:

> In interviews with three teachers involved in the action learning team, each commented that they have spent more time reflecting on their practice as a result of the introduction of the QTP model into their school. As one teacher noted 'yes it is more work because you have to reflect a bit more on the actual teaching … review what you do and compare it with the QT model … how it is mapped out, there is more reflection after the lesson'. Another felt it had made her focus on elements of teaching she had not thought of before: 'it is more student centred and activity based … they have to construct their own knowledge base in some phases of the teaching–learning cycle'.

Heron Public School also noted the integrated nature of action learning and Quality Teaching when new teachers joined the team in 2005:

> The initial cohort of teachers demonstrated a confident familiarity with the pedagogical concepts as the project moved to the new content area. They were much more certain about what they were doing, how to do it, and why it was important, and were able to transfer the elements between areas without hesitation. Second-wave teachers seemed less certain about whether or not they had included a specific element, and how to assess its presence in a practical manner.

In the school's view this finding 'demonstrates the importance of professional development through active participation'. It believes that 'penetration of quality teaching into the larger school community will require ongoing and further organized projects, complete with funding and resources'. Staff do not believe that systemic change can occur unless all teachers participate in an action learning process, and only then will the teachers have a deep understanding of all of the elements of Quality Teaching.

Not only did Quality Teaching provide the scaffold for the action learning activity that was carried out, it provided a language and focus for the dialogue that was resultant on the action learning. The role of a language for shared dialogue was acknowledged explicitly by the team at Toad Public School:

> Teachers have become more reflective in their teaching practice. They make meaningful evaluations and share successes and failures with other members

of staff. This dialogue often contains metalanguage embedded in the Quality Teaching Discussion Paper.

There were many examples in the reports where outcomes were expressed in the language of the elements of the Quality Teaching Model.

The finding from this analysis of the reports is that teams rarely made a distinction between action learning and the Quality Teaching Model in relation to this project. However, many teams reported that they would continue to conduct cycles of action learning as a means of professional development. It is arguable that the combination of Quality Teaching and action learning offered in this project has enabled schools to acquire and thoroughly trial for themselves a method of professional development that will, in the future, facilitate professional learning beyond embedding elements of Quality Teaching.

Factors that inhibit action learning

Although the majority of teams were satisfied with the outcomes of their projects, there were some factors that were regarded as obstacles to the continued implementation and effectiveness of the professional development.

Ongoing cost

A number of reports (12, 26%) noted the need for ongoing funding to allow time for the essentials of the action learning process, collaboration, data collection and reflection. One example was the team at Quoll who felt:

> There is no doubt that the timetabled classes of team members have suffered … Unless there is a more systematic release of teachers to engage in such action learning projects it will always remain a case of robbing Peter to pay Paul.

Despite making this comment, this school is committed to continuing with the project, and team teaching in particular. Many teams argued the need for funds but are planning to use existing professional development funding for action learning projects.

However, there is disagreement amongst the participants as to whether action learning necessarily requires special centralised funding, with a few schools indicating action learning should be supported with existing school resources. Ibis Central School, which had a long history of projects with action learning commented: 'We are confident the focus on Quality Teaching can be maintained without special funding.' Yet it seems unlikely that action learning will become widespread in many schools without targeted funds to support at least some initial school-based projects. Some teams believe that the process should become intrinsic to long-term classroom practice.

Timeframe

The Seagull Public School team commented that:

> A major problem with our action learning project was that half our team changed schools [through promotion] half way through the project … this also affected the team's motivation and drive at times.

This project was one of twelve (26%) that reported a disruptive effect of the instability of the teams involved in instigating and carrying out the project. This change was not always disastrous, but it is likely that the experience would have been more satisfying had these changes not occurred. In the majority of cases, rearrangements to teams were necessitated at the beginning of 2005. Many teams commented that the start time in the later part of the year was damaging. A very persuasive argument for running the project over one school year was made by Bandicoot Public School:

> We would prefer to implement a project that operated throughout the school year, rather than across school years. This is important:
>
> - to ensure that teams remain stable and the focus of the team projects can be smoothly adjusted from term to term if needed
> - so that learning partners can appreciate the growth that occurs in students as well as teachers across a full academic year
> - to ensure continuity of personnel for peer observation, and the trust that is needed for that experience to be positive and affirming as well as constructively critical.

Lack of whole school support

In those situations where the project did not have support of other staff or the school executive, the team found the organisation and implementation of the project was impeded. Huntsman High School noted 'improved communication to whole staff' as something that needed refining in their school, and Eagle High School suggested that 'more cross school understanding and support across the school' was needed. Blue Tongue Public School commented that 'it [action learning] is a difficult strategy to implement, when it is not supported by the whole staff'. This team found that without whole-school support they could not schedule time at staff meetings. Other staff expected a product from the project and not a process, and they were not allowed the time they needed to concentrate on implementing the units they developed. In general, if the school as a whole was not aware of, or did not support, the project the progress toward professional learning was more difficult.

An Overview: Action learning as professional development

The following story of one team's experiences in this project is offered as an example of the power of action learning for professional development. This team encountered many obstacles, but was able to make this project a very positive experience.

A Space Odyssey

The content area of Space (in mathematics) was the topic of focus, and progress toward a successful outcome illustrates some challenges that were overcome.

Bandicoot Public School found that one challenge was 'initial fear of the unknown'. Early notes kept by the team revealed an 'underlying reluctance toward the notion of change that the Quality Teaching Model represented'. Some staff members did not feel that they had the 'big picture' and didn't see the link with current practice. The team observed that 'many saw it as more work and wanted to know how it would benefit their classroom.' A strong collegiality enabled the school to overcome these objections. In particular, the observation sessions 'were deemed a very positive experience and this was thought to be due to the interaction that we engaged in during each other's lessons'.

As the project progressed the team found that it became more confident with exploring Quality Teaching, in discussion and in the classroom. It claimed that 'our greatest challenges were finding time amongst competing commitments, and staying focused on the project'.

There were other challenges at this school. Their academic partner was skilled in the area of 'educational change', but had no expertise in mathematics education. The team felt that assigning an academic in the field covered by the project (mathematics) would have been valuable. And, while staff appreciated the help they did receive, the academic partner had a 355 km round trip to visit the school, for which he was not reimbursed. The school relied to some extent on the district consultant for guidance when the academic partner could not contribute, and they found that when she went on maternity leave they noticed the lack of support in the content area.

This school also noted other learning as it fought its way to a successful outcome. Staff commented:

> We needed to be guided not to take on too much. If we were to do a similar project we would start small then work our way up to the bigger picture. We tried to educate staff at the same time as the team. In hindsight we would have focused on the team exclusively in the initial stages of the project.

Leadership also became a factor to consider. The project team felt it had too many executive teachers and, although it invited other staff as the project evolved, it believes that a wider range of staff should have been included. In their view, 'this would have given us a wider range of perspectives on how the rest of the staff perceive the project, and the way we should implement certain strategies'.

Lastly, the school struggled with the organizational aspects of the project. The report stated that:

> We often had to cancel planned days because we couldn't get enough casuals or because the booked casuals had to cover a class when the teacher had fallen ill.

Despite the initial reluctance of teachers, and a considerable number of challenges in implementing the project they had planned, in the final report the team noted:

> As a result of being involved with the action learning project we have found that it is an ongoing process that can evolve as the need arises. It allows team members to be continually in-serviced as parts of the project develop.

This school intends to apply action learning and Quality Teaching through other curriculum areas, and the team has been helping other staff to learn about and work with elements of the Quality Teaching Model. The method they propose to use is to get members of the current team to align themselves with a staff member who has not been part of the project, 'and together they can work on a mini-project that looks at enhancing use of one or more elements in their teaching'.

Case Study Schools

Analysis of Mini-Journals

All teachers completed a journal throughout the project, involving them in assigning a number to three dimensions of engagement and making written responses to further open-ended questions. The three dimensions were 'Stages of Concern' (from Hall and Loucks, 1979) comprising stages of awareness, informational, personal, management, consequence, collaboration and refocusing; 'Hierarchy of Understanding' (from Dlamini et al, 2001) comprising unawareness, perception, utilisation, personalisation and production; and 'Typology of Utilisation' (Dlamini, et al 2001) comprising drop-out, struggler, domesticator, succeeder and innovator. Teachers were provided with definitions of the categories.

While it is difficult to find a pattern in the variable and sometimes sparse written comments, there were some interesting and discernible trends in the quantitative data. A comparison of initial and final journal entries reveal elevated means for all three dimensions, indicating a growth sequence in concern, understanding and perceived capacity to use the action-learning model.

Concern. The mean increased from 4.5 to 5.3. The number '4' refers to a 'Management' concern ('I am focusing on the processes and tasks associated with running the innovation') and 5 refers to a 'Consequence 'concern ('I am concerned with the impact of the innovation on students'). The computing of means for a dispersion of numbers on a seven-point scale only provides an average that could be misleading. The most noteworthy change was the marked increase of responses at the end of the study for the final two categories in the sequence. Category 6 'Collaboration' ('I am concerned with coordinating with other teachers') and Category 7 'Refocussing' ('I am concerned with extending and adapting the innovation'), increased from 2 to 10 responses, and from 3 to 16 responses respectively. At the beginning of the study, Category 4 was heavily modal, and at the end of the study, categories 4 and 7 shared modality.

Understanding. While the mean increased from 4.0 to 4.3 (category of 'Personalisation' refers to a teacher's application of a strategy to his/her own model of teaching), the noteworthy trend was the narrowing of responses from all five categories initially, to the final three categories, and the emergence of Category 4 as modal (from 11 to 27 responses).

Utilisation. While the mean increased from 3.9 to 4.2, the noteworthy finding was the shift of responses from approximately equal numbers in Categories 3, 4 and 5, to 4 and 5 (with 5 being modal). Category 5, the final category from the 'Typology of Utilisation' is the 'Innovator' ('I understand the approach and I am able to vary and use it readily as part of my own teaching').

In summary, a profile emerged of teachers who, while they maintain their initial concern with mastering the processes of action learning, are also concerned with extending and adapting those processes to their project; and who increasingly discern ways of applying the new learning in innovative ways to their own teaching.

Case Study 1: Red Gum Public School

Context of the study

Red Gum PS is a K–6 school with 12 teaching staff and also houses six other local DET staff. It is located in an inland area of the state, largely dependent on agriculture. Staff are very experienced, with few exceptions, and the school is considered by the community as probably the best of the three government public schools in the immediate area. The school is long-established but buildings, gardens and grounds are well kept. The social environment of the school is welcoming and students appear friendly, with a high level of adherence to school uniform requirements.

Overview of the school-based project

The project initially had the two intended foci of quality assessment and quality teaching, although the school readily admits that the major emphasis in the project has been upon quality teaching, with assessment put on the 'back burner' for the moment due to a recognition that most effort needed to be put into quality teaching. The project has been centred mainly on staff development, reflection on quality teaching and pedagogy and sharing of progress.

Process leading up to the school-based project

Prior to the project, there had been recognition at the school by the principal and others that greater emphasis needed to be placed on higher-order thinking and that teachers, despite doing a 'good job', needed to be engaged more with professional learning on student learning and quality teaching.

The Quality Teaching discussion paper had been presented to staff and staff had workshopped what they saw as the 'ideal classroom'. Two members of the staff had previously visited an interstate school with a reputation for innovation in teaching, and this also contributed to thinking and discussion at the school.

As a result of general interest and support, it was decided that all teaching staff would visit the interstate school, and staff used part of the Anzac Day holiday and the following staff development day in 2004 to travel to and spend time at the interstate school. Following the stimulus of this visit, staff engaged in resource development such as posters on higher-order thinking and these were displayed in the school. A 'curriculum thinking program' for the school was developed and led by the person who subsequently became the AGQTP school project leader.

The teacher who became the project leader was released from teaching for Term 2, 2004 through a university intern being placed at the school on her class. The teacher spent much of this release time working on the school plan and gathering and producing additional materials on aspects of higher-order thinking and learning which were displayed across the school in classrooms and offices, and which served as discussion starters and triggers for reflection. Helpful advice was also obtained from district office staff.

Following the internship, the project leader was released from teaching for one day per week during Term 3, 2004 through the principal employing a casual teacher. This was to 'keep the ball rolling'.

The timing of grants for AGQTP projects was fortuitous, as this enabled the school to build upon the momentum already established for quality teaching. The school applied successfully for AGQTP funding and the project commenced in Term 4, 2004. The project leader was again released for one day per week to coordinate the program and this time was spent writing reports, going to conferences and putting into place the action learning project. Shared lessons within a pilot group began in Term 4, 2004 and this broadened in Term 1, 2005 to include other staff (see below).

Implementation of the school-based project: Phases, stages, changes

During Term 4, 2004, a pilot group, comprising the project leader and a teacher from each of Stages 1, 2 and 3, met, watched each other teach, reflected and discussed, and reported back to staff. Project funding was utilised mainly in providing for teacher release to enable this to occur.

Each of the three stage representatives then became the leader for wider observations and discussions with teachers within their stage.

The next phase will comprise cross-stage observations and discussions.

One major change during the project noted previously was the shift in emphasis from assessment to quality teaching. Originally, there had been concern over whether assessment practices reflected higher-order thinking skills, but it was decided to change the emphasis with assessment to be addressed later. It was felt that the staff would be taking on too much to attempt to address both areas simultaneously.

Achievements of the school-based project to date: for the school, teachers, students

Staff interviewed commonly identified the following outcomes. They stressed that they were already 'going down this track' but that the project formalised and facilitated the process:

1. Staff have a language for professional dialogue, and 'professional talk' is now much more prevalent in the school – 'teachers are talking about what they are doing, sharing … not so isolated'.

2. Leadership is more distributed, with teachers taking more responsibility for their professional learning and increasing their contribution across the school – 'leadership is more spread now, more pedagogic thought … more receptive'.

3. Rejuvenation of staff and heightened excitement to be part of teaching and learning has resulted – 'proud to be here'.

4. Enhanced staff understanding and teamwork across stages, different parts of the school has occurred; 'cross-stage visits are great … better idea of continuum'.

5. Teachers are using more student-centred approaches and are 'more organised'; 'students are getting much more variety … experimenting with higher order thinking skills'; 'more explicit teaching, catering for more learning styles'.

6. Students too are using the terminology of the model – even in Kindergarten – and will be able to carry this with them as they move through the school.

7. Staff and students are using common devices, such as graphic organisers, across the school to aid consistency of understanding and approach.

8. Students are using group work and getting more out of it – 'learning is less individual … cooperation, learning to listen, increased tolerance, more

understanding … less going to the teacher for help … a big change, more independent'.

9. Students appear to be taking more control for their own learning and appreciating each other more. In turn, 'more credit goes back to kids, gets them involved'.

10. Students' conceptions of thinking and learning have changed and they are more aware of their responsibility.

11. Sharing of lessons is indicative of a new climate of openness in the school – 'lifted the veil of secrecy' of the classroom, despite initial anxiety.

12. Teachers are more critical users of resources: 'things we used to accept in the past'.

13. Positive feedback from parents about students has increased – '[the project] helped in the community, showed teachers were trying to improve themselves … a good model for students to see teachers learning'.

14. A number of those interviewed commented on how the project leader had grown in confidence and leadership capacity during the process.

15. Overall, there was agreement that higher and more uniform expectations were evident in the school. 'Some impressive work' was being produced by students, although it was agreed 'it was too early to quantify' any improvement in student outcomes.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project to date:

1. The admitted shared need for professional learning and the universal commitment of staff to the project was a 'success factor': 'there was some anxiety, but everyone signed up for it'.

2. Leadership and support of the principal, including the important symbolic and tangible act of funding all staff to visit the interstate school prior to the project, was important.

3. The leadership, drive and enthusiasm of the project leader before, during and after the project and her availability to staff was seen as essential – 'Without [her], it was not a viable option … one person to drive was a major factor … needed to keep pushing in early stages'.

4. The commitment by all staff to the school plan and the project was seen as advantageous.

5. The involvement of 'three credible staff [in the pilot phase] who could sell it to the rest' was important.

6. The time available at different phases to release staff to engage in planning, discussion, conferences, observations and the funding which made this possible was seen as a significant factor in the success of the project.

7. The sharing of lessons, reflection and discussion between school staff was both a factor and an outcome.

8. The input and support of the university academic partner, particularly in providing guidance to the project coordinator and more focused direction, was seen as important.

9. The input, encouragement and support of district staff, although limited by work commitments elsewhere, was seen as an important factor.

10. The Quality Teaching Model was seen to articulate 'what good teachers have always done' and to provide a language for professional dialogue and reflection.

11. Success was demonstrated and shared progressively during project implementation and these successes and the staged approach meant that fears and anxieties were overcome – 'seeing that things work, taking small steps … got a feel for it, lots of sharing'. The success of the pilot phase was used to 'sell the project'.

12. The project 'affirmed we were doing the right thing' and built upon what was already good, experienced practice – 'for some of us, a lot has come from within … dynamic already, some teachers already into this [Quality Teaching] before the project'.

Role of action learning and the Quality Teaching framework in the success of the project

The model of action learning with assistance from the academic partner and others was seen to be very effective. Because staff had already identified the importance of the area of action learning for Quality Teaching, this assisted in gaining commitment, support and involvement.

As noted by a number of staff, the QT Framework was seen to articulate what good teachers have always done. However, it was also seen to provide a valuable framework for discussion, reflection and action and to provide a language for professional dialogue. In the words of one of those interviewed, its use in the project 'made teachers look at and examine not just what students are learning but how they are acquiring that information … [and] presenting information they have gathered, discussing with each other … looking at understanding, not just facts, asking questions, types of questions to ask, classifying information, how they are processing'.

Plans for sustaining professional learning after the project

The principal retires at the end of 2005 and it will be important that the momentum generated from the project continues to be encouraged under the new leadership of the school. The leadership of the project leader also needs to be shared and new leaders found and encouraged.

The school's intention to focus on assessment as the next phase of implementing quality teaching and learning is logical. The commitment and ownership are there; it requires expertise and resources to enable the process to be successful. There is also an expressed need from some staff who would like to see a similar approach adopted for mathematics/numeracy teaching and learning.

A number of staff made the point that the action learning project was 'not well enough communicated to the community … parents saw teachers off class', and that

the successes of the project and teachers' commitment to their professional learning needed to be publicised and appreciated more effectively.

Postscript:

The project leader is now working as a QT consultant in the local SEA: 'We have a new [project] leader and all goes well' (principal).

Case Study 2: Iron Bark High School

Context of the study

Iron Bark High School is a western Sydney co-educational secondary school established in the late 1950s–early 1960s. Over time, the demographics of the area it serves have changed to the extent that the school is now highly multicultural and also experiences 'competition' from a variety of government and non-government schools. Despite this competition, the school 'is maintaining numbers while other locals [public schools] are going down'.

Partners in the action learning project included three of the local 'feeder' government primary schools.

Overview of the school-based project

The major focus of the project was on strengthening learning through literacy links; in this case, links between three high school Key Learning Areas and three local primary schools.

The three Key Learning Areas – English, Science and PDHPE – were identified to engage in professional learning and programming literacy strategies as well as develop areas of the NSW Quality Teaching Model. In terms of the NSW Quality Teaching Model, the team chose to focus specifically on the dimension of 'intellectual quality' and – within that dimension – especially on the elements of 'deep knowledge' and 'deep understanding'. 'High expectations' was seen as the element of the dimension, 'Quality learning environment', that would accompany a focus on 'deep knowledge' and 'deep understanding'.

The project also sought to address transition issues by working across Stages 3 and stage 4 with the three primary schools.

Primary and secondary staff worked together and in teams under the overall project leader to plan and teach a Stage 3 and a Stage 4 unit of work in each of English, PDHPE and Science, with each primary school 'specialising' in one KLA respectively.

As well as cooperating on programming across the two stages, primary and secondary staff also had the opportunity to visit their 'partner' school to observe teaching. In some cases, teachers also taught in the 'other' school; i.e., secondary science in the primary school where the Stage 3 Science and Technology unit was being taught.

Aims were to address transition issues through primary and secondary teachers having greater mutual understanding; and to develop a continuity of content and approach, and consistency of teaching and learning strategies, especially in literacy.

Process leading up to the school-based project

The senior executive of the secondary school had 'changed over' around four years ago when a new principal and, shortly after, two new deputy principals, were appointed. Reviews of the school carried out prior to this provided some recommendations which the senior staff 'could work with' although, at the time, there had been some resistance to engaging with the generally unfavourable review outcomes.

A review of student welfare was then undertaken and a greater dialogue on teaching and learning was initiated. Staff meetings were reoriented to focus more on teaching and learning and the school 'started to look at values about teaching and learning'. The emergence of the Quality Teaching framework and the AGQTP were 'perfect timing … the key people were ripe for it', to quote the principal.

The three KLAs of English, Science and PDHPE were chosen for the AGQTP grant proposal, with a Head Teacher and other teachers from each KLA (one in Science and PDHPE and three in English) in the project team. Three local feeder primary schools were also involved with two teachers from two schools and three teachers from the other making up the rest of the project team.

Implementation of the school-based project: Phases, stages, changes

Major use of project funding was for teaching release of primary and secondary staff to enable planning, programming and observations/visits to occur.

The principal of the secondary school said she was 'involved in all stages, although [the project leader/deputy principal] was the driver'.

There were three in-service days on aspects of the Quality Teaching Model, backward mapping, and strategies for teaching literacy, especially reading. The input of the academic partner was important, as he was able to help the team focus, and assisted in facilitating the setting-up of on-going evaluation processes, including a 'running record', for the project. On one of the in-service planning days, the academic partner provided strategies for enhancing reading which were workshopped and later incorporated in units the teams developed.

Planning of units was followed by delivery and evaluation. It has already been decided to widen the project beyond its completion with a replication with three additional primary schools and three additional KLAs (see below).

Achievements of the school-based project to date: for the school, teachers, students

The following outcomes were identified by interviewees:

1. Stronger relationships between primary feeder schools and the secondary school: 'We didn't really know about primary Science … primary had previously attempted linkages with the high school'. In PDHPE there was 'not much prior contact'. There were also stronger links established across the three primary schools. These links were described as 'sustainable … a real little village, a community of schools'.

2. There was general agreement that the initiatives and outcomes of the project would ease the 6–7 transition for students: 'really good for Year 6 teachers,

really good for high school; kids know you when they come to high school [from secondary teachers being to primary classes]'.

3. Distributed leadership was enhanced through the project, which had 'spread leadership across faculties, staff are taking on leadership roles'.

4. It was commonly recognised that a factor in success of the project was that it was 'based on needs and builds on what you were doing anyway … good knowledge to begin with … needs driven'.

5. There was 'realisation that we were teaching surface strategies … [now] astounding knowledge from kids, reading for meaning'.

6. Already, there were whole-school influences, partly attributable to the project. The 'whole school is now exposed to backward mapping'. Assessment tasks are 'discussed more with students [and] more are handing assignments in on time'.

7. Faculties were seen to be talking more and working more closely together: 'Staff resistant to change are now getting up and sharing'. A dialogue about teaching and learning has developed and people from different faculties are now talking and sharing, whereas they were 'their own cells in the past'. There is more understanding of secondary strategies in stage 3 and of primary strategies in stage 4.

8. Lesson observations by peers were increasing and seen as beneficial, despite some initial and residual anxiety and resistance.

9. In the primary schools, integration of strategies and approaches had begun to occur across other KLAs and stages.

10. Primary staff commented how their content knowledge had improved: 'lacked science knowledge … grew, and was filtering down into school [into earlier stages]'.

11. There are 'hints of new consistency … higher expectations and fewer excuses'. Strategies are 'now done in depth, deeper understanding, challenging information'.

12. There were also higher expectations for staff professional learning and development, which was 'more focussed' on teaching and learning.

13. Students are 'enjoying lessons more … staff are excited'. Lessons are 'more student centred'. The comment was made that 'the kids are so turned on to science [in the primary school] … science has improved'.

14. A teacher noted that 'students don't question teachers as much now, they seem to understand purpose … more explicit'. Another teacher said students were 'more accepting of themselves, accepting of others, very appropriate for Year 7'.

15. A cautionary note was, however, expressed that it was 'too early to assess' the value of the changes in terms of student outcomes.

16. Improved lessons from those involved and greater sharing were twin outcomes observed: 'More aware, sharing amazing, professional dialogue increased … time to discuss'; and 'some incredible lessons … overwhelmingly received by everybody, sharing at staff development days, QT workshops after school … [there were] 80 staff after school at a meeting for feeder schools'.

17. The view was that there is 'a critical mass now, momentum'. A teacher stated it was 'a highlight of my career … so positive … learnt so much'. Teachers were 'enthusiastic, everyone likes it because it worked … agreed to do it, really enjoyed it, understood it, feel confident, even people teaching for years … feedback, reaffirmation, reassurance … re-enthused some teachers'.

18. There has been some feedback from parents: 'Kids are talking [at home] about what they are doing.'

19. The sharing of the project at an AGQTP conference through a team presentation was described as 'outstanding'.

20. Finally, there was recognition that the changes were spreading: 'we have stopped calling it a project … ongoing, spreading'. The fact that the project is now expanding to additional KLAs and additional primary schools is indicative of the sustainability of the project.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project:

1. The reviews of the past four years and earlier had demonstrated the need for coherence in teaching and learning. The 'school was ripe for change' and there was widespread recognition of the need to do more in teaching and learning: 'Teachers were saying there has to be a change.'

2. The project addressed the needs of the staff, students and school. The project provided staff with 'something real to take away'.

3. The project remained focussed and evaluation was built in 'from day one'.

4. The aim of the project was sustainability, and not just a 'one off project'. This gave the project direction and greater significance.

5. Previous staff development days had resulted in better understanding and good rapport, a foundation for success. Staff were introduced to new ideas progressively, with 'ownership' of the process.

6. Teachers were 'tapped on the shoulder to be involved' and a key team of teacher leaders assembled to share their expertise. These teams included 'some with street credibility who could have gone either way'.

7. Staff at the school had the 'expertise and ability to go on with it … willing to reflect on their own practice and a 'critical mass' of teachers existed: 'It was hard for resistors to argue against teaching and learning.'

8. The school built on existing expertise and augmented this with key external personnel.

9. The fact that team members were able to be released at the same time for planning, discussion and observation was an important factor: 'release time is important … damn hard work even with time … time needed to work out where we were heading'.

10. The support from school leaders for the project, especially the principal and project coordinator was seen as essential. The project leader was described as: 'constantly actively involved' and 'a big lynch pin but knew how to distribute leadership'.

11. The assistance of the university partner was highly praised as being relevant, practical and directive in terms of literacy strategies.

12. The fact that 'benefits can be seen' was seen as important. The 'more we can inform them, show results, the better'.

Constraints on success of the project included:

1. The situation where two of the three primary principals had changed during the project which 'pulled it back a bit'.

2. Some staff were 'afraid, find the concepts difficult, some embrace it'.

3. It would have been useful to have spoken with staff at other schools previously involved with the AGQTP.

4. Some staff noted the difficulty of commencing a project in Term 4 in the primary school due to Year 6 leaving half way through the project.

5. One teacher who was otherwise highly complimentary noted that the process was 'so outcomes driven it can take the enjoyment, flexibility out of it'.

6. Time away from class for participants was 'an issue', and seen as 'negative by those not involved: 'when the class is covered by casuals, there is some backlash'.

7. A number commented on the sheer amount of time and effort needed: 'lots of effort, but great results'. Some, however, noted the need for more time: 'it's full on, we needed more lesson observations, team teaching would have been good'.

8. Staff also commented on the need for more effective use of time, and the constraints of the high school timetable, where colleagues were teaching at the same time and could not observe each other. It was also difficult to coordinate primary and secondary staff to be able to meet in school time. Agreed meetings sometimes 'fell through' or did not eventuate.

9. A final issue with time was that some units had taken longer than intended to deliver due to interruptions and public holidays, such as Easter. It also appears that some units had been over-optimistic in terms of content and strategies to be covered.

Role of action learning and the Quality Teaching framework in the success of the project

There was agreement from participants that the action learning model 'had an enormous effect on school culture … getting everyone on board, people are coming on side'. Another participant said that action learning 'adds a communal part to action research … everybody was interested, involved … really successful … seen as research, interested in measurement, outcomes'.

The action learning project had built on earlier developments in teaching and learning but was able to formalise and give this work direction through the project and the mechanism of facilitating getting people together to work on a commonly agreed area of need. The action learning model had enabled teachers themselves to engage in deeper learning: 'It really changed our teaching; hard work but rewarding.'

One teacher noted: 'we achieved a lot more than other schools … had a clearly focussed plan from the start, very specific, well thought out, based on school needs'.

In terms of the Quality Teaching Model, a number of teachers noted it was 'nothing new, but a good approach' which gave a focus, framework and language for discussion. Teachers were 'sceptical about the QT model … interrogated it and concentrated just on a few areas, deep knowledge and high expectations'.

Plans for sustaining professional learning after the project

The success of the project to date has encouraged the school to widen the involvement to six KLAs and to involve another three primary feeder schools. The three KLA groups already involved will each 'take on' another new primary school. The three primary schools already involved will work with a new high school KLA using the same model, thus spreading expertise.

A number of those interviewed spoke of the need to 'maintain the momentum' following completion of the project. Another challenge will be to obtain the necessary funding for the next stage to fund release of key staff for planning and visits: 'Funding is essential.'

There is also a need for longitudinal follow-up in terms of student outcomes to evaluate benefits of the project and associated activities.

Case Study 3: Wattle High School

Context of the study

Wattle High School was established in the 1950s in the northern suburbs of Sydney. It is a comprehensive public secondary school located in a medium to high socio-economic area and has experienced increased competition from selective and special purpose public schools and the non-government school sector.

The school is quite well maintained and presents well, although space and access are at a premium. In recent times the viability of the school has been brought into question with suggestions that the site be sold, given the prime residential land this would bring onto the market.

The school has around 60% NESB students. The school applied successfully for a selective stream, which was introduced in 2002 and which is currently through to Year 10, building on a Year 7 gifted and talented class established in 2001.

There has been some concern at the school over the writing abilities of students (see below).

Overview of the school-based project

Because of 'strong competition' from surrounding government and non-government schools, changes in clientele and other factors, the school was described as 'on its knees' in 2001. Staff were described as 'demoralised' and student numbers had fallen to around 500 in the main school. There was a change in the senior executive of the school who set about implementing a change agenda to turn the school around. Student numbers in the main school are now around 700.

The project has a focus on literacy and involves working with the Quality Teaching Model and literacy strategies with one of the two Year 8 selective classes. All KLAs are involved with teachers being volunteers, although in some classes, the selective students are mixed with 'regular' stream students.

To provide benchmark and diagnostic data, both groups of Year 8 selective students were administered a past English Language Literacy Assessment (ELLA) paper early in 2005.

At the end of Term 3, 2005 another ELLA paper will be administered to assess 'value added' from the project class and the 'control' Year 8 elective group not involved.

Process leading up to the school-based project

At the school there had been concern over the literacy performance of students at the school, which has a 60% NESB student body. ELLA results in 2003 had been poor for writing and reading, although better for language.

The school had been working with the QT model since its introduction.

There had been an internal review of literacy at the school in 2004, and a new position of Head Teacher Literacy, funded internally, was introduced in 2005.

There had been ongoing analysis of ELLA, School Certificate and HSC results at the school. There had been an assumption held by some at the school that 'you don't have to teach selective kids explicitly'. Staff were 'under-prepared to talk about literacy outside the humanities [subjects]'.

The AGQTP project was described as 'coming at the right time' and a steering committee for the project was established in 2004; it included three staff members – a deputy principal, who served as project leader, the Head Teacher, Literacy and one other Head Teacher.

Implementation of the school-based project: Phases, stages, changes

The steering committee met with the university adviser to plan the project and to work on protocols for scaffolding literacy and text types. This represented 'a lot of work' for the team.

Teachers working with the Year 8 selective class come from all KLAs as well as the ESL and support areas.

The last intended phase of the project is observation of classes, which had not happened at the time of this evaluation but was scheduled for the last 5 weeks of Term 2, 2005. There was 'some anxiety over observation', although 'people are more comfortable now … talking over concerns and problems.

Achievements of the school-based project to date: for the school, teachers, students

As the project was still being implemented, it was too soon to gauge concrete outcomes for students, but test results later this year (2005) and in subsequent years will be instructive.

1. A cross-faculty team of teachers has been brought together which will have contagion effects through the school. Those involved 'feel special, included'. The project has been described as 'a learning process for all of us'.

2. There is some evidence of the teaching approaches used with the project class spreading in the school, and the hope that the students concerned will apply their enhanced literacy skills in other years and classes, although 'it is too early … don't know yet … ELLA results will help [evaluation]'.

3. Initially, there was some concern: 'why are we doing it? … all are now on-side'. Teachers involved are more confident in their ability to teach literacy and are 'not afraid of the QT model'. There has been 'awareness raising of the QT document … conversations re pros and cons of quality teaching, engaging with it … it puts titles, labels, on what you do'. Teachers are 'prepared to talk, share experiences'.

4. There is an awareness of the need to teach literacy in 'non-traditional literacy subjects'. There is a 'much greater awareness of literacy, writing … this was happening anyway … people from all faculties are seeing writing as their responsibility, not just English'.

5. The project 'made some students stand out who have literacy problems' and who might not have been identified previously: 'more awareness, more explicit teaching reveals problems'. As another teacher noted, 'It showed selective kids still need assistance.'

6. The project also changed students' views of literacy: 'kids initially said "thought this was History, not English" … literacy across the curriculum, concentration on writing skills … the standard of writing required of students increased'.

7. A 'best practice booklet is in the pipeline'. This contains pro-forma and strategies for literacy, arising from work done during the project, and this will be made available to all staff: 'hopefully this will get improved results … teachers taking it on board, utilising guidance'.

8. There was a general view of raised standards and expectations for both students and teachers: 'more challenge in the classroom for students, more confidence from teachers … some things affirmed … more understanding of reaching gifted students, literacy … sharing ideas'.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project:

1. All KLAs are represented by volunteers on the project team; giving a 'whole school feel'. There was 'good teamwork'. The volunteer participants 'took it [the project] back to staff'. It was important that the project 'really needed people who want to be involved and see the need for it'.

2. The school had independently identified the need for work with literacy and with selective students. The project 'came from within the school, not imposed or thought up'; 'there was a clear focus on what was wanted to be achieved'.

3. The project brought two priority areas together. The project was also 'killing two birds with the one stone'; responding to the literacy review and addressing quality teaching and action learning.

4. The project 'raised awareness amongst staff … made staff take on broad responsibility for literacy … made staff reflect on what they are doing'.

5. Funding provided the means for the research team to meet, engage in professional learning and plan: 'having the time to get together'.

6. The support of the principal and project leader and 'the strong steering committee', which was described by another teacher as 'good at what they do'. The people involved were described as 'committed, supportive … everyone believed in it … positive, saw the reason for it'.

7. Successes were shared with the rest of the staff: 'being acknowledged is a good thing, e.g., at morning teas'.

8. The school was seen to be 'on an upward trend … good to be at the school', and the project built on and assisted with this trend.

Constraints on success of the project included:

1. By common consent there were some 'knockers and blockers', and the perception of an 'in-crowd', yet all staff had been invited to participate.

2. Time spent and time management have been issues: 'It needed 12 months for the project, not two terms.' Additionally, the 8–10 days when staff have come together 'can be disruptive … have to find casuals'; 'abandoning Year 12 is a problem'.

3. 'Communication flow was tricky, e.g. organising meetings … more communication [between the team and the university partner] would have been good'.

4. Increased workload was also an issue noted frequently: 'marking, lots of writing tasks'. However, this was balanced by the enjoyment and perceived benefits of the project.

5. A view was put that it was 'ambitious to get everyone [all KLAs] in … might have been better to target traditional literacy areas'. Another teacher commented: 'some teachers are not as responsive … not so proactive in catering for selective students'. Newer teachers are 'more responsive', some older staff described the QT model as 'new labels on old jars'.

6. The contribution of the university partner was seen as very positive, although there was a view that 'it might have been good to have her in classes earlier'.

7. There was some anxiety about classroom observations with 'no team teaching yet, no common assessment tasks'. However, it appears that the school is moving at a realistic pace so as not to alienate or overwhelm staff with change.

Role of action learning and the Quality Teaching framework in the success of the project

By common consent, the opportunity for staff to get together to work collaboratively was seen as very positive, constraints aside. Action learning was described as 'a good concept … time to get together for professional discussion'. A teacher commented that 'AL is a really good way to go … a team is a must … demands teachers deliver, address the project'. Another teacher commented: 'All have learnt a lot in different spheres.'

The Quality Teaching Model was described as 'constantly there, a useful framework to pin things on … teachers used the documents as reminders'.

Plans for sustaining professional learning after the project

Because staff from all faculties are involved, it is hoped that those involved will 'spread the word' to their faculty-based colleagues. Teachers are 'not afraid of the Quality Teaching Model' and show preparedness to 'talk and share experiences', although the need for more work on the model was identified.

Literacy is seen as everyone's responsibility and there is a focus on literacy across the school/curriculum, which is an important precondition for further change.

There is a 'best practice booklet in the pipeline' and it is planned to share this with other staff not currently directly involved. While the focus has been on selective students, it is agreed that the work to date has relevance to all students.

Case Study 4: Cedar High School

Context of the study

Cedar High School is a long-established, single-sex secondary school in an inner western suburb of Sydney. Despite the age of the buildings, the school presents as clean, well organised and with friendly ancillary staff, teachers and students.

Over time the demographics of the school have changed such that the school has almost 90% NESB students. Pacific Islands (PN) students make up almost 10% (and rising) of the student body and are disproportionately represented in suspensions, absenteeism, truancy and under-achievement, especially at the HSC.

Overview of the school-based project

The project consists of an in-depth attempt to better meet the needs of PN students, initially in Stage 4 Science, English and HSIE. It was thought that PN students have issues in their ability to articulate understandings related to intellectual quality.

The project team comprises staff from the Science (HT and two others), English (HT and one other) and HSIE (HT and one other, also a HT) faculties. The project is led by a deputy principal.

Process leading up to the school-based project

The university partner has an extensive background in the Pacific Islands and has worked at the school in a variety of programs with PN students since 2000. He has also arranged for PN students to access various programs at his university.

A Science teacher who is part of the project team had previously completed a research project with PN students in 2003, examining learning in Science, and there was the desire to put some of her findings into practice in Science and other faculties. The school had also been working with the NSW Quality Teaching Model.

There was an unsuccessful AGQTP application in 2003 and the university partner gave the school 'a lot of advice … [he] had prior experience with 11 other AGQTP programs'. There was some initial uncertainty about what the school wanted to do and there were several days of 'unfocused discussion'. This was 'good … the staff came together in consensus'. The improved application was successful.

Implementation of the school-based project: Phases, stages, changes

The project aimed to focus on units of work with high intellectual quality and to incorporate material of relevance to PN students. It was thought that this approach could apply equally to all NESB students.

In Term 4, 2004 the whole team met with the university partner, where team agreement was reached on the project, what aspects of the QT framework would be incorporated, and the input of each faculty.

The three KLA teams developed units of work for Stage 4 over Term 4, 2004 and Term 1, 2005. The units of work were to be taught in Year 8 classes in Term 2, 2005 in all HSIE classes and in some of the English and Science classes. The HSIE unit is an integrated History/Geography unit incorporating 'contact', Pacific case studies and globalisation. In Science, two of the four Year 8 classes are undertaking a unit on ecosystems, with the remainder studying the 'older' unrevised version. The English unit has the theme of 'fame' and how the media portray famous people.

The units have been designed to contain rich tasks, independent thinking, and learning through engaging students with 'lots of stimulus material', especially PN students. There is 'lots of group work' and a high degree of negotiation with students. In all units students are encouraged to research and connect with their own culture.

Students have been 'pre-tested' to establish their attitudes to the relevant subjects and how they taught.

The main use of the project funding has been teacher release to enable planning workshops to occur.

Achievements of the school-based project to date: for the school, teachers, students

As the units were still being taught during this evaluation, outcomes are tentative and will require longer-term evaluation. Nevertheless, those interviewed identified the following achievements of the project to date:

1. The project has been a very effective professional learning activity for those teachers involved. It has 'renewed a lot of personal interest'. It has 'empowered the school and teachers, … provided resources', and provided time and a framework for reflection on teaching and collecting data'.

2. Some teachers have been able to apply, demonstrate and share skills they already possessed. There has been 'the opportunity to try different things, to see if it works … sharing ideas'.

3. Teachers are more confident and assertive in their professional learning. They 'are increasingly using the language' of QT.

4. Current units of work have been adapted to be high in intellectual quality and significance to PN students. Teachers are 'giving more focus to kids' perceptions'. Teachers have been challenged to take a different cultural perspective and to 'teach from another cultural frame of reference'.

5. The quality of units developed during the project appears to be extremely high, with a deal of pride for those responsible: 'really great unit of work, keen to see the product of the groups and teachers'.

6. Teachers are 'balancing explicit teaching with student ownership in rich tasks'. There is an increased incidence of negotiation with students, as individuals and as part of groups: ' … we do a lot of group work anyway but will focus more on negotiation, options … love consulting with them [in the unit] but there's not enough time'.

7. There is more monitoring and checking of student progress, 'how they are going … allowing them to work in groups on assessment tasks … real focus on research … they don't read enough'.

8. Partly because of the four HTs involved, there is school-wide awareness and appreciation of the project and its outcomes to date. In addition, the 'school has been following the QT model the last few years … gifted and talented and rich tasks' and this has aided the wider school impact of the project.

9. Teachers involved are 'giving advice to others in other KLAs or units … there's increased interest, faculty groups are talking … whole school discussing rich tasks'.

10. Interaction with the academic partner has been valuable 'changed views … brought the school and uni closer together'.

11. There has been greater teacher cooperation and sharing of resources.

12. In the HSIE units, teachers who are predominantly historians have 'had to do additional learning in geography' which has 'taken them out of their comfort zone a bit'.

13. There has been wider dissemination of the project through region and state PD days, conferences and workshops.

14. While it is too early to identify student outcomes, there appears to be 'greater student involvement in units, portfolios … they get to be more creative'. Students are 'looking forward to coming to class'; they are 'right into research, all enthusiastically engaged … totally student centred … enjoying the subject material … discerning about how the media portray people [in the fame unit]'.

15. The types of questions students are asking and the answers they are giving seem to indicate deeper thinking and understanding.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project:

1. The fact that the project arose from needs previously identified and was 'not from above … seamless rather than imposed … makes it more likely to be sustainable'.

2. The fact the team knew what it wanted to achieve and stayed focussed on this.

3. The work undertaken by the project coordinator, particularly that relating to professional learning outcomes for teachers, and the fact that 'the boss was supportive'.

4. The school is 'incredibly supportive of kids, great school … executive is great, admin. staff great'.

5. The provision of time for 'genuine professional learning', the 'opportunity to sit down, talk through … don't usually get the time for that'; 'time to do it, prepare the unit … never been more prepared or more confident … got resources'.

6. The teams were carefully selected. There were 'no blockers or resistors, only one teacher' who was teaching a unit but was not part of the project team. The sharing within teams was also mentioned; 'to be able to walk hand in hand with someone in the faculty', and the fact that the project involved 'good quality people'.

7. The fact that the team were prepared to undertake an ambitious program of professional learning, reflection and leave their 'comfort zone'.

8. The willingness of staff to try new ideas; to talk across faculty groups; their enthusiasm for the project.

9. The input of the university partner, which was described as 'really relevant … provided cultural background [of PN students] … good ideas, knowledgeable'.

Constraints on success of the project included:

1. The two HSIE members of the project team are not teaching the HSIE units and, because the teachers delivering the units are less directly involved, it remains to be seen the degree to which the 'new' approaches in the units are implemented in HSIE classes. Additionally, there is recognition from the project team of the need not to 'push' staff too quickly to teaching observations while there is some anxiety and even resistance. Consequently, the idea of teacher observation has been 'put on hold' for the present.

2. By common agreement, the writing of the units has involved 'more preparation … takes time initially … lot of prior PD'. However, this has been balanced by the teachers 'enjoying having the time to put together really good lessons'.

3. Some units are taking longer to teach than intended, due to the richness and complexity of what is being attempted.

4. As the units were only being taught at the time of this evaluation, it is too early to make firm judgements on the project outcomes. There is a 'need to collect data over a longer period'.

5. The time commitment to the project has been seen as an issue by some, as has the covering of classes to release staff: 'time taken away from classes is the price you pay … but fantastic to have the time to develop the unit'.

6. While the input of the university partner was favourably regarded, the partner mainly had input to the planning stages in Term 4, 2004 and staff 'would have liked to see [him] more … and would have liked more help in ways to manage peer observations'.

7. Action learning was described as 'great, but there is difficulty with the reality of program demands … supportive of teacher learning but constrained by syllabus demands, overloading'.

8. Timing of the project was an issue, with the planning in Term 4, 2004 meaning that 'everything has to happen in Term 1 [2005]'.

Role of action learning and the Quality Teaching framework in the success of the project

'Professional dialogue of a high level' has been described as the 'most valuable aspect' of the action learning model.

Team planning across faculties and the empowering of 'people who have already got skills' were also mentioned.

The project and time for focus and reflection meant the 'exercise of part of our professionalism we wouldn't usually get'. Another project member commented: 'really enjoyed the whole process … the professionalism of teachers recognised, more confidence … it is more work, the benefits need to be shared'.

In terms of the QT Framework, the comment was made that 'we are continually using the protocols'. The comment was also made that the Framework was an aid to 'discourse … the main positive [of the model]'.

Plans for sustaining professional learning after the project

The intention is to extend the project model across all faculties. In Semester 2, 2005 more school funds will be provided for the three KLAs and 'hot tasks' will be spread across the school. It is also thought that the approach will benefit all students, not just PN. It is also planned to revisit the issue of peer classroom observation when some of the anxieties about this are diminished.

Case Study 5: Peppermint Grove Junior College

Context of the study

Peppermint Grove is one of eleven secondary 'school' colleges in NSW and is situated on the mid north coast. The nature of local industry is diverse, though the area is well known for its engagement in fishing and oyster farming. The school site, which includes a Junior campus, a Senior campus and a TAFE, is inviting, and personnel from all campuses are welcoming. The Junior School College (the subject of the case) has approximately 545 students and 45 teachers.

Overview of the school-based project

The project aimed to develop quality teaching and learning strategies to cater for the needs of two students with profound deafness. The project purposes were linked to the AGQTP activity outcomes for teachers to:

- develop an increased understanding of pedagogy
- expand their pedagogical repertoire in one or more of the AGQTP priority areas
- maximise student learning experiences in one or more of the AGQTP areas.

The statement of these outcomes is significant, as while the initial focus of the project was designing strategies for two deaf students, the process of action learning involved in achieving this purpose provided a far-reaching consideration of pedagogy beyond the scope originally envisaged.

Process leading up to the school-based project

Three areas of school investigation shaped an interest in seeking AGQTP funding.

First, in Term 1, 2003, staff worked with a university consultant to promote their understanding of quality teaching. This commitment to quality teaching resulted in a review of programs with a focus on increasing consistency in authentic assessment and reporting.

Second, in 2004, staff developed a program to improve reading, organization and reflection skills (R.O.A.R) in a target group of year 7 students. This involved the creation of strategies with an emphasis on literacy to foster engagement in learning.

Third, the school implemented a peer-tutoring program, and provided resources to reduce class sizes to enable its effective operation.

To ensure an integrated approach in implementing these initiatives, teams of teachers met each fortnight to plan, and discuss relevant pedagogy.

The impetus to apply for AGQTP funding was provided when it was learned that two profoundly deaf students were to enrol in Year 7 in 2005. It was proposed to place them in a mixed ability class of 20 students; to continue the ROAR program; and to ensure that the two deaf students benefited from the school's developing emphasis on quality teaching. A recently retired teacher had just completed her doctorate on the integration of deaf students into regular classes, and it was further proposed that this teacher would assist teachers to devise quality teaching strategies that could operate in an inclusive learning environment for profoundly deaf students.

Given the evolving school commitment to quality teaching, and the foreshadowed enrolment of two deaf students, the availability of AGQTP funding was particularly propitious.

Implementation of the school-based project

There were three broad phases of implementation relating to the three school terms:

- Term 4, 2004. Involved the selection of potential students for the class from year 6; the familiarising of staff with the needs of deaf students; the alignment of the proposed teaching strategies for deaf students with the QT guidelines; the design of an initial language program; the development of resources; and the development of tools to assess both the students and the effectiveness of the program.

- Term 1, 2005. Involved the commencement of the program and staff monitoring of its impact on students; and the implementation of an action-learning model involving a continuous process of review and redevelopment.

- Term 2, 2005. Involved the continuation of program implementation and evaluation; and the publication of developed learning modules.

For the duration of the project, there were regular fortnightly team meetings of the 13 staff on the project. These typically involved the display of newly created resources; sharing their uses and how they might be improved; and discussion of quality teaching pedagogy.

Achievements of the school-based project to date: for the school, teachers, students

The following are identified achievements:

1. The observation of the Head Teacher, Teaching and Learning: 'I loved working with a dynamic team', was echoed by virtually all team members, as was the enhanced belief of what the synergies between team members can accomplish as opposed to working alone. The team acknowledged that the initial narrow focus of catering to the two deaf students broadened into a deep understanding of pedagogy for all student learning. A Maths team member commented, 'You can't do chalk and talk with hearing impaired … you need the visual, so we are rethinking how … there is a spill-over of strategies into other areas'. Team members all claimed that, as a result of the fortnightly meetings, 'it made us aware that there are other ways of doing things … and that what we are [currently] doing is good'.

2. The production of a booklet titled, 'Quality Teaching Action Learning', including sample strategies developed by seven of the team to use with hearing-impaired students in a mixed ability class. The strategies are applicable to the learning of all class members, and the KLAs reported include English, Maths, Science, History, PD/H/PE, Technology, Music and LOTE. Each of the contributors used the quality teaching framework to develop their strategies. The booklet will be available to all staff.

3. The preparation of a videotape of the evaluator's first interview with the 13 team members in March 2005. This is regarded as a fine instance of action learning because the subsequent discussion enabled the team to reflect on progress and to develop new initiatives.

4. The development of a DVD outlining the project within the quality teaching framework, and used to report progress to the NSW DET sharing conference.

5. The improvement in the learning of the two deaf students. While staff were cautious in making this claim, acknowledging that such improvement might have occurred despite the project, they claimed to have observed improved concentration, and self-esteem, as well as cognitive gains.

6. The development of visual aids that have assisted all learners.

7. The promotion of a culture within the team involving reflection as both teachers and learners. This was perceived as the precondition for making changes to both teaching and learning.

8. The demonstrable development of interest in non-team school staff: 'In a sense we do have to understand and be involved.'

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to embed Quality Teaching

The following factors were identified by staff:

1. The time to reflect on one's learning and to share discussions of pedagogy with other teachers. Ironically, many team members claimed that they did not use their full allocation of days from concern that their absence may impede the learning of their students.

2. The operation of fortnightly meetings in teams. All team members acknowledged the synergy of working collaboratively and the excitement the

team generated. It was argued that action learning is a better form of professional development than 'one shot' in-service days.

3. The quality of the team. One reason for effectiveness was the fact that the initial team was hand-picked.

4. The organization of the Head Teacher, Teaching and Learning. One team member, describing her as an inspiration, commented that 'when she asked for help, they'd say how much'.

5. The two NSW DET run conferences provided a forum for hearing what other schools were doing, and provided the opportunity to showcase their own achievements. One teacher, with a certain concealed glee, reported on how the team 'gave our workshops as though the principals were class members'.

6. The Quality Teaching Model was utilised as a framework to appraise effective teaching and to develop new ideas.

Role of action learning and the Quality Teaching framework in the success of the project

Staff had expressed a commitment to the Quality Teaching framework before applying for funding. It was regarded as a valuable framework for formalising good teaching practice and, as the project progressed, was increasingly perceived as a helpful framework for introducing new ideas for practice. The team booklet, 'Quality Teaching Action Learning', reports the work of seven team members adopting the framework.

The regular fortnightly team meetings, involving reflection on practice and sharing and generating ideas for future practice with strong leadership commitment and support, were a fertile context for action learning. There is substantial evidence of the initiatives that progressively evolved as a result of these team meetings. The Head Teacher claimed that 'action learning works because its not imposed from the top. It's not about status and power. They [the teachers] have equal ownership'.

There was, however, a team belief that 'we haven't learnt much from our academic partner', though this is predominantly explained by a 'communication problem' and the fact that the initially identified partner was unable to continue in the role.

Plan for sustaining professional learning after the project

Part of the provision for the eleven school colleges in NSW involves certain 'structural' changes at the end of each triennium. The current project team expressed concern about the ways in which these changes may impact upon 'the wonderful team that now exists': 'Our team won't be together in the same way,' the principal claimed, and yet, 'we wouldn't want to lose what we've got.' The leadership did concede, however, that a professional learning team, with an action learning emphasis, would continue to operate, though it may be reconstituted. The inevitability of encroaching change was seen as an argument for extending such projects across the whole school.

Case Study 6: Bilby Public School

Context of the study

Bilby Public School is a P3 school of 329 students and 12 regular class teachers in a leafy, upper-middle-class area. There is a non-teaching principal, three assistant

principals, two RFF teachers and a computer teacher who team teaches with all classes two days per week. The staff are generally highly experienced and there is little staff mobility. The school has an open and warm climate.

Overview of the school-based project

The project was designed to build on the school's focus of employing an ICT specialist to work with regular classroom teachers. It was anticipated that observing and team teaching with this specialist ICT teacher would not only develop teacher understandings, attitudes and skills in ICT, but utilise the technology available in the school and improve student outcomes. The project aimed to continue this focus by:

- increasing teachers' understanding and confidence to integrate ICT in teaching and learning

- developing cooperative programming

- improving ICT skills through engagement with the NSW model of pedagogy.

The team of five, headed by the ICT specialist and the principal, focused on the three dimensions of the Quality Teaching Model: intellectual quality, quality learning environment, and significance. Team members adopted an action learning cycle: planning according to the Quality Teaching Model, followed by implementation and recorded reflections. The plan also involved partner observations of lessons to encourage the requisite reflection.

Process leading up to the school-based project

Exploring the use of ICT was an acknowledged school strength. Prior to seeking AGQTP funding, staff were becoming more comfortable and confident in the use of ICT. Teachers were increasingly expressing the need to 'put ICT back into the classroom context' and to 'embed and integrate it further in the curriculum' through the provision of classroom strategies.

The staff had only 'dabbled on the edges' of the Quality Teaching Model. It was certainly not embedded in the school, but it was seen as a valuable tool to deepen teachers' understandings of quality teaching and, by extension, the use of ICT. Staff, under the leadership of the ICT specialist, acknowledged the importance of exploring international pedagogical benchmarks for ICT in teacher education, viz Personal ICT Competencies (already addressed in the school); ICT as a Mind Tool; Educational/Pedagogical Use of ICT; and ICT as a Tool (proposed for investigation in the submission).

The School Plan for 2004/05 emphasised both the development of pedagogical skills to support ICT across the curriculum, and the need for teachers to be reflective in and of their practice as a basis for their professional learning. So the availability of AGQTP funding, conditional upon the use of the Quality Teaching Model, was regarded as a timely extension of evolving emphases and directions.

Implementation of the school-based project

The team was proud of the originally conceived action plan:

- Term 4, 2004. Involved providing team members with opportunities to engage with the Quality Teaching framework, creating opportunities to work with the ICT teacher to develop knowledge, skills and understandings of the applications of ICT; observing and reflecting on classroom practice in learning

partnerships; designing 'rich tasks' that demonstrate achievement of outcomes relating to elements of the Quality Teaching Model; and sharing the learning journey with other staff.

- Term 1, 2005. Involved continuing all of the above, as well as liaising with the ICT Innovations Centre at Macquarie University; focusing on the integration of ICT into HSIE (and refining current units in the school's scope and sequence); and implementing a new cycle of action learning, involving planning, teaching, observation and reflection.

- Term 2, 2005. Involved consolidating the team's skills relating to how the Quality Teaching Model operates, in particular focusing on collaboratively developing trans-disciplinary units of work in HSIE, using the newly learned competencies.

Apart from three 'operational' phases, team members identified a progression from being initially overwhelmed, both by the nature of the task ahead and the new terminology (the QT framework), to the emergence of greater clarity with the operation of the action-learning plan. In response to a query about the present state of 'illumination', the principal laughingly used the metaphor of 'muddy waters clearing'.

Achievements of the school-based project to date: for the school, teachers, students

The following are identified as achievements:

1. The development of more flexibility in learning through the application of the Quality Teaching framework, incorporating the varied use of ICT.

2. The provision of a great range of teaching/learning strategies to engage all students and the identification of other strategies to promote the learning of the gifted. There was an acknowledged increased awareness of class needs and learning styles.

3. The design of 'rich tasks' (based on the Queensland New Basics) within a newly developed scope and sequence for HSIE and involving higher-order thinking tasks.

4. The increase in opportunities to 'celebrate student achievement' through student production of high-quality, computer-enhanced work.

5. The development of cross-disciplinary units of work, incorporating the use of technology. For example, a term's work for Stage 3 in Science and Technology (incorporating outcomes from other KLAs) titled, ' Switched On: Using and Generating Electricity', requires students to make a PowerPoint presentation, demonstrating how energy may be supplied to a community without using fossil fuels, incorporating what students have learned on a revisited conceptual map.

6. The increased interest of all staff in ICT. The Personal Development Plans of staff members reveal ICT as the most preferred area in which to develop expertise. This was also true for the couple of the school's 'technophobes'.

7. The team bonding that resulted from sharing and collaboration. One team member commented: 'We don't work in an environment where you can share your classrooms. Teachers are isolated. [The project] has really brought us together.'

8. The promotion, through collaboration, of a sense of connectedness within the school (classroom, library, computer labs).

9. The wholehearted adoption of the NSW Quality Teaching Model, and the associated use of a common language with which to discuss teaching practice. The team identified a growing confidence in the use of 'a metalanguage'.

10. The establishment/confirmation that all staff members are effective teachers.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to embed Quality Teaching

The following factors were identified by staff:

1. The time to reflect on one's own learning, but this was also identified as a constraining factor: 'When you have a class to teach, you know you have to get back to it. It was still an issue to take time off.'

2. The importance of committed leadership. The ICT teacher 'knew where the school needed to go; she was really committed to it'. She was described by a team member as 'our guiding light'.

3. The NSW DET-run conferences were regarded as very helpful, both for hearing what other schools were doing, and as a confirmation of the value of their own project. There was, however, a strong belief that the second conference (April) should be held in June or July at the completion of the project.

4. The flexibility and opportunities for negotiating the action plan were identified as facilitating factors, even though there was acknowledgement that the initially conceived plan was followed.

5. The benefits of team-work in terms of observing each other's teaching, team teaching, sharing and collegial support.

6. The initial lack of confidence in one's own ability and in each other was identified as a constraining factor. The growth in competence and confidence is seen as an indication of the program's efficacy.

7. The invaluable contribution of the academic partner, who assisted with the original submission, provided ongoing support at the school, conference and ICT Centre, and created focus when necessary.

Role of action learning and the Quality Teaching framework in the success of the project

Team members attribute the success of the project to the Quality Teaching framework and action learning. The team 'had dabbled on the edges' of the Quality Teaching framework before the submission, and the framework, after an initial period of feeling overwhelmed, provided a tool and a language with which to reflect on, and develop new pedagogy. While three dimensions of the framework were the main focus, other strategies came to the fore in developing units and 'rich tasks'.

Action learning was fundamental to the project's success. Fortnightly team meetings, supplemented by sessions at two staff development days, produced synergy in discussions of 'where we'd been, what we'd done, and what we might do'. Apart from the 'buddy teaching', collaborative planning, reflective journals and silent conversations, the academic partner 'gently guided us as to what we should be doing' and frequently challenged team members to discuss the meaning of their recorded reflections.

Plans for sustaining professional learning after the project

The principal proposes that the current project team will continue as the ICT team, and that a new Quality Teaching team will be established. She further proposes that someone from the project team will also be a member of the new QT team, and will guide its progress in selecting and developing a new project. The principal has recently completed a training course in INTEL (integrating ICT into all school learning areas), and will share her newly acquired knowledge with the whole school staff (including the project team).

Case Study 7: Hakea Central School

Context of the study

Hakea Central School is located west of the Great Dividing Range, about 25 km from a regional centre. It is a K–12 school of about 200 students. The school has faced a variety of challenges in recent years. Specifically, until very recently, the school has not been highly regarded by the local community. It competes for students with nearby state and non-government secondary schools that are larger and have been 'attractive to many local students'. The drawing area is low in economic status, with the exception of some 'escapees from Sydney'.

The population has experienced high levels of unemployment following closure of local industries. Prior to the current principal, the school has been led by a series of principals with short tenure. The prospects for the school in the last 18 months have improved as the school has tried a range of initiatives, of which action learning is but one. The school's improvement has been recognised by an award for the NSW DET for middle schooling and, literally, a better 'press'.

The school has 75 students in the middle school (i.e. Years 5 to 8) who would typically be organised into 4 classes. In the middle school program, the four potential classes have been combined to form two classes – each co-taught by two teachers. This arrangement is dependent upon the staffing formula and very sensitive to student numbers. A small drop in student numbers in 2004 resulted in a loss of a teacher. This threatened the middle school program but new enrolments allowed it to continue. Unfortunately, the original teacher, now lost to the school, could not return.

The two teachers who take the lead in the middle school project are very frank and open as they encourage people to watch their co-taught class and what they are doing. The researcher was warmly invited into the class on arrival for the first visit and, on the second visit, found himself joining a team of students to compete in a science quiz game. There was an undeniable feeling akin to visiting a large family in the country rather than a school classroom.

Overview of the school-based project

The project was limited to a small group of staff: five staff members teaching in the middle school programme at the school. This included three primary and two secondary trained teachers. Two of these teachers were also members of the executive.

The project involved many varied sources of data: lesson coding, using the Quality Teaching Model; teachers' reflective journals; feedback charts from students; learning logs; focus group discussions; student interviews; minutes of team meetings –

analysed and annotated; video recordings; and a pre/post Concerns-Based Adoption Model (CBAM) survey.

Teacher thinking, planning and discussion were informed by two academic partners; experience; selected, shared readings; and evidence from the above data sources. The project centred on the combining of middle school classes that were co-taught in a program, integrating secondary and primary syllabuses. The 'project developed to see whether their integrated program was getting the achievement we wanted in terms of science, technology, history and geography'.

Process leading up to the school-based project

The action learning project developed from an existing, almost three-year-long action research process in the school. A group of teachers at the school had been researching their own practice as teacher researchers, using action research with the guidance of an academic from Monash University.

The action research had arisen as two teachers were particularly keen to improve their teaching of their shared class. They wanted to monitor their teaching and the learning of their students progressively, and use this information to modify what and how they taught. They already had an established pattern of regular meetings, in their own time, when they reflected on practice and planned actions in their action research. The invitation to apply for support from AGQTP funding was timely because 'we just got it [invitation to apply] handed to us and it looked like a great opportunity to have financial support to meet in school time and to evaluate integrated studies as part of the project'. The main shift lay in making interconnections between what they were already doing with the Quality Teaching Model.

Implementation of the school-based project: Phases, stages, changes

As the QTAL project was so closely aligned with what was already happening, the process proceeded seamlessly. In Term 4, 2004 they were assigned their (new) academic adviser but the team at Hakea maintained contact with the previous adviser, though to a lesser degree than had been the case previously. They 'set aside Wednesday afternoons to meet … The dialogue was important because it allowed us to identify the QT elements we were already strong on in our classroom and the ones we wanted to develop … higher-order thinking tools and highly supportive learning environment were strengths. Substantial communication was also there … [So the] development of deep knowledge and understanding was targeted'.

During Term 4, 2004 regular meetings were attended and supported by a DET staff member who, as the regional linkages consultant, had previously developed a close relationship with the middle school teachers. Although no longer part of her formal role at regional office, she continued to act as a critical friend. She explained, 'My job [as consultant] was to bring along QT materials and to consider what QT might look like in their classroom. There was lots of reading and lots of professional dialogue.'

For these teachers, action learning had already become part of their normal practice. Thus, they first spent time 'mainly getting our heads around QT and its language'. Their analysis of programs indicated: 'Deep knowledge and understanding is evident in programs (and teaching) but we were not sure that it is getting through to our kids … We knew we had elements of a supportive classroom but the new thing we wanted – we wanted to be sure of, was deep knowledge and understanding as part of the integrated studies.' This desire to 'be sure' characterised the project, in that the

teachers were determined to gather convincing evidence so that they could be confident that their middle schooling strategy was working for all students across all middle school years. Indeed the teachers were less easily convinced than the 'outsiders': the consultant and academic advisers: 'As an outsider, I felt kids were getting in-depth knowledge, but the team wanted better evidence/data.'

As the two central teachers developed deeper understanding of the Quality Teaching Model they continued to gather evidence of their teaching. They met with others in the middle school to reflect on practice and engaged in professional conversation about the dimensions and elements of the Quality Teaching Model, which became central to their planning and teaching of their class. For example, 'connections [were made] between science, together with other disciplines, especially English and Mathematics – making connections with real life situations'. There was greater emphasis on the metalanguage and 'scientific literacy'. Both teachers and students used the language of the Quality Teaching Model during lessons. Both teachers and students spontaneously referred to, for example, 'metalanguage', and 'substantive communication' during lessons so that discussions took place about what these meant before students went on to work in cooperative groups.

The project was limited to a small number of students and teachers in the middle school and, in terms of teacher participants, was small. On the other hand the data collection was extensive (see above) and produced a small mountain of documents. Nevertheless, data analysis was thorough as the middle school team continued their now long-term, iterative process. At their regular middle school meetings, for example, the professional dialogue was audio-recorded, transcribed and analysed, and transcripts were annotated for further discussion by the team. In short, there was a commitment to evidence-based practice, driven by the teachers' shared sense of responsibility to their students. This commitment to basing actions on evidence was strengthened by the teachers' recognition that they were trying something unusual and their need to be convinced that what they were doing was 'working for their students'.

During the first case study visit in March, the two teachers explained that although the project was limited to their middle school classes their 'plan is always to pull in others. We haven't really talked much to others yet … [but] maybe it's just that integrated studies is so time-consuming we just haven't found the time for sharing'. There was also a reluctance to be seen to be telling others how to teach and a sense that advice may not be welcomed by some others in the school.

On the other hand, interviews with some (but not all) teachers not involved in the middle school project indicated that they knew very little about the middle school project; although they should have made the effort to know more; and they would like to know more (this last view seemed to arise for some during the interview). These teachers admitted that this position had not been conveyed to the middle school team. Indeed, by not showing active interest, it may be that unintended, negative perceptions may have been conveyed.

The two middle school teachers said that, 'there's an open invitation to staff to come and be involved or just visit the class. … People have talked positively and knowledgeably about QT and this surprised us because we didn't realise they knew about it'. Nevertheless, in March 2005 there was no hint that the action learning/research that drove the middle school project had influenced teachers outside the small middle school group. By contrast, the Quality Teaching Model had been

discussed among the staff and if the two teachers were surprised by the knowledge of others of the Quality Teaching Model, other teachers in the school were very impressed by one of the two's knowledge, describing her as a 'real expert' and being 'fantastic at Quality Teaching'. Thus, in the early stage, the knowledge dissemination seemed limited to the Quality Teaching Model alone and excluded action learning.

By contrast, at the second case study visit, teachers not in the middle project were speaking of how they were planning on adapting middle school action learning plans and strategies to other teaching groups in the school. Teachers in the HSIE teaching group, for example, were speaking with interest about action learning, Quality Teaching elements, and how they would be used. They had already grown in their understanding of the Quality Teaching Model but 'it's the doing part … actually putting it into practice and doing it that's important'. They want to know 'what works and what doesn't', explained a teacher who was part of the middle school team, leader of the HSIE team and central to this project. Some other teachers were also keen but commented that in their KLA area there was little interest. Hence these few felt unsupported and possibly envious.

This process is interesting in that there was no great push to include others or argue that others should be involved with the Quality Teaching Model or action learning. It seems that individuals gaining benefits from these and 'how to' knowledge about the action learning process took their knowledge to at least one other group in the school. This is a striking, natural means of knowledge generation and distribution, driven by a subtle, incidental process of exchange of information. In short, there developed a desire by at least some others to adopt and adapt practices perceived as successful and rewarding. This desire was prompted by 'hallway talk' about 'good things happening', which led to a willingness to know more and 'try it myself'.

Achievements of the school-based project to date: for the school, teachers, students

Visitors to the school, including this researcher, the academic adviser, the consultant and principal were glowing in their views of the achievements in the middle school. The project leaders, however, were reluctant to overstate their achievements through the Quality Teaching Action Learning project. This is, perhaps, due to the project being an extension of their existing action research, making it difficult to discern what had already been achieved and what can be attributed to the project *per se*. It also appears to result from the two central teachers' insistence on evidence to support claims they make and to them being their own harshest critics.

According to the action learning team, their evidence indicated that:

1. There developed good understanding and extensive use of the Quality Teaching Model to inform, monitor and improve teaching among the middle school team.

2. There was greater understanding of the Quality Teaching Model and more extensive use of coding among teachers in the school.

3. The coding had demonstrated that targeted 'quality teaching elements were often already evident in [their] classroom practice' and central to 'teaching methodology', but less evident in programs. Hence, programs are being modified.

4. Quality Teaching Model language has become part of the professional dialogue and the terminology has become a means of documenting, discussing and analysing teaching developments.

5. The team was and 'remains enthusiastic and committed to the action learning process. Transcripts of meetings showed an openness and willingness to critique, reflect and collaboratively investigate new strategies and processes'.

6. The continuing interaction and sharing of ideas among primary and secondary teachers added to the learning experiences of students.

7. The project has 'not changed what we do, but helped to reward and entrench our action learning'. At the same time, the Quality Teaching Model has given 'a label and a language to help share thinking about teaching'.

8. 'People talk positively about the school and now the school has an impressive reputation in the wider district and beyond'. There have been talks and presentations to others and 'a Visit by the D-G'. It's 'all indicative of success … recognition and improved school image and status' (This is not all attributable to the middle school project but the project is claimed to have played a role).

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project:

1. The existing action research project, which had progressed for three years, laid the foundation for this action learning project. The team was already experienced and knew where to get assistance, and the action learning process was already part of their day-to-day teaching.

2. The funding made action learning more visible and viable, bringing the professional discussion into the school by holding meetings during school time. This made it easier for more staff to participate because the meetings previously had been held far from the school in the evening.

3. Keeping the program small and limited to an enthusiastic group allowed it to move quickly in a mutually supportive environment.

4. The school principal was very supportive following his dictum of trusting staff to be professional and to try innovations while he offered encouragement to do so.

5. Money allowed time release, making the action learning far less burdensome that it had been, funded the videoing of classes, and subsidised attendance at the sharing conference – which was valued.

6. Attending and presenting at conferences was very rewarding and encouraging. The two main teachers felt that they and their efforts had become highly regarded and well-respected. This encouraged them to continue.

7. There was a strong sense of commitment, shared responsibility and mutual support.

8. The teachers enjoyed the professional dialogue and the support it gave them in their teaching.

9. Both academic partners were very supportive, providing advice and assistance particularly in data gathering and analysis.

10. The responsiveness of students to the middle school environment, in which most students were happier and more cooperative in their learning, was a constant stimulus to continue.

Difficulties were rarely mentioned. Staff interviewed identified few factors as constraining the project, perhaps because they had been doing such work for so long that obstacles were barely noticed or had previously been overcome.

However, some constraints were identified by those interviewed:

1. The major obstacle is the NSW DET staffing formula which threatens to make the staffing of the middle school project, with its co-teaching of shared classes, unsustainable.

2. The variation in the teaching load and release time of primary and secondary teachers in the middle school can create resentment when the two work closely together on projects and one has more release from face-to-face teaching than the other.

3. Though impressive and convincing to others, the two teachers were always slightly dissatisfied with the trustworthiness of the 'soft' data (e.g. reflections, interviews, discussions). They wanted more 'hard data', including test scores illustrating student achievement and improvement.

4. Release time is a double-edged sword because it is needed for time-poor teachers but 'we sometimes feel we have deserted our classes' ... I often wish I could run down and check that my class are OK'.

5. 'Our executive roles are time-consuming and take us away from the project … [including] interruptions to meetings.'

6. Communication with the interstate academic adviser sometimes proved difficult.

7. Private space in the school for viewing videos and conversations is limited.

Role of action learning and the Quality Teaching framework in the success of the project

Action learning was, and long had been, central to these middle school teachers' work. It had become, and remains, a self-critical process of improvement. The Quality Teaching Model provided a language to improve the existing dialogue and encouraged the identification of strengths and weaknesses, resulting in the targeting of specific needs. It also provided a bridge, enabling discussions with other teachers within and beyond the school.

Plans for sustaining professional learning after the project

The middle school team plans to continue as their program of development is not driven by the project but by the action learning/research in which they have been long engaged; the professional support and learning this provides; and the improvements this yields in teaching and learning. Nevertheless, they hope that it might be better supported by becoming part of the school management strategy; by sharing the practices and responsibilities more widely; and maintaining some time release for the process. The release time is seen more as an 'incentive' and mode of 'recognition' and not as providing all the time required to engage in the process.

Case Study 8: Wollemi Public School

Context of the study

Wollemi Public School is a relatively new (6-year-old), K–6 school. It has experienced rapid growth to a current student enrolment of 610 students, with 23 classes. It has many new buildings, resulting from an ongoing, and somewhat distracting, building program. The school draws students from areas of low socio-economic status. The drawing area, though by no means itinerant in nature, is characterised by a changing population, providing a similarly changing student population in the school, with frequent 'comings and goings'.

The school was described as a 'tough school', as it experiences significant student management issues, including high mobility. These present long-term and daily challenges. The attitude, among staff interviewed, to these challenges is that they are viewed as something not to be 'whinged about', but to be addressed.

The students' results in literacy and mathematics have been below state average, although literacy achievements improved in 2004–05. This is claimed as an outcome of an unfunded, literacy action learning, school-based project begun in 2003.

There is a 'high rate' of 'staff turnover', resulting in some classes having multiple teacher changes during the year, including short periods and extended blocks taken by casual teachers. The teaching staff have a broad range of experience. Teams have been established among staff, and teachers belong to one of four stage teams, each led by an assistant principal.

Overview of the school-based project

The project was large in scope, being a whole-school venture, involving participation of every teacher and each student in every class. The project has one major focus but is informed by a range of perspectives or models and involves a complex set of teacher and student activities.

The project aims to improve mathematics learning and students' Basic Skills Test results. A weakness in understanding of measurement and volume, in particular, was identified both by the academic partner in interviews with students and from Basic Skills Test data; hence it has been targeted.

Specifically, from the NSW Quality Teaching document, the dimension of Intellectual Quality has been targeted for improvement, with specific emphasis on the elements, Higher-Order Thinking and Meta-language. There is also a perceived need to address individual differences in learning among students. Consequently, the project has set out to raise awareness about individual differences and uses Multiple Intelligences as a guiding framework. The action learning processes promoting change include teacher professional journals; classroom observation and reflection, using the Quality Teaching Model; an initial practical set of mathematics activities to probe students' understanding of measurement; and discussion of and teaching of the 'same' set of mathematics lessons across classes. Thus, professional dialogue about evidence from shared experience seems central to the attempt to improve teacher learning, teaching and, thereby, learning.

Process leading up to the school-based project

The action learning project was built on a foundation of two experienced leaders and a similar, recent, successful project. Two members of the executive have a record of seeking and gaining grants to support initiatives in the school. They applied in a previous Quality Teaching round but were unsuccessful. Nevertheless, they embarked on their unfunded project to improve student literacy. This literacy project had a great deal in common with the current project, being characterised by action learning, driven by perceived weaknesses in Basic Skills Test results, and involving all staff in teaching planned lessons, targeting specific literacy needs followed by professional, stage-team-based dialogue. This project had demonstrated its success, to a sometimes ambivalent staff, with improvements in literacy achievement as measured by the Primary Writing Assessment.

The success of this project encouraged the two assistant principals to use a similar model, but to target mathematics. The academic partner had already conducted interviews with students in the school as part of a research project. This, too, had helped to identify students' particular strengths and weaknesses and to suggest ways forward.

Unusually, the two assistant principals, without informing other staff, developed and submitted their Quality Teaching Action Learning application project, only supported by advice from the academic partner-to-be. They had no support from other executive or school staff: 'There was no support to do the Action Learning application – just long nights'. The AL project leaders have applied for many funding schemes 'with mixed success'. They 'usually tell staff after' the event to prevent 'anxiety and criticism' but in this case utilised advice from the academic partner-to-be.

The timing of the AGQTP grant was serendipitous because the two drivers were highly motivated by the success of their literacy project and, consequently, well-informed about the NSW Quality Teaching Model and a potential action learning process that involved the whole school, as well as being well-connected with an enthusiastic, highly respected academic partner.

Implementation of the school-based project: Phases, stages, changes

Initially, the school took a long time to implement its action learning plans and in March 2005 was struggling to meet its own project timeline. Put simply, it took a very long time to 'come to grips with' what was a complex multifaceted project with the high ambition of whole-school involvement and change. When the researcher first visited the school, it was hard to envisage how a leadership team (excepting the academic partner and the two drivers), down on confidence and knowledge of both quality teaching and action learning, could lead the whole school on a demanding journey.

Making the case
As teachers other than the executive indicated that they were unaware of the project or even the application, the first step was to make a case for the proposed action learning.

In 2004 the staff, led by the two teachers, had 'already been through the action learning process in LARK [Action Learning Literacy Project]'. There was some initial resistance to LARK but the need was argued, based on results in the school, and this

led to most staff participating. The success of students in testing, following LARK, was evident, with improved scores. This confirmed the merit of LARK and gave credibility to the approach/innovation and personnel leading it. Here, the evidence seems crucial – both clear evidence of need and, later, clear evidence of improvement.

Similarly, the current action learning/maths (measurement)/Intellectual Quality project is based on an identified need, based on the following evidence:

- poor Basic Skills Test results in maths – measurement

- information about student thinking and views of measurement derived from the academic partner's interviews/research with students in 2004.

Making the case of an existing need to be addressed was a critical part of the strategy for gaining staff participation. The evidence was presented as part of a whole-staff meeting in 2004. The Quality teaching Action Learning project was presented by the two teachers as a way to address the need and improve student outcomes. The argument presented emphasised that the 'action learning project is not extra work' but merely 'a way of doing what teachers should already be doing …based on syllabus requirements, outcomes and expectations'.

The response of staff was mixed with some teachers becoming very enthusiastic, some neutral and others responding negatively.

Leadership
A leadership team of seven was formed during Term 4, 2004. The team was headed by the two assistant principals who had planned and applied successfully for the project. To these were added a representative of each stage team, who was also part of the mathematics reference group. The leadership team had a range of expertise from extensive to little leadership experience.

Some teachers were invited onto the team to provide an opportunity for building leadership expertise, rather than because of a special commitment to the project or perceived leadership qualities. In this way, it was hoped (by the co-leaders) that the QTAL project could contribute to building long-term leadership capacity within the school. In this distributed leadership model, each member of the QTAL leadership team would plan the project's progress, determining what actions to take and what evidence to collect, and analysing this evidence to determine further actions. They assisted in developing lessons to be taught in common, acted as a conduit for information to the stage teams, and had the main role for promoting and implementing the QTAL project among teachers within their stage teams. It is noteworthy that the stage team leaders were not the QTAL team leaders. Hence, the agenda of each stage meeting was not determined by or managed by the QTAL representative.

Members of the QTAL leadership team indicated that at least two members of the initial leadership team were reluctant members and did not develop the enthusiasm or leadership qualities needed to promote and lead the project within their stage groups. However, both left the school during the project and their replacements in the leadership group proved more productive.

The leadership team set project targets, such as dates by which common lessons would be taught. They planned for regular updates with and from stage teams each week, 'so we know we meet targets'. However, the extent to which each team implemented the targets and the time devoted to the project at each stage team

meeting varied. For example, in three of the stage teams, each meeting opened with discussion of and reporting on the QTAL project, but it could not be said that the path was always smooth in these teams. Where time was regularly devoted to professional discussion, the project progressed – albeit more slowly than hoped at first.

For a variety of reasons (see below), but primarily changing staff at the start of the year and stage team leadership problems (according to members interviewed in the leadership team), the QTAL project progressed very slowly at first and this was a source of frustration. On the other hand, the complexity of the project, with its multiple perspectives, proved a challenge for people to 'get their head around'. Thus, during the early implementation in 2005, the emphasis and priority of the leadership team and stage groups became the teaching of the agreed lessons, particularly the 'pre-test lesson' designed to probe students' initial understandings of measurement in mathematics. This was evident in discussions with staff and the leadership group during the first case study visit in March 2005. At the leadership meeting observed in March, only the co-leaders and the academic partner seemed well-informed about the project, the Quality Teaching Model and the rationale underpinning the project. At this time, action learning seemed barely relevant, with the pressing need for the stage leaders to clarify their roles within their stage teams and what needed to be done by teachers with their classes next. Thus, the bold aims of the project remained a little unclear as the immediate short-term goals were addressed.

A teacher, who was new to the leadership team in 2005, in what the researcher came to recognise as typical understatement, explained that she felt 'a little out of my depth'. Similarly, another teacher said that since she came onto the team, she is 'floundering'. Both elaborated that their concern was not so much about their fundamental capacity to work with their stage teams but, primarily, a function of perceived, initial lack of knowledge about the project.

The co-leaders and the academic partner played important roles during early 2005 and at the first QTAL leadership meeting, clarifying the steps to be taken in the teaching of mathematics and the relationship with Quality Teaching elements and dimensions, and building confidence. At this first meeting, which was observed by the researcher, it seemed obvious that only the co-leaders and the academic partner were confident about the project and its process. They listened with patience to the concerns of others and encouraged them first to raise concerns, but then to address concrete problems which had arisen, such as deciding how to ensure teachers made 'consistent professional judgements, based on common criteria', which were required to provide reliable data and evidence to inform the project, as well as making decisions about activities in common lessons to be taught.

The co-leaders and the academic partner often invited input from others in the group, often praised their suggestions and built team confidence. One of the most striking features of the researcher's notes of this meeting is how little the co-leaders said during the first two hours of the meeting during which time they mainly listened to problems raised by others. Many of these related to looking at communication problems and resource issues to see how the team could address them.

Just as the support of the co-leaders and the academic partner helped to promote a positive 'can do' atmosphere in the leadership team so, too, did the initial teaching activity that the teachers had tried. All the teachers in the leadership team spoke positively about the pre-test activity in mathematics they had done with their classes.

They spoke negatively about it being time-consuming and bothersome, but it provided evidence to all of the need to improve mathematics teaching and learning, as well as demonstrating the in-depth reasoning many of the students were capable of. This seemed to increase commitment to the project as team members now recognised the need first hand. Hence, the positive leadership of the co-leaders and the academic partner had combined with clear evidence of a personal professional need to act on behalf of their students to deter opposition to the project and channel thinking into what practical actions to take to select and implement lessons and improve communication among staff. Nevertheless, it seemed that one member of the team, who had been a reluctant member, remained so.

The project had a number of key activities or features identified above. Some of these met with more resistance than others. It is noteworthy that while teachers were encouraged to participate and the case for doing so was well argued, teachers were told that they had to do the activities that were essential to the action learning project, such as the journal, about which there had been some tension and resistance, although all teachers participated.

Often initial resistance was reduced once teachers tried things and realised the benefits and recognised that the burden was quite small: 'I had a lot of resistance to the journal but once I tried them, it was a really nice finish off, ending off, to lessons. It was not a nasty thing I had to do'. In some stage groups the project progressed well as teachers taught common lessons, gathered data, recorded reflections and regularly discussed their shared experiences, and what and how their students had learnt or not learnt. Where the action learning process proceeded well, the teams had made a commitment to it; it was well supported by both the action learning project leaders *and* the executive team leader. 'Successful' groups were relatively stable – though not immune from staff changes.

By contrast, one of the initially less successful teams was characterised by relatively weak leadership and low levels of enthusiasm from its action learning stage leader. Notably, the group that made least progress suffered from many staff changes, having an itinerant membership of casual staff. The teachers' classes were also characterised by 'behaviour problems', which made team members reluctant to risk 'unfamiliar lessons'. Furthermore, this team seemed reluctant to embrace the common mathematics activities that had been developed, citing an already crowded curriculum in Years 5–6 that made it difficult to include 'extra activities'. For this group the implementation seemed to be limited to the eventual teaching of the complete set of activities. This teaching of the lesson for some became an end in itself. However, the common lessons, while valuable in themselves as learning experiences for students, demonstrated their value in enabling professional dialogue at stage meetings if teachers taught them as planned at about the same time and prior to meetings.

From event to process
It is inappropriate for the researcher to make judgements about the merit of different stage teams because the circumstances of each was and is different, but they serve to illustrate the different types of progress that the school made as a whole. Specifically, in March 2005, the focus seemed primarily on a set of events, with the first event being the pre-test that probed student understanding. Hence, much of the discussion focused on setting the common lessons and getting them taught. This contrasted markedly with the second case study visit in July when again a leadership team meeting was observed. At this meeting, almost all members talked with enthusiasm

about the project. Progress in student learning had been identified, particularly among younger students, particularly lower-stage groups. Team members had been teaching the common lessons and valuing the professional conversations. All members of the leadership team spoke with confidence about the Quality Teaching Model and how it related to their mathematics initiative. The way in which the leadership team as a whole viewed their project had changed markedly from implementing a set of events – chief among these being the teaching of a common set of lessons – to a more sophisticated, more complex view of change, characterised by a process of related activities centred on teaching and gathering evidence in order to have a professional conversation about these. As one member explained:

> Each week we have a stage meeting … with a chance to talk about what we're up to. We talk about the lesson before we teach it and give and get advice on how to do it. We discuss the previous week's [common] lesson and … our teachers' journals. There's a real reward in conversations about how lessons went.

By July, there has been a shift from perception of the QTAL project from it being seen as a project to it being seen as a 'continuous process of improvement' for teacher learning and development. Yet there remains ambiguity about action learning, in that questions about it often resulted in responses about teacher professional development or the Quality Teaching Model. For most outside the leadership team, and some within it, it has developed into a seemingly, largely tacit but pragmatic process, characterised by addressing their problem by planning, taking action, reflecting, talking. Yet the general pattern seems unclear to them.

Achievements of the school-based project to date: for the school, teachers, students

There were many achievements identified by members of the QTAL leadership team:

1. Learning activities, targeting volume and measurement in mathematics, have been developed.

2. Weaknesses in mathematics have been identified and explicit teaching has been enacted to address these.

3. A strong leadership team, whose members have developed their expertise in leadership, action learning, the Quality Teaching Model and mathematics teaching, has been established.

4. The perceived success of the previous literacy project and the current mathematics project mean that many teachers value the action learning process and the Quality Teaching Model.

5. There has developed a more widely shared view of what good teaching looks like and an ability to describe it.

6. The QTAL team leaders in particular, and some other teachers, have increased confidence to share their thinking with others and they feel more highly valued by colleagues.

7. A pattern of consistent professional reflection is evident in teacher journals and some stage meetings.

8. Some teachers engage in professional dialogue about shared teaching experiences.

9. Teachers and students have become more deeply aware of metalanguage and target its development in their teaching.

10. The feeder pre-schools have been advised of the students' weaknesses regarding metalanguage and now have begun to target this in the pre-school setting.

11. The project has provided an opportunity for team members to celebrate their achievements.

12. Students' attitudes to mathematics learning have improved, e.g. before, when students did practical work in maths they considered it 'play time' and behaved accordingly; 'now, [it is viewed] as learning'.

13. Students have become more aware of the language of mathematics. This is not only evident in the target areas of volume and measurement but also in other areas, including the language of maths problem solving.

14. Students have increased confidence in maths measurement, volume and problem solving.

15. The school has developed its continuing, productive collaboration with the academic partner.

16. The school has increased its hands-on resources for targeted maths activities, taught widely throughout the school.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Staff interviewed identified a number of factors as contributing to the success of the project. Many related to personnel and experience – few could be considered peculiar to action learning.

1. The previous success of the action research literacy project, upon which the current project could build.

2. Leadership of the two assistant principals who had experienced similar projects, were confident, well respected and 'had clout' with both staff and the executive.

3. The support of an academic partner who was knowledgeable of the school, the target KLA, action learning and the NSW Quality Teaching Model.

4. Research previously conducted by the academic partner, providing evidence about student learning in mathematics.

5. The Quality Teaching Model, in that it provided (*inter alia*) a language for discussion, a tool to evaluate lessons, criteria for reflection, and key elements to guide their purposeful developments in mathematics teaching.

6. Time, particularly release from face-to-face teaching, for the leadership group to plan, gather and consider evidence.

7. Systematic organization to distribute leadership among selected staff located in each stage team.

8. Strengthening of a system of communicating and networking of staff through stage team groups with the leadership team.

9. Strong sense of commitment, shared responsibility and mutual support, initially between the two executive leaders, but which later developed more widely among the majority of the leadership group.

10. Gathering and sharing of experiences and evidence to build enthusiasm and expertise.

11. Attitude of some key school staff eloquently described as follows: 'If there is a problem we just get on with it and do something about it.'

12. The sharing conference, where the leaders found support from many other teachers and realised that many saw what they were doing as valuable.

13. Time to plan, think and converse.

Staff interviews indicated a number of factors as constraining to the success of the project. Many related to personnel and experience and few could be considered peculiar to action learning.

1. The changes in staff, with departing staff often being replaced for long or short periods by casual staff. New staff had little knowledge of the complex project and often, at best, only managed mechanistic implementation of activities.

2. Negative attitude of some teachers to the project, e.g. 'extra work', interruption to normal teaching, the project model, and/or leader privileges.

   - 'Some teachers, particularly new teachers are in 'survival mode' as this is a 'tough school'. … [This] makes trying new things … [which change routine] a little more difficult.'

   - Some staff viewed the project as an 'add-on', others as 'part of what they should do'. Where it was viewed by teams as an add-on, there was little progress.

   - Varying levels of commitment among staff have 'made it a struggle much of the way. It would have been easy to say, "Who's interested? Let's go with it" but this approach was rejected because of a commitment to improving the lot of all students'.

   - The process hinged on all teachers teaching a set lesson at about the same time, before stage team meetings. Teachers in two teams were unwilling or unable to do this.

   - Resentment by some staff not on the leadership team, due to perceptions that those on the team were getting 'time off'.

   - There was 'negativity' among teachers in one stage team, who were 'not keen on the philosophy' of the project.

   - There has been a lack of 'air time' at whole-staff meetings in 2005. There is a need to reiterate the importance of the project by bringing it to the fore at each staff meeting. Some perceived that this indicated a lack of commitment to the process from the principal.

3. The scale of the project, which was whole-school and complex.

4. Weakness in some QTAL team leaders' or Stage team leaders' enthusiasm for, ability to lead, or knowledge of the process.

Role of action learning and the Quality Teaching framework in the success of the project

The project used action learning to trial, monitor and provide ongoing evidence to inform an attempt to improve mathematics learning and outcomes. The NSW Quality Teaching Model seemed to provide a way to focus on identifiable aspects/elements of

the teaching/learning that was sought. The evidence, obtained systematically, and the collaboration of teachers in teams were crucial in providing professional support, in convincing teachers of the need to do something, and in providing positive feedback that they were achieving some good.

Plans for sustaining professional learning after the project

The project team has not yet, but intends to seek to 'embed action learning in the school management plan … making it not a project but part of what we all do all the time to improve the quality of teaching'. By doing this, they can ensure funding of the process, though at more modest levels than in the current project. This was also described as a plan for 'continuous improvement'. This prospect became clear to the co-leaders after the DET sharing conference.

Time is viewed as essential, particularly teacher release time, but it is difficult to see how to fund sufficient time for an ongoing process of this scale. As part of this ongoing process, team members plan to maintain a role for the current academic adviser, though they realise this can't be 'too onerous'. The process will remain, but there will be a shift in emphasis to target a new area of need – perhaps annually.

Changes in teaching staff are anticipated. Hence, changes to the leadership team and to the teachers in stage teams are expected. This is seen as a significant obstacle to maintaining the momentum and knowledge base generated in 2005. This problem is recognised by the leaders, but they have not yet decided how to address it. They will avoid trying to conscript unwilling teachers onto the leadership team as part of a plan to build leadership capacity, but they still want to use the process for capacity building.

Communication among staff was recognised as a problem during the early phase of the process. This was, in part, a function of the timing of the project across Term 4, 2004 and the beginning of 2005. Nevertheless, the need to improve communication, particularly initially, both from the leadership team to all teachers and from teachers to the leadership team, is recognised. How this is to be done is not yet resolved.

Case Study 9: Banksia SSP

Context of the study

Banksia SSP caters for students with moderate to severe intellectual disability with high support needs. It is located in western Sydney. It has an enrolment of about 115 students. Students range in age from four to eighteen years old. Classes range from early intervention to Year 12 and class sizes are from three to nine students. The school 'takes pride in 19 to 20 students moving to mainstream schools every year'. The principal described the staff as: having 'good leadership', being 'committed' and 'enthusiastic' with a 'mix of experience'. A variety of learning programs exist in the school. Three were targeted in the Action Learning Quality Teaching project.

Overview of the school-based project

The project was organised around three teams: Morning Circle team; Picture Exchange System (PECs) team; and ICT/*Clicker 4* Team. Each team had three or four members who had volunteered to participate. Each team set out to investigate how selected Quality Teaching Model dimensions and elements could be used to enhance learning in their targeted program (Morning Circle, PECs or ICT). This involved

analysing the Quality Teaching Model, adapting it for their special education context, using it to inform developments in their selected program and taking improvement-aimed action in their teaching. The Quality Teaching Model was used to monitor their teaching, guide their actions and provide an indication of their achievements.

Process leading up to the school-based project

The staff had discussed the NSW Quality Teaching document and 'we were worried … how can we apply it to Special Ed?' So, while the prospect of an action learning project seemed attractive, there was a sense of foreboding and 'anxiety'. The school got together with three other SSPs, led by a consultant, for professional development based on the original Quality Teaching discussion paper. The consultant suggested that action learning provided an opportunity 'to take a closer look at Quality Teaching'. Three staff members developed a collaborative action research plan and presented it to staff, and the fifteen teachers at the school were invited to be involved. Nine teachers accepted the invitation. Two staff members (members of the school executive) had worked together to develop the school's submission to the NSW DET.

Implementation of the school-based project: Phases, stages, changes

The project had been developed by the two executive with advice from the principal. One left the school before the plan was implemented in the school. The other took over as sole leader. The loss was significant. The remaining leader explained her feeling at the time, 'I thought oh, my goodness, we have to do the QT project and what am I going to do?' However she 'returned to the submission [to clarify] … what we said we'd do … began to plan the release days and went back to the teams and said, "How do you want to go about this?"' Each of the teams then took responsibility for their own projects.

Thus, the school-based project was enacted by three distinct and seemingly independently operating teams. Each team initially consisted of three teachers. The teams had self-selected the aspect of teaching or learning that they wanted to improve. The teams each had release from teaching to meet with the academic partner and discussed 'where to go'. They each negotiated a clear focus. All the teams commented that, at first, they were a little disappointed that the academic partner was not more directive in telling them what to do. However, this view rapidly changed as they valued her input and suggestions but came to recognise that they had to think through and solve their own problems.

All groups independently determined that the coding sheets 'didn't work' in their special school context. They set about learning about the Quality Teaching Model, discussing ideas with the academic partner and developing coding instruments better suited to them. All the teams had to make elements and the terminology meaningful and come to agreement on what they 'looked like' in their teaching. The many complications they had to deal with included:

- What do these elements look like when the teaching situation is one-to-one?

- What does substantive communication mean when the child does not speak or write?

Each team selected elements most relevant to their goals and worked with these. The process of developing coding sheets was a significant action learning project in itself, involving initial adaptation of the QT sheets, trial of their new sheets, modification, retrial, and so on, until the teachers were satisfied that they had a practical coding

system that would work for them. All teams felt the need to 'challenge themselves' to address the domain of Intellectual Quality in their school setting.

The ICT team wanted to increase use of ICT in teaching at the school. They knew about *Clicker 4* and assistive technology – Intellikeys concept keyboard, and recognised its potential for learning in special education. Members of the team attended a professional development program on the use of *Clicker 4*, funded jointly by the school and AGQTP funds, to learn more about *Clicker 4* and how to use it in their teaching. They targeted selected Quality Teaching Model elements to monitor their progress as they used *Clicker 4* with students. Elements targeted were Connectedness, Cultural Knowledge, Explicit Quality Criteria, Substantive Communication, Knowledge Integration, Metalanguage, Narrative and Higher-Order Thinking.

The Morning Circle Team recognised that the morning circle activity was something all teachers did with their students but wanted it to become a more productive learning experience. They thought that if they could improve their morning circle, and gather evidence about this, then they could then provide advice to others in the school. The team worked on a list of activities and skills, mapping these against relevant Quality Teaching Model elements. For example, see Table X below:

Activity	Skills	Quality Teaching Model Dimensions/Elements
Greetings	Verbal	Intellectual quality
	Signing	-metalanguage
	Eye contact	Quality learning environment
	Responding	-explicit quality criteria

Adapted from school report: (School name), *AGQTP* 2004–2005, Using the NSW *Quality Teaching* document in Morning Circle.

This allowed them to enact activities, targeting specific skills. The Quality Teaching Model served to guide the development of the activities and modified coding sheets provided data indicating the effectiveness of their intervention. They focused on the following elements: Connectedness, Explicit Quality Criteria, Metalanguage, Deep Knowledge, Deep Understanding, Higher-Order Thinking and Self-Regulation.

The PECs team followed a similar pattern to those above. They thought that the Picture Exchange System (PECs) could be used more widely and effectively in the school. PECs was 'something we've tried to get people to implement in the school … but it wasn't really working in the school … so the plan was [to] look at what we could do to get it to work … we wanted evidence to show how it was working for us'. The team focused on the following elements: Metalanguage, Deep Knowledge, Background Knowledge, Deep Understanding and Higher-Order Thinking. One member of the team knew little about PECs but joined the team to learn more. Others on the team, who were more expert, provided advice and support.

All the teams met often and discussed their data and teaching plans, but there was no formal exchange across teams until towards the end of their project. Then, each team presented to the whole staff, outlining what they had done and what they had learnt, and making suggestions about how others might use the activities and experiences in

their own teaching. This generated much interest among other teachers and led to the adoption of new strategies in morning circle by most staff in the school, and the wider use of *Clicker 4* and PECs, with some staff intending to attend professional development courses to learn more about these programs. This presenting and affirmation by other teachers was a very positive experience for the teachers. The teams also presented at a Special Education Conference which caused some nervousness, but their work was so well received that this, too, proved a very rewarding experience.

All the teams spoke positively about the supportive nature of the small teams. Each felt responsible to the others, having made a commitment to take part in the project. This sense of shared responsibility proved important during difficult times. The ICT - *Clicker 4* team for example lost its prime driver when a member, who was co-leader of the action learning process at the school, left. At the time they 'felt leaderless' because he had a 'clear vision about where we were going'. The two remaining team members explained that they 'believed in what they were doing' and 'didn't want to let [the other teacher] down. They also felt a responsibility to the students and other teachers. The teachers felt a responsibility to their small team, as well as to all teachers, in that they were trying something which they thought could be of value to students in the school.

Achievements of the school-based project to date: for the school, teachers, students

1. Increased collaboration among teachers.

2. The educational value of PECs and *Clicker 4* have been identified, clarified and shared, leading to their wider use. Strategies for their use have been developed and shared in lesson plans and sample activities.

3. Teachers 'feel good' about their achievements in the project, particularly following their presentations at the school and elsewhere.

4. Teachers have come to terms with the Quality Teaching Model and made it meaningful in their context: 'It took a long time for us to get our head around that document … we worked out our own definitions and put it in our own context … At first I thought it was totally irrelevant … [but having agreed to be on a team] I had to find a way to make it relevant.' This adapting of the Quality Teaching Model enabled them to improve teaching by targeting elements for monitoring and improvement in their teaching in their own terms. They became more conscious and reflective of some elements than had been the case in the past, e.g. deep understanding.

5. The school produced a book outlining the process and practices each team had developed from their Quality Teaching Action Learning project.

6. The students demonstrated learning as part of their involvement in all programs. For example, morning circle had become more engaging for students, leading to a range of improved learning. They became better at 'naming' and 'picking friends', using diagrams and symbols, and reading. They were 'not just sitting' but thinking 'oh, it's going to be my turn next time ... [they are] involved'.

Influences/conditions/factors enhancing and constraining action learning as a practice for professional learning to imbed Quality Teaching

Field notes and interviews indicated a variety of positive influences on the project.

The small team structure seemed to interact with the teachers' personal attributes, commitment and dedication to generate a shared responsibility and interdependence among teachers in each team. This made them want to press on 'to get the project done' for each other.

1. All teachers praised their academic partner for her expertise in the Quality Teaching Model and special education. This joint expertise was seen as essential in providing advice in their special education context. She was a 'great listener' who could reinterpret and 'feedback our ideas'.

2. Dispersed leadership with choice and control given to teachers. Each team determined 'its own direction' and responsibility for it. They were enthusiastic about their projects.

3. Funding for release was 'pivotal' in providing 'room for conversations'.

4. The dedicated nature of the teachers and attitude towards professional learning was critical:

   • The school has 'highly committed and motivated teachers'.

   • Teachers were willing to take on leadership roles: 'People were willing and able to take on leadership roles both of the whole-school project and within teams.'

   • Teachers valued their own learning: 'People were not willing to stand still in [their] learning. They want to learn here.'

   • The teachers didn't balk at problems. As one teacher explained when faced with a problem – 'panic slowly'. Difficulties are normal for them as they 'face significant problems every day' in their teaching.

5. Presentations at staff meeting and conferences provided opportunities to share ideas and for professional affirmation.

6. Targeted use of formal professional development programs helped to build capacity, teaching knowledge and skills where needed by teams.

7. Strong support of the principal, both in funding (e.g. purchase of software, time release), professionally and emotionally.

Staff interviewed identified few factors constraining the project and, when asked, did not dwell on problems, often shifting in their reponses to successes.

1. It was a challenge to organise the teacher release needed to support the action learning teams.

2. One of the leaders in the application and Quality Teaching Action Learning project left the school. This was a major obstacle but it was overcome.

3. The Quality Teaching Model was not well suited for the Special Education context and required extensive modification. This was a problem but the need to adapt the model resulted in extensive professional discussion and good understanding of the model.

Role of action learning and the Quality Teaching framework in the success of the project

Each of the teams seemed to be sure that the program they were working on had merit. Action learning assisted them in the cyclic trial and modification of the Quality Teaching coding sheets. The Quality Teaching Model helped to focus attention on particular elements of teaching to be developed and provided a means to monitor progress as the teachers tried strategies and activities in their selected programs (ICT-*Clicker 4*, Morning Circle or PECs). The interventions or programs were decided in advance but the Quality Teaching Model allowed the teachers to think about and discuss what teaching/learning changes they wanted to achieve through them. The action learning process provided evidence to inform their program improvements and to convince others of its worth.

Plans for sustaining professional learning after the project

'[We] have not yet planned where to go from here.'

Some of the teams are continuing to meet though the formal period of the project has ended. The emphasis for continuation seems to be, for now, on the teams' programs rather than action learning or the Quality Teaching Model. This is mainly due to the positive response of teachers to the presentation, such that others want to try new things in morning circle and to find out more about teaching with PECs and *Clicker 4*. Some coding of lessons is continuing.

Case Studies – Concluding Comments

Each of the nine case studies stands alone as a record of an AGQTP action learning project, but there are also strong commonalities across the researchers' nine reports.

Some of these common features are no doubt attributable to the common structure, requirements and parameters of the AGQTP projects and the required use of the Quality Teaching Model. It is, however, striking that these structural and contextual commonalities aside, there are similar patterns, factors, processes, outcomes and problems present in each case, and that these connect well with what we know of the general research literature on educational change, educational leadership, and school climate and culture. It was clear that the release of teachers to engage in action learning was a significant factor in these success stories. It was also clear that the NSW Quality Teaching Model had also played an important role.

Each AGQTP project case study was found by the research team to develop a capacity for action learning as professional learning as a means to address its stated goals. Significant outcomes were noted in each of the nine cases. However, there was common recognition that it was 'too early to tell' if these outcomes represented substantive and lasting change or a short-term effect.

Research Findings, Discussion and Recommendations

Research data, derived from teachers, school reports, academic partners and the researchers' site visits revealed conditions associated with professional, stimulated and enhanced teacher professional learning through action learning projects in NSW schools.

Professional learning brings both opportunities and challenges. Doing action learning may mean you cannot do something else you normally do. It then requires a re-evaluation of the worth of some existing teaching/learning priorities and practices in order to make room for action learning.

There needs to be preparedness to go through a 'J curve' of learning (i.e. things may get worse before they get better), especially for the coordinators, but the process is still highly productive. The initial feelings of lack of confidence in one's own teaching, leadership, reflective, evaluative and/or analytical skills (and those of others) and the subsequent pleasure of sharing common project experiences and professional learning outcomes at the conferences, underlines the role of effective action learning in overcoming feelings of professional isolation.

Interviews, discussions and comments from staff indicate that there tended to be a lack of clear, generalised understanding of action learning among the teachers or others on the leadership teams. Rather, there was a mechanistic implementation of a set of steps as part of the school plan. This suggests that if action learning is to act to address teachers' concerns, there is a need to come to understand action learning not just as an applied example but also as a generalisable model. This takes time and, hence, many school projects began slowly. Similarly, there was a tendency for teams to be hesitant and lack expertise to research, document and evaluate their projects. Action learning here did not take a smooth path – having ups and downs. The leaders were resilient and resilience is required to push past barriers and disappointments.

The projects were successful in facilitating teachers' action learning, but were equally successful in clarifying, valuing and affirming what teachers and schools were already doing. Thus, the projects operated in a challenge, rather than a deficit model. Likewise, the use of the Quality Teaching Model was seen to validate and affirm what 'good teachers do', whilst providing a useful framework for reflection and action.

Action learning projects evidenced improvement in teachers' awareness of action learning, understanding of their approach, and ability to use new teaching practices eclectically.

The Quality Teaching Model was seen to be a useful framework for discussion and analysis of teaching, as part of the action learning process. Four broad factors contributed to the success of projects:

1. Schools built on an area of need they themselves identified and on which they had already done work.
2. The funding enabled teachers to have the time and space to work collaboratively on projects.
3. The input from academic partners provided essential conceptual and procedural guidance.

4. Systematic application and selection procedures combined with reporting milestones (in school reports) to guide and support project designs and progress.

Main recommendation

The main recommendation is that NSW DET continue to support and expand action learning in NSW schools.

Conditions influencing teachers' implementation of an inquiry-based approach (action learning) to changing teaching practice and related, specific recommendations

Condition 1: Projects being built upon a genuine, recognised need in the school
Previous work, including action learning, had been undertaken in many cases such that the schools were prepared when the opportunity arose to be part of the AGQTP process. The schools were ready for change in the area and groundwork had been laid. The projects were seen as necessary by those involved.

Recommendation 1:
That schools be required to demonstrate need and prior work in the field for which action learning projects are proposed.

Condition 2: Clear, agreed, achievable and suitable goals
All teams noted this imperative and, where it was lacking initially, this tended to slow the development of the projects. Limiting goals to start with was seen as important, as was the need to avoid being sidetracked by other priorities. In fact, several teams reduced the scope of their projects, which had been overly ambitious. It was, however, also apparent that project teams still held high expectations, even when aims had been narrowed. A whole-school project is very challenging. Perhaps there are advantages in starting small and working up, rather than imposing a whole-school plan when this generates obstacles, such as problems relating to workload, organisation and resentment.

Recommendation 2:
2.1 That in the application process schools be encouraged to consult with others about goals.
2.2 That projects be designed and assessed on the basis of having clear, achievable goals.

Condition 3: Support from the principal (and other leaders)
With one exception, the case studies and school reports revealed how the support of the principal was highly important in initiating and directing the projects. Principals tended to 'hand pick' project teams and helped to 'sell' the projects to other staff members. They provided support when the going was tough, but tended to be 'hands off' when things were going well, giving teams the space to operate within. Principals and other leaders contributed to the resilience of the project teams.

Recommendation 3:
That applications require schools leaders to demonstrate sufficient support and commitment to the project.

Condition 4: A credible, suitable leader for the project
Sometimes projects were led by an individual and sometimes by small teams. In either case, these people had credibility with their peers and had the skills and qualities to get others on board, to 'sell the project', and to maintain momentum. In some cases the team leader was a specialist in the area being investigated and clearly had a well-developed vision of what was required. The success of such a project may well require vision, expertise and knowledge of 'how to get things done'. Succession of these leaders by others will be important in the sustainability of the initiatives in the period following the projects.

Recommendation 4:
That applications need to demonstrate leadership capability and potential of the designated project leader(s).

Condition 5: Effective teams and team building
As noted, principals often 'hand picked' teams. In some cases, they included people who could have been critical of the project, if not involved. Getting commitment and a critical mass of teachers is important, although it was agreed that smaller teams made coordination easier. There is a need to select teachers carefully – those 'who will pick it up'; 'start … keen': 'People involved have to be prepared to change, try new things … take on board what you find.' Self-directed small teams, in which there is congruence of the teachers' personal attributes (including commitment, perseverance and determination), contributed a shared responsibility and interdependence among teachers in each team. This made them want to press on 'to get the project done' for each other. In the longer term they knew they were 'doing it for the kids' but, in the shorter term, especially when things got rough, they were doing it for each other. However, commitment of team members did vary, and some of those involved in the projects, particularly in teaching new units, appeared to lack understanding and commitment to the project. Some teachers will also 'switch off'.

Recommendation 5:
That schools give careful consideration to the composition and size of their action learning teams.

Condition 6: "Starting small but starting"
Some teams expressed frustration that it took some time to get moving. In some cases this was because members lacked adequate knowledge of the Quality Teaching Model. In other cases this was attributable to overly ambitious or unclear goals. Professional learning and planning also took longer than anticipated in some cases. It was common for teams to have an unrealistic view of what could be achieved in the time frame, e.g. some of the planned units were unlikely to be fully taught within the planned time frame. It can take a long time to get started and the process requires patience but, once begun, can accelerate, as was the case with a number of teams. A minority of teams responsible for the implementation of projects were not involved in the school application and some remained almost entirely unaware of the action learning projects even at the initial Planning Conference. Some teams overcame this uninformed start, but a few found it difficult to lead something they had not contributed to and knew little of.

There is an inevitable tension between the desire for large-scale school change and the desire to get something happening quickly. The former requires the involvement of many; is typically more structured in distribution of knowledge among the school

community; requires extensive investment in team building; is typically slower, more difficult to initiate and maintain; and tends to promote superficial implementation. In the long term, however, it may 'accumulate' significant shifts in practice among many. The latter depends on small teams (often with pre-existing collaborations); is quicker, easier to initiate and maintain; tends to promote deeper learning among small numbers of teachers; can lead to resentment of the perceived 'elite' involved; and leads to major shifts in practice among the team members – but tends to be limited in scale. 'Scaling up' seems to function through a more ad hoc sharing of information and reporting of success, followed by a desire by others to 'join in'. Each type of project has its advantages and disadvantages. This evaluation indicates that there is no one project size which is fundamentally superior, but that the approach adopted, small-scale or large-scale, depends on varied contextual factors in each school, from which it is difficult to generalise. Nevertheless, it is worth re-emphasising that large-scale projects face more obstacles and appear more likely to stall.

Recommendation 6:
6.1   That schools focus on the implementation of the project: start small but start – focus on something that can be done and do it.
6.2   That school implementation teams include teachers involved in the development of the application.
6.3   That schools carefully consider the potential, optimum size of their projects and, in so doing, take into account the nature of their school community.

Condition 7: Maintaining communication with all school staff about the school's project
There is a 'tension' between involving the whole of a school staff in a project team (thereby including the relatively non-committed), and selecting the most effective teachers (thereby confining the benefits to the select few). In some schools, 'knockers and blockers' will act as a negative force. Over time, however, the success of the projects did result in other members of staff being 'drawn in'. It is 'important that there is a team to do it and that other executive and teachers are brought on … another step for schools so that change doesn't stand still'. Trying to get the 'not-keen' on board from the start just might have been 'the kiss of death'. Only later had others become 'more-keen', perhaps even a little envious, saying, 'Hey, I want some of that too – I'm missing out!' Tangible, local evidence is crucial to convincing staff to become involved and demonstrating that the engagement is fruitful.

Recommendation 7:
7.1   That participants in the action learning projects communicate the progress of their action learning and seek feedback and input from all school staff.
7.2   That action learning projects begin with the willing.

Condition 8: Academic partners who provide valuable conceptual and theoretical background and assist with framing, implementing and evaluating project proposals
Academic mentors are 'useful, schools like that support, and outside perspective … it's a very good way to go … it would be good to maintain this as part of the model'. Academic partners who were knowledgeable and good listeners were valued, although funding, workloads and access sometimes proved limiting factors. In the words of one teacher, the 'academic partner needs to be carefully chosen, not intimidating, dogmatic'. School staff would have liked more access and better communication in some cases. There needs to be a good 'fit' with the academic partner and the school, and problems of geography and access need to be overcome.

There needs to be flexibility and negotiation around the role and input of the academic partner. There is a need for the project brief to be well-defined between schools and academic partners. Ideally, consideration might be given to creating a working relationship well prior to project implementation.

Recommendation 8:
8.1   That the provision of academic partners be maintained.
8.2   That the selection of academic partners ensure that they are well matched to the project needs of their school.
8.3   That access of the school to the academic partner be flexible, depending on needs and progress of the project rather than a fixed schedule.
8.4   That the project brief be thoroughly negotiated between academic partner and school.

Condition 9: Teacher release time
Time is a precious resource. In every case, the time afforded by the funding project was seen as essential to the planning, implementation and evaluation of the projects. Time – essentially release from some teaching duties – meant that discussion, reflection, observation and professional learning could take place. The preciousness of time for teachers to share pedagogical ideas and practice has the overwhelming endorsement of team members.

While time release was important to the success of the projects, a number of those interviewed also noted the potential disruption of being off class, of the time needed for discussion and the necessity for planning and reporting meetings. Projects 'can tie up too much time … meet after school instead … leaving Year 12' was problematic for some. There was also a related issue of other staff, and in some cases parents, being resentful or critical of teachers being 'off class'.

Recommendation 9:
That NSW DET promote the use of project funds for teacher release time in action learning and encourage recognition of its benefits.

Condition 10: Communication about the project and successes of the project
It was clear that communication played an important role. The aims and dimensions of the project need to be clear to all. A common theme should be evident, and it is important to be deliberate, have reasonable aims and stay focused. Communication of the project and its successes to the wider community is important in overcoming misinformed criticism and in building support and sustainability. Small successes are important and need to be celebrated. There is a need to show results and benefits to others, and to 'spread the results and expertise'. It is also important to let students know what the project is about and their role in it. There is a need to sell the project inside and outside the school. Effective communication systems are critical and take time to establish and function. Time needs to be systematically allocated regularly to discuss and report on the project among staff, to promote the project, to emphasise its importance in the school's life, and to give recognition to achievements.

Recommendation 10:
That provision to communicate and celebrate projects be made available at school and systemic levels.

Condition 11: The NSW Quality Teaching framework
Schools and teams had a degree of prior experience with the QT model. The fact that some teams had little experience of the Quality Teaching framework, yet found it so efficacious, endorses the value of the model. The teachers had to make the Quality Teaching Model relevant in their context. This involved, for example, not just mapping the activities and skills the teachers were seeking through their teaching against elements, but redefining elements, for instance, in the special education context. Here, action learning was powerful because it facilitated this, as teachers targeted what they wanted to do, but brought their interpretation of the Quality Teaching Model to bear on this. This suggests just doing the coding and talking about it is less likely to be productive than adapting or applying it to the school's/teachers' particular circumstances/needs and clear purposes.

Recommendation 11:
That there is benefit in providing a framework (such as QTM) but schools should not merely adopt it, but seek ways to adapt it or use it selectively to meet their needs.

Condition 12: Schools considering long-term sustainability from the start
Where prior work had been undertaken in the project area, the project was seen to build on this and was not conceived as an end but a means. Project teams and schools saw the projects as essential bridges to ongoing improvement and sustainability. There is a potential, even likelihood, of 'narrow' projects becoming broader investigations of pedagogy, particularly when the Quality Teaching framework is adopted. There is also an agreed need to build in evaluative mechanisms from the start and for data-driven decision making.

Recommendation 12:
12.1 That schools plan ways to continue and sustain action learning beyond the life of the project.
12.2 That schools plan ways to continue and sustain the focus of the project (e.g. literacy) beyond the life of the project.
12.3 That NSW DET continue to fund selected action learning projects from this and subsequent rounds.
12.4 That there be greater flexibility in the funding duration of school projects and the times for application (e.g. two rounds per year and allowing projects to extend over two years or more).

Condition 13: Distributed leadership
It was both a factor in implementing and an outcome of action learning. It was apparent that project team members 'grew' as educational leaders during the projects, especially those not in formal leadership positions. Members took responsibility for their professional learning and influenced the learning of others within and outside the project team and school. Collaboration and shared leadership responsibility provided support in the tough times experienced by some teams.

Recommendation 13:
That schools provide opportunities for and recognition of collaboration and shared leadership.

Condition 14: Gathering evidence of student learning outcomes
Inevitably, evidence of student outcomes was lacking in the time frame of the project. The time frame for the projects and this evaluation meant that it was too early to

discern substantive changes in teaching and in student learning and achievement. Thus, longer-term evaluative mechanisms need to be part of sustainability considerations. Schools need to consider carefully and build in evaluative mechanisms to determine achievement of outcomes from the start. For example, some schools used and/or planned to use instruments to achieve this.

Recommendation 14:
14.1 That NSW DET commission research to ascertain student outcomes from action learning projects.
14.2 That schools ascertain student outcomes from action learning projects.

Condition 15: Sharing the successes of school based initiatives with other schools
Schools are notorious for 're-inventing the wheel', or at least inventing wheels at the same time. There is 'merit in offering support to schools which are already on track to spread to other teachers in the school … as well as dollars for new schools to be involved'. The sharing conferences have been important, but these have largely been preaching to the converted, i.e. other schools involved with the AGQTP. There is a strong argument for further disseminating best practice and proven approaches which can be modified as necessary for application in other contexts. This is seen as particularly necessary in the area of research methodology so that school teams can use valid measures of achievements and outcomes.

Recommendation 15:
15.1 That NSW DET disseminate information about projects.
15.2 That schools take initiatives to share project processes and outcomes within and beyond the school.
15.3 That NSW DET actively publicly acknowledge school teams and individuals.

Condition 16: Sharing conferences
Attending and presenting at sharing conferences enhanced school projects. The presentation often allowed teachers and teams to recognise and focus on their achievements. The sharing often led to ideas, strategies and practices developed in one school being adopted and adapted to improve action learning in other schools.

Recommendation 16:
16.1 That NSW DET continue to fund sharing conferences.
16.2 That NSW DET convene a sharing conference at the conclusion of the projects to celebrate and disseminate project achievements.

Condition 17: Timing and time span
Beginning projects in Term 4 made their implementation difficult. Many changes in schools occur between one year and the next and these changes render the implementation of a project difficult.

Recommendation 17:
That projects begin towards the start of the school year.

Condition 18: Peer observation and direct sharing of classroom experience
In eighteen project reports, favourable comments were made about the professional learning and/or sense of community that flowed from teachers sharing experiences of each other's classrooms. Eleven reports indicated that, when teachers embraced peer observation, using the NSW model of pedagogy (or a subset of it), it was a turning

point for projects. Peer observation was associated with an openness, trust and sharing that contributed to productive learning communities. It is unclear whether these conditions were prerequisites for and/or resulted from the peer observations.

However, it was also apparent at many of the QTAL project schools that peer observation was seen as threatening. Where the fear was overcome, it proved useful but the fear was not always overcome. In these circumstances, the perceived threat had potential to inhibit teachers participating in professional learning. Many schools had planned to have peer observation as part of their projects, but many postponed it until teacher confidence in the process had improved. It appears from the evaluation that peer observation can't be rushed and this highlights the problem of professional isolation and defensiveness experienced by teachers in some schools.

In the schools where peer observation did occur, it was mainly achieved by small teams and managed in a very non-threatening way, e.g. without the use of observation check-lists or protocols. At Red Gum, despite the fact that it was supposedly a whole-school project, observations had only occurred among the QTAL project team and only within teachers teaching in the same stage. They were moving towards broader observations across stages and, following this, planned to involve teachers outside the project team.

Further research is needed to investigate the potential of peer observation and other less threatening modes of professional learning. This could be achieved if future research projects on action learning were designed to ensure the sample of case studies included schools engaged in peer observation as well as different modes of evidence gathering to inform their action learning. It is reasonable to speculate that reports about and positive experiences of other teachers will help with the process of removing the fear and resistance to observation, which currently has judgemental, rather than developmental, connotations in some schools. It is also reasonable to speculate that, in schools where peer observation and/or direct sharing of classroom experiences occurs, the antecedents (at least) of a trusting, sharing professional learning community exist.

Recommendation 18:
18.1 That peer observation and/or direct sharing of classroom experience be encouraged gently, among well-informed participants, conducted with sensitivity, and initiated by and among trusting colleagues – but not imposed.
18.2 That teachers who have participated in these practices be encouraged to share the positive and negative aspects of the process.
18.3 That future research case studies of QTAL, should they occur, select samples to ensure a representation of alternative practices to gather evidence about teaching (including peer observation) to inform professional dialogue.

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(Tables include only projects for which all reports were available at time of analysis.)

Table 1 Outcomes of the Quality Teaching Action Learning project

Project Outcomes	Projects: n (%)
Quality teaching	
Authentic engagement with QTF	37 (64%)
Improved planning, focus on QT elements	21 (42%)
Increased use of metalanguage	5 (10%)
Integration of QTF across other KLAs	10 (20%)
Action learning	
Increased teacher communication and collaboration	30 (60%)
Shared professional dialogue	28 (56%)
Increased reflection on own teaching	25 (50%)
Increased confidence in peer observation	11 (22%)
Improved morale	8 (16%)
Increased team teaching	5 (10%)
Adoption of action learning process	25 (50%)
Satisfaction due to ownership of the learning	13 (26%)
Development of trust	3 (6%)
Recognition of importance of evidence gathering	5 (10%)
Classroom practice	
Development of resources	24 (48%)
Greater range of questioning	6 (12%)
Implementation of student-centred strategies	15 (30%)
Increased student voice	13 (26%)
Increased risk-taking (variety of strategies)	18 (36%)
Greater range and scrutiny of resources	6 (12%)
Increased confidence in teaching new content	10 (20%)
Student outcomes	
Improved attitude/engagement	7 (14%)
Observed content learning	10 (20%)
Increased self-evaluation	6 (12%)

Table 2 Role of Academic Partner

Contributions and Limitations of Academic Partner	Projects: n (%)
Contributions	
Attending meetings/workshops	7 (14%)
Providing theoretical understandings	17 (34%)
Supporting coding process	7 (14%)
Facilitating data collection, design and/or analysis	12 (24%)
Keeping the project focussed	13 (26%)
Supporting and reassuring	11 (22%)
Assisting with report writing	9 (18%)
Providing constructive feedback	18 (36%)
Limitations	
Lacking time to meet	13 (26%)
Lacking proximity	6 (12%)
Mismatching of skills	3 (6%)
Lacking clarification of role	5 (10%)

Table 3 Strengths and weaknesses of project

Project Strengths and Weaknesses	Projects n (%)
Strengths	
Funds allowed time for discussion	25 (50%)
Created a sense of support	8 (16%)
Ownership of the learning	12 (24%)
Collaboration with other schools	7 (14%)
Promoted team building	19 (38%)
Offered a framework for action learning	7 (14%)
Learning occurred in a real context	3 (6%)
Offered opportunity to observe other teachers	11 (22%)
Weaknesses	
Inconsistency of team composition (timeframe)	13 (26%)
Disruption to normal classes	2 (4%)
Required ongoing time and funding	11 (22%)
Complexity of the task undertaken	9 (18%)
Required whole-staff support	8 (16%)

Table 4 Projects and foci

School Type	Location	Project Focus
central	rural	Leadership
central	rural	Integrated studies, middle years
college junior campus	regional	Integrating special needs
primary	metro	Pedagogy, maths
primary	metro	Science, maths
primary	metro	Pedagogy, literacy
primary	metro	Integrating ICT
primary	metro	Pedagogy, literacy
primary	na	Pedagogy, maths
primary	regional	Pedagogy, assessment
primary	metro	Pedagogy, literacy
primary	regional	Maths, pedagogy
primary	metro	Pedagogy, literacy
primary	rural	Pedagogy, science
primary	regional	Pedagogy, maths
primary	metro	Pedagogy, writing
primary	regional	Pedagogy, student outcomes, maths
primary	metro	QTF, writing
primary	regional	QT, maths assessment
primary	metro	QT, maths
primary	regional	QT, science
primary	regional	QT, student outcomes, maths
primary	na	Maths, student learning
primary cluster	metro	Pedagogy, maths, student outcomes
primary cluster	regional	Pedagogy, student outcomes, maths
primary cluster	metro	QT, student outcomes
primary cluster	regional	Maths, student engagement, pedagogy
primary cluster	metro	QT, science
primary, cluster	rural	Science, QT
sec/primary cluster	metro	Literacy, transition
secondary	rural	Student learning, higher-order thinking
secondary	regional	ICT, QT
secondary	na	Values
secondary	metro	Pedagogy, student outcomes
secondary	rural	Pedagogy, literacy, numeracy, outcomes
secondary	metro	Student voice, English, maths
secondary	regional	Gifted and talented
secondary	regional	QT, student engagement
secondary	regional	Pedagogy, science
secondary	metro	Teaching and learning, ICT
secondary	metro	Teaching and learning
secondary college	metro	Maths, student outcomes
secondary/primary cluster	metro	Literacy, transition
'special' school	na	Pedagogy
'special' school	metro	QT in programs
'special' school cluster	metro	Pedagogy, special needs

Appendix 2 Initial Survey

Please indicate your response to the following questions by circling the appropriate number on the following scale:

	A little			**A lot**	
Use N/A for NIL or not applicable	**1**	**2**	**3**	**4**	**5**

1. To what extent are the following committed to your AGQTP project:

The school executive	1	2	3	4	5	NA
The project team members	1	2	3	4	5	NA
Staff of one or more faculties	1	2	3	4	5	NA
The whole school?	1	2	3	4	5	NA

2. To what extent was your AGQTP project submission developed by:

The school executive	1	2	3	4	5	NA
The project team members	1	2	3	4	5	NA
Staff of one or more faculties	1	2	3	4	5	NA
The whole school?	1	2	3	4	5	NA

3. To what extent does your AGQTP project submission build on a current school initiative?   1   2   3   4   5   NA

4. To what extent was the academic partner involved in developing your AGQTP submission?   1   2   3   4   5   NA

5. To what extent did the following assist you in developing your AGQTP project submission:

NSW DET Quality Action Learning Handbook	1	2	3	4	5	NA
Quality Teaching materials, e.g.	1	2	3	4	5	NA
Discussion Paper & Classroom Practice Guide.						
Project team members	1	2	3	4	5	NA
Non-project team staff	1	2	3	4	5	NA
School executive staff	1	2	3	4	5	NA
Academic partner	1	2	3	4	5	NA
Time release	1	2	3	4	5	NA
Your School District	1	2	3	4	5	NA
Other? …………………………………………….	1	2	3	4	5	NA

6. To what extent did the following hinder you in developing your AGQTP project submission:

Lack of staff interest	1	2	3	4	5	NA
Lack of understanding of action learning	1	2	3	4	5	NA
Lack of expertise in developing submissions	1	2	3	4	5	NA
Lack of time for submission development	1	2	3	4	5	NA
Other? ……………………………………………	1	2	3	4	5	NA

Please add comments about what helped or hindered the production of your submission.

Appendix 3 Mini-Journal

AGQTP Action Learning Mini-Journal

1. Your perception of your 'Stage of Concern'

Please indicate the stage you think you are at in your AL project on the 'stages of concern' list below by writing a number in the box. (Short descriptions of each stage are shown on the back of this journal page.)

1. Awareness	5. Consequence
2. Informational	6. Collaboration
3. Personal	7. Refocusing
4. Management	

2. Your perception of your 'Hierarchy of Understanding'

Please indicate the phase you think you are at in your AL project on the 'hierarchy of understanding' list below by writing a number in the box. (See over for a short description of each phase.)

1. Unawareness	4. Personalisation
2. Perception	5. Production
3. Utilisation	

3. Your perception of your 'Typology of Utilisation'

Please indicate the phase you think you are at in your AL project on the 'typology of utilisation' list below by writing a number in the box. (See over for a short descriptions of each phase.)

1. Drop-out	4. Succeeder
2. Struggler	5. Innovator
3. Domesticator	

What influenced or helped you to reach the levels indicated above?

How might you progress to higher levels?

What evidence or aspects from AL is/are influencing your professional learning?