# Giving Girls Voice

KRISTINE NEEDHAM, ASQUITH GIRLS HIGH SCHOOL

*This paper will discuss a model of consultation that engages students as researchers, providing a structure for generating evidence that may be used for school improvement. The process is illustrated by reference to recent projects in a public comprehensive secondary school for girls. Through a process of inquiry, students reflect on their own actions as learners or on the learning environment they witness. The inquiry employs focus group data or photo images as evidence. 'Giving girls voice' allows diverse sources of knowledge and the development of an authentic community of practice that honours the shared teacher-student partnership in learning. Benefits for student learning, for student leadership and for organisational change are discussed.*

## INTRODUCTION

There are many choices to be made when schools seek to move forward in extending their capacity to provide improved conditions for learning. This paper discusses one school's efforts to embrace a school improvement model based on gathering evidence that encourages a culture of reflection and enquiry for teachers and students alike. Seeking, listening to and valuing the voice of students can yield a surprising range of outcomes.

As Arnold has noted in a review of middle schooling literature "students' voices need to be heard in order for teachers to connect with their students' feelings and aspirations, as well as to give students the lift in self esteem which occurs from being truly heard" (Arnold, 2000, p. 6).

There may even be particular benefits for girls in participation. One writer notes "Self esteem plummets for girls entering adolescence; they become enmeshed in a dilemma of relationship(s), and they learn to silence themselves...when girls enter middle school, lessons about voice and silence, disruption and docility are re-enacted daily in the classroom" (Prettyman, 1998).

Consulting young people, and indeed students, about teaching and learning, is not new. What has given some impetus to the process in recent years is an increasingly well-documented role in the context of school improvement. In the United Kingdom, it is the focus of a network project being conducted through Cambridge University (Rudduck &

Flutter, 2001) aiming to develop manageable strategies for consulting students and evaluating the outcomes of these approaches. A number of schools have worked with research teams on projects to inform the relatively small knowledge base currently existing on appropriate processes, school conditions and general principles.

Rudduck, a strong advocate for this approach, argues 'from an early age in school young people are capable of insightful and constructive analysis of social situations and if their insights are not harnessed in support of their own learning then they may use them strategically to avoid learning in school and conspire unwittingly in the process of their own underachievement" (Rudduck, 2001).

Closer to home a small group of schools in Sydney, interested in exploring evidence-based practice, have formed the Coalition of Knowledge Building Schools under the auspices of the Centre for Practitioner Research at the University of Sydney. These schools see as their purposes:

- developing and enhancing the notion of evidence based practice;

- developing an interactive community of practice using appropriate technologies;

- making a contribution to a broader professional knowledge base with respect to educational practice;

- building research capability within their own and each other's schools by engaging both teachers and students in the research processes; and

- sharing methodologies which are appropriate to practitioner enquiry as a means of transforming teacher professional learning. (Groundwater-Smith et al, 2003).

From an initial project at MLC school, interest grew and further iterations of the process at other schools saw methodologies develop. The member schools of the Coalition have now explored an evidence based approach through a range of initiatives, many of which use student-led inquiry as their methodology (Groundwater-Smith & Mockler, 2003).

The projects described in this paper are from a public secondary comprehensive girls school on the northern outskirts of Sydney that is a member of the Coalition, beginning to formally consult with students in building an evidence base as a strategy for school improvement and for teacher professional learning. 'Giving girls voice' at Asquith Girls High School has become, in less than twelve months, a strategy seen as rich, challenging and authentic to the school's purposes.

## PURPOSES FOR USING STUDENT VOICE

For Asquith Girls High School, these purposes derive their ethical base from the school's formal statement of purpose: "developing young women as independent and responsible learners and leaders for cooperative citizenship". They can be described in three frames: learning, leadership and capacity building. The frames provide a structure for the design of the projects and for the benefits.

Learning is, by anyone's measure, the core business of schools. Both student learning and teacher learning are priorities. The skills required of students as learners are changing with the explosion of knowledge in the second half of the last century. Students today need to know how to find out, how to learn and re-learn, and how to manage their own learning. Asquith Girls has recognised the need to assist students become more aware of themselves as learners. A first step towards this was the introduction of a "Learning to Learn" curriculum wherein thinking and learning strategies are taught explicitly to students in Years 7 to 9 as well as being embedded in teaching activities across key learning areas.

One of the aims of this curriculum has been to give teachers and students a shared language to describe learning. When students are consulted about learning, the process of articulating their opinions can assist their awareness of themselves as learners, and also assist them develop a language for describing learning.

Similarly, teachers increasingly need to be assuming the role of learners. The developing emphasis on school-based professional learning and on professional development programs that have as their focus students' thinking (for example, Wilson & Berne, 1999) gives credence to processes of active and focused reflection in teacher learning. Student-led inquiry lends opportunities for teachers to engage with meaningful action research and also challenges traditional sources of information and understandings, contributing to teacher learning about learning. At the school in point, there has been a professional development focus on the learning process, including what learners bring to their learning and what constitutes effective or powerful learning. Practitioner research is encouraged, and several staff members have been trained in focus group methodology.

A second frame of purpose for using student voice is that of leadership. The student voice projects at this school have created another opportunity for participation in student leadership as well as increased opportunities for teacher leadership. The school has recognised the need for more student leadership programs in the junior years. Student voice is one of the programs introduced with this aim in mind. Students in the first project reported below self-selected for participation, which included training in focus group methodology, conducting the group and then reporting on the findings. Nearly every student of the forty involved was not already participating in a formal leadership program.

For teacher leadership, there are similar benefits and teachers leading these projects experience the training in methodology, manage the data collection, reflect on the findings and then work with the results to bring about change. Teachers thus engaged are invariably participating at their own level in reflection and enquiry as they learn from this experience, becoming increasingly involved with research and knowledge management processes in the school.

This brings us to the third frame of purpose for engaging with student-led inquiry. How can student-led inquiry contribute to a school's capacity for change and for self-improvement?

The notion of improvement-related school capacities is a complex one. It derives not from simple models of cause and effect but more from the new sciences such as quantum theory and chaos theory, proposing a web of interconnectedness where any one action has a rippling effect on its environment.

School capacity for sustained development has been associated with a number of conditions (Hopkins et al 1998) including proper attention to the potential benefits of inquiry and reflection. Further, schools on the move need to be able to adapt, to enable creative developments, to go outside their comfort zone, to enable students to have a greater say in their learning and in the management of the school. Moving this way means changes in attitudes, practices and structures to create a supportive environment within the school for managing change.

If we ask ourselves what kinds of education will best prepare students for life in a knowledge society, we may consider what kind of experience offers the best preparation for life in a knowledge society. "If schools are to constitute the learning organisations in which students gain experience," Scardamalia and Bereiter argue, "the role of students must change from that of clients to that of members. This means changing the function of the school from that of service provider to that of a productive enterprise in which the students are contributors"(1999, p. 275).

Asquith Girls High School has begun, over the last twelve months, to explore the possibilities of student-led inquiry through three projects.

## PROJECT ONE

### Voices for effective learning

The school's first project aimed to investigate effective learning in years 7 and 8. A group of students from Year 8 and a group from Year 9 self-selected to participate in gathering data from all students in the year below them, on the topic of effective learning. In this project the school worked with an associate research academic (ARA).

Initially the student researchers were trained by the ARA in the conduct of focus groups. (Barbour & Kitzinger, 1999). In the work of the Coalition of Knowledge Building Schools, the focus group is seen as an important strategy for delving into issues where varying points of view prevail. The school was also furnished with a discussion paper, which outlined the conduct and purpose of focus groups in social inquiry. Each training session allowed students to participate in a group and observe while others were engaged in the discussion. While the original questions to be discussed were prepared by school staff it was indicated to the students that they would be open to modification following the student feedback.

At the conclusion to each session students completed a follow up questionnaire that gave an indication of their participation. The data from this questionnaire, plus staff consultation, led to the original questions being revised.

Following the training year 9 students interviewed all students in year 8 in groups of seven to ten participants using the revised questions. Similarly year 8 students

interviewed year 7 students. Three trained students, with one undertaking the questioning while the others observed and noted responses, conducted each focus group.

A debriefing session was held with the ARA. Each question was discussed and an indication given of the ways in which the participants understood the question and responded to it. The students then were given an opportunity to comment via a "silent conversation" where they indicated what had surprised them, puzzled them and how they believed the school should respond to the data. At the conclusion to the session students were asked to write briefly upon what the experience had meant to them in terms of skill development and participation in a significant school enterprise.

The results flowing from the student data were lengthy and complex. The major features were:

- peer learning and its importance for a supportive learning environment

- learning should be enjoyable

- interactive learning where students feel confidence to speak up and ask questions

- learning which is seen by students as relevant and related to their cultural lives.

The "silent conversations" process gave an opportunity for researching students to elaborate these ideas and give voice to them. In this process, students responded in writing to the findings on large sheets of paper and then annotated others' responses. They did this in silence, ensuring that the quietest student was 'heard'. They responded both in terms of the substance of the focus group discussion and the methodology of the research under three headings: surprises, worries and what next?

Mostly, year 8 students were surprised by the range and quality of the responses of their focus groups. They found it difficult to cope with unexpected responses and how to assist participants who were not responding at all. These focus group leaders also commented upon their own engagement in the process. At times they were challenged by the need to keep the momentum of the focus group going as well as handle behaviour management issues. This issue was the main concern of their worries.

The matter of what should happen next dealt with the substance of the participants' responses. These can be grouped under physical environment – clean, attractive and comfortable classrooms - and teaching practices, with a concern that teachers act upon the information that the students collected.

Similarly year 9 students, acting as focus group leaders, expressed surprise at the dynamics of the group interaction, for instance the ways in which very small groups wanted to talk more, and the level of participation. There were a number of observations that commented positively upon the experience and upon the extent to which students were taking some responsibility for their own learning.

As with the year 8 students, these year 9 group leaders divided their comments between the processes involved in the conduct of the focus group and the reactions of participants to questions being posed. Year 9 student leaders indicated that opportunities

to ask questions in class appeared to be a significant issue for year 8. It was both a matter of confidence and peer pressure. But, speaking up was also linked to the nature of the question and the student/teacher relationship.

The students' main concerns were related to ensuring that teachers were advised of the results of the focus group enquiry. They wished the questions to be extended. They also wished advice to be given to specific groups, for example new teachers. In spite of their surprises and worries students indicated the worthwhileness of the project.

Since the school was interested in developing student leadership through participation in the project, the focus group leaders from both years were asked to reflect on their experience in a written free response.

All students reported positively. They reported that they had enjoyed the training experience, felt closer to other students, and that they enjoyed hearing other students' views, felt more confident in talking to people and would like to be involved in any future similar projects.

The student data was now ready to be presented to teachers. A small team of staff members collated a report for their colleagues. To assist the whole staff develop a deeper understanding of the project, it was decided to have a representative team of student leaders describe their experiences and then lead two focus groups of staff through some of the research questions, while the remaining staff observed in a fishbowl structure. After staff had this experience, the data from the student groups were reported. Staff then reflected on the data, again using the silent conversations technique, asking:

- what surprises/unexpected results?

- what do the responses tell us about learning in years 7 and 8?

- how can we respond to the findings?

Teaching staff were surprised that students predominantly saw them as old. They were surprised that students were critical of the physical environment of classrooms and that they thought some teachers did not explain things well. Staff also commented on the maturity of the students, their confidence and especially their confidence in expressing their opinions. Other comments focused on the process.

Teachers identified a need for change in practice for these students. They identified specific strategies that could be used. They also observed the expressed need for fun in learning. Most teachers saw the data as being useful for improving teaching and learning

Some teachers commented on the need to listen to the student voice and respond in some way. Some suggested specific strategies. Others were less receptive to the 'voice', for instance suggesting that 'all kids say the same thing'.

Teacher data was then analysed to identify some changes the school could make to respond to the students' voice. A school-wide strategy was developed to strengthen teachers' skills in cooperative learning, to provide improved classroom conditions for students to learn from each other. The cooperative learning model fosters positive

interdependence, individual accountability and interpersonal skills and metacognition (Johnson & Johnson, 1994). At a two-day workshop off-site, staff again examined and reflected on the student data, participated in training sessions in cooperative learning strategies, and worked as faculty learning partners to rewrite teaching and learning units to incorporate these strategies. A resource booklet was published and all faculties are now required to demonstrate how cooperative learning has been enhanced in their classrooms.

## PROJECT TWO

### Voices for a supportive learning environment: The self-image study

The school's second project was conducted without the assistance of an external academic research associate. A similar focus group methodology was used, and data was collected not only from students but from teachers and parents as well.

Self-image was identified, through staff concerns and discussion at a community planning forum, as a focus area for the school's 2003 management plan. To begin, it was decided to gather student views on self-image to help define the meaning of the term in the context of teaching and learning at Asquith Girls High School. A group of year 9 students was invited to participate as focus group leaders and was trained by staff.

Another community forum provided an opportunity to raise awareness of the issue and collect ideas and understandings from the 60 staff, students and parents present. Student inquirers, working in pairs, conducted focus groups of mixed representatives. The students in consultation with the teachers who trained them devised the questions:

- What is self-image ?

- What are signs that students have a positive self-image?

- What are signs that students have negative self-image?

- What influences affect self-image? – school / community / home

- What are some things that this school does to help students develop a positive self-image? - teachers / friends/ peers/ programs/ in the classroom /what students learn

- What can this school do to improve student self-image? - teachers / friends/ peers/ programs/ classroom / learning.

Discussion arising from these stimulus questions was recorded for later analysis.

Another activity involved each group writing a definition of self-image. The definitions were later summarised by the focus group leaders into a school definition of self-image:

> Self-image at Asquith Girls High School means the view we have of ourselves as individuals, part of a friendship group and part of a learning community. This view of

ourselves in these various roles affects our relationships, how we behave and our levels of confidence. If students have a positive self-image they will be more likely to reach their full potential both socially and academically.

At the forum, the "silent conversation" technique was combined with De Bono's 'six hats' methodology to gain a broad and creative response. The 'six hats' method is a tool for encouraging creative thinking where a coloured hat becomes a symbol for a direction of thinking. Wall charts were placed around the room, each chart with a stimulus question based on one of the 'hats'.

- The Red Hat: What are your feelings about self-image?

- The Blue Hat : Where do we go from here?

- The White Hat: What else do we need to know?

- The Black Hat: What are our concerns?

- The Green Hat: Creative ideas

- The Yellow Hat: What have you found interesting?

Participants moved around the room, recording their responses on the charts, which were retained for analysis.

The data derived from this project is now being used as a framework for a series of activities and strategies that will comprise the fuller program for addressing self-image. The group of students who led the inquiry are currently working again with the data and will generate suggestions for a plan of action.

## PROJECT THREE

### Voices through images: Improving learning at the Museum – and more

A further project is in planning at the time of writing this paper. As part of a project between the Coalition of Knowledge Building Schools and the Museum of Sydney, a year 7 class will assist the museum reflect on itself as a learning environment. This project uses photographic image as evidence.

In the first phase of the investigation, museum staff gathered photographic evidence regarding existing conditions for learning at the museum. In the second phase, several classes of students from different member schools in the Coalition of Knowledge Building Schools join the project to similarly gather photographic evidence. Students in the class from Asquith Girls, during their Science excursion to the Australian Museum and working in small groups, will use cameras to record their perceptions of

- What helps my learning?

- What gets in the way of my learning?

Prior to the visit there is a school based workshop where students consider how they learn and develop a metacognitive language. Following the visit, students will display their images in group posters. They will then present their views to a visiting representative of the museum. This data will be aggregated by the museum with data from other visiting classes and used as evidence in improving their learning environment.

For Asquith Girls, this project will have a second stage. This stage stems from the school's interest in promoting student leadership in the junior school, and the current focus on self-image. A second year 7 class will be mentored by the class from the museum project, in gathering images from the school itself addressing the questions:

- What helps build self-image in the school?

- What is harmful for self-image?

This class, guided by the first class, will then build these images into posters and present them back to audiences of other students and staff. Again, this data will be used to inform whole-school initiatives in building positive self-image for students. The project design for this second phase also creates opportunities for student leadership through mentoring.

## DISCUSSION

What is the influence of these projects on the school community and what has been the school's experience of working in this way?

The experience for the school has been an extremely positive one. Although this movement is only in its infancy at Asquith Girls, there appear to have been significant benefits for the students and for the school. These can be discussed under the three frames set out above: learning, leadership and school capacity.

There have been benefits to student learning. Student skills are increased and students' awareness of themselves as learners heightened, through training and working as school-based researchers. This was evidenced in the first project by student responses such as:

> I learned to see things from another point of view

> I learned many things about the learning process

> Able to use the focus group method in the future to help my learning and the learning of others

> I learned about leading groups

For teachers, the discussion that emerges in responding to student voice facilitates active listening, collaboration and reflection, and in the case of the first project, led to collaborative development of resources for enhancing student engagement through cooperative learning strategies. Through practitioner research, teachers are supported in

asking critical questions about their practice, contributing to the construction of new knowledge, rethinking pedagogical practices and working towards a more 'activist teacher professionalism" (Sachs 2003).

Some comments from teachers in the first project who were asked "How should we respond to this data?" illustrate the reflection generated:

> Good opportunity to take stock and self evaluate our actions in the classroom and relationships with students

> Personal response important – where am I in these lists of responses – good or bad?

> Adjust focus to student-centred learning – realise we're not teaching the same type of kids we used to

Teacher responses also demonstrated the power of the process itself to stimulate a change in ways of thinking about students

> Great to know how they think

> The facilitation skills of the student learners. This is real learning.

> We have a number of very thoughtful students who have thought about their learning experiences

The project enabled the school to achieve its aims in extending student leadership. Through the use of open invitation and self-selection, many students who did not have previous leadership experience self-selected for participation. The process therefore provided an opportunity for a new group of students to engage in the broader life of the school. The reflective comments of these students indicate the experience was a positive one that boosted their communication skills and their self-esteem.

Girls involved in these projects expressed a greater sense of participation and feeling positive about school. This was evidenced in comments such as

> Helped me to become more confident in speaking to people

> I am proud to be involved in such an enthusiastic and interesting leadership course

> Made me feel useful in our school

At an organisational level, these projects have assisted the school build its internal capacity for change and self-improvement.

The first project, having reached completion, is an example. The project enabled the school, after analysis of the student data, to identify strategies for improving learning in the junior years and to devise teacher development activities that would support the implementation of these strategies through a planned process.

Data from the project strongly indicated a need for the school to develop more peer learning strategies. Many students commented on the ways in which friends assisted

their learning and the lack of confidence they felt in asking questions of the teacher. In response, the school has encouraged staff to integrate more cooperative learning into years 7 and 8. More than 30 teachers, working in pairs as faculty learning partners, attended a one day workshop led by executive staff which reviewed the findings of the research, refreshed teacher understanding of cooperative learning through discussion and reference to a resource booklet, and provided time for rewriting years 7 and 8 teaching materials to include various cooperative learning approaches. The school has also introduced a peer-tutoring program in reading. In this program, older students undergo TAFE accredited training and then work one-on-one with younger students in a short session each morning before school.

The school also developed a short reference sheet for staff, summarising the learning needs of students as expressed in the data, cross referenced to the research literature on the middle years of schooling, and a teacher reflection guide for use as a checklist against lesson planning.

Through a planned training and development program including relief time, printed resources and use of learning partners, teachers are being supported in beginning to implement the proposed changes to pedagogy. The expectation that there will be a change was formalised by being given priority in the school's management plan for the following year, and by the expectation that teaching programs for years 7 and 8 will be rewritten and submitted as part of the faculty and executive review process.

The project has modeled for the school community an authentic process for school improvement that has benefits for all participants. Further, aspects of the process, including the choice of research methodology and the manner in which the school responded to the findings, themselves contributed to the outcomes of the project.

By formalising the concept of students and teachers as partners in learning and by demonstrating a model of school improvement derived from an evidence base of authentic data collected by teacher and student researchers, a school culture which values a participatory knowledge base was reinforced.

Some useful analogies for the complexity of whole school dynamic made possible through these activities may be drawn from the work of Barbara MacGilchrist on the 'intelligent school' (MacGilchrist, 2000). MacGilchrist believes schools use at least nine different intelligences in addressing teaching, learning, effectiveness and improvement.

The nine intelligences MacGilchrist and her team have identified are: ethical intelligence, spiritual intelligence (these two concern the school's vision), contextual intelligence, operational intelligence, emotional intelligence, collegial intelligence, reflective intelligence, pedagogical intelligence (these concern how the school puts the vision into practice) and systemic intelligence (ensuring the vision and action work together).

These can be summarised as follows:

- ethical intelligence: which recognises the importance of students' rights and the need to involve students in decisions about their learning

- spiritual intelligence: valuing the lives and development of all members of the school community

- contextual intelligence: characterized by the school's capacity to be flexible and to work openly with a range of perspectives

- operational intelligence: having a planned approach to development and ensuring leadership roles are distributed throughout the school

- emotional intelligence: the school's capacity to allow the feelings of both students and staff to be owned, expressed and respected, including the ability to understand other people: what motivates them, how to work cooperatively with them

- collegial intelligence concerns the capacity for the staff to work together, in particular, to improve their practice in the classroom

- reflective intelligence: monitoring, reflecting upon and evaluating the effectiveness of the school and the progress of students. "The intelligent school is comfortable and skilled in its ability to interpret, learn from and use evidence and put it to the service of its pupils and the organisation as a whole" (2000, p. 3)

- pedagogical intelligence: the school seeing itself as a learning organization, including understanding the dynamic relationship between thinking, learning and teaching

- systemic intelligence: a way of thinking about the interrelationships and patterns that enable flow and connection between the parts that make up the organizational whole (from MacGilchrist et al, 2003).

At a conference of school executive staff, this model was used as a framework for analysing the school's development, and it was observed that giving students 'voice' allows the development of several, if not most, of these intelligences. It establishes a way of working that signals particular approaches, structures and values. It develops the school's capacity for improvement through validating the role of students as partners in learning, through building the school's collective efficacy in creating knowledge about teacher practice and importantly, in responding to that knowledge.

**ISSUES**

Clearly there are aspects of this work that can be challenging and uncomfortable. Some of these challenges accrue to any school change initiatives, such as finding a source of funding and building teacher ownership. Of stronger relevance to this paper are issues relating to the nature of the projects themselves.

First, involving students as researchers and asking them to give time to expressing their opinions leads to the ethical issue of the need for a visible outcome. One cannot keep seeking data from students and not demonstrate that something has happened for the

better - or at least something has been modified - as a result. Students involved in the first project expressed strongly their wish that 'something is done' with the data. The school then needed to provide the structures and resources necessary to help teachers work collegially to translate the data into action. Once this work was started, it was appropriate to go back to the students and tell them what had resulted from their efforts.

A second highly relevant issue is how teachers respond to the process. Teachers are, generally speaking, used to seeing their work through adult eyes. As Russell explains: "What the student perceives, believes and understands determines what the student does. We all behave on the basis of how we see the world. For the student, the world of school, classroom and learning is not necessarily the world the adult sees. " (Russell, 2000).

The extent to which teachers will value and validate 'student voice' as a basis for changing classroom practice can be problematic. In the first project, some teachers said that students have little to say that is worth hearing about learning and teaching in the school

> Take it all with a grain of salt – all kids say the same thing

Even teachers who accept the voice as a reason for change are sometimes unable to effect that change without ongoing support. The project design needs to include processes that allow teachers to respond to the voice and make meaning of it, then to participate in designing the actions that flow from it. After all, a sensitively constructed challenge may have positive spin-offs for learning. As Ball and Cohen (1999, p.15) note "Situating professional development in such material, examples, incidents ... which may stimulate some productive disequilibrium would create a new terrain for learning.

## ENABLING CONDITIONS

In considering the contribution student voice processes have given Asquith Girls High School, it is relevant to ask whether there were any pre-existing conditions that enabled its influence.

Several factors can be identified.

- a school culture with a focus on improving learning has been nurtured. Considerable teacher professional development resources have been allocated and pedagogical issues are commonly discussed

- The school has a tradition of academic success and a caring ethic which has led to school pride and a sense of collective efficacy

- there is a supportive approach to school based teacher development, with several whole day workshops built into the school structures

- a history of effective student leadership and student participation in decision making has produced a regard for young people and their opinions

These factors have led to an overall climate of trust where innovation, well managed, is possible.

## GUIDING PRINCIPLES

For schools beginning to explore this process, a few guiding principles derived from one school's experience, may be helpful. Most of these are related to the need for authenticity and respect for the contributions of the participants.

- consultation has to be genuine – arising from a genuine need

- training of students in the research methodology is critical to the validity of the results

- the mechanism for reporting back to staff needs to have built-in success

- some visible change should result

- participating students need to be given feedback on the outcome.

## CONCLUSION

In this project, the school firstly set out to conduct an open-ended inquiry into effective learning in years 7 and 8 – to know about students' perspectives. There was intent to act on these perspectives. The next step, to give over the role of researcher to the students themselves, was the most challenging step. However the full participation of students in data collection, interpretation and communication of results was critical to the broader aims of the project and to the developing ethos of the school as a place where students can articulate how they learn.

The voices of these students made it clear that young people have strong views about how they learn best. In contributing these views, they also made it clear they expect the school will take some action to bring about change. By responding to the data that emerged, the school is building its capacity to work with young people to improve their conditions of schooling.

The project demonstrated that student voice data can be collected with resulting benefits for participants and can inform school improvement. Some pre-existing conditions of the school culture that may be enabling of the process include a focus on improving learning, a history of effective student leadership and student participation in decision making, and a supportive, school-based approach to teacher development.

# REFERENCES

Arnold, R. (2000). *Middle Years Literature Review: A Report Prepared for the NSW Board of Studies.*
  http://www.boardofstudies.nsw.edu.au/manuals/pdf_doc/mid_years_lit_review_1.pdf

Ball, D. L., & Cohen, D. K. (1999). Developing Practice, Developing Practitioners: Towards a
  Practice-Based Theory of Professional Education. In L. D. Hammond & G. Sykes (Eds.),
  *Teaching as the Learning Profession* (pp. 3-32). San Francisco: Jossey Bass.

DeBono, E. (2003). http://www.sixhats.com

Groundwater-Smith, S. (2003). *As We See It: Improving Learning at the Museum.* Paper prepared for
  the Coalition of Knowledge Building Schools.

Groundwater-Smith, S., Mockler, N., & Talbot, D. (2002, December). *The Coalition of Knowledge
  Building Schools and Activist Professionalism.* Paper presented to the Annual Conference of the
  Australian Association for Research in Education, Brisbane.

Groundwater-Smith, S., & Mockler, N. (2003). *Learning to Listen: Listening to Learn.* Sydney: MLC
  School & Faculty of Education and Social Work, University of Sydney.

Barbour, R., & Kitzinger, J. (Eds.). (1999). *Developing Focus Group Research: Policy, Theory and
  Practice.* London: Sage Publications.

Heilman, E. E. (1998). The Struggle for Self: Power and Identity in Adolescent Girls. *Youth and
  Society, 30*(2), 182-208.

Hopkins, D., Beresford, J., & West, M. (1998). Creating the Conditions for Classroom and Teacher
  *Development, Teachers and Teaching: Theory and Practice, 4*(1),115-141.

Johnson, D. W., & Johnson, R. (1994). *The Nuts and Bolts of Cooperative Learning.* Edina, MN:
  Interaction Book Company.

Keighley-James, D. (2002). Student Participation and Voices in Curriculum Redevelopment: The
  view from a curriculum development agency. *Curriculum Perspectives, 22*(1), 1-7.

Johnson, N. G., Roberts, M. C., & Worell, J. (Eds.). (1999). *Beyond Appearance: A New Look at
  Adolescent Girls.* Washington DC: APA

MacGilchrist, B. (2000). *Leading the Intelligent School.*
  http://www.ncsl.org.us/index.cfm?pageid=ev_auth_macgilchrist

MacGilchrist, B., Myers, K., & Reed, J. (2003, January). *The Intelligences of the Intelligent School.*
  Paper presented to the International Conference of School Effectiveness and Improvement
  Sydney.

Needham, K., & Groundwater-Smith, S. (2003, January). *Using Student Voice to Inform School
  Improvement.* Paper presented to the International Congress for School Effectiveness and School
  Improvement, Sydney.

Prettyman, S. P. P. (1998). Discourses on adolescence, gender and schooling: an overview.
  *Educational Studies: A Journal in the Foundations of Education, 29*(4), 329-340.

Rudduck, J. (2001). *Pupil consultation and participation: What's in it for schools?*
  http://www.educ.cam.ac.uk/lfl/nov01/index.html

Rudduck, J., & Flutter J. (2001). *Consulting young people in schools.* Homerton College Cambridge:
  Economic and Social Research Council. http://www.homerton.cam.uk/research/ersc.html

Russell, V. J. (2000). *A Thinking Curriculum for the Middle Years.* IARTV Seminar Series No. 99.

Sachs. J. (2003). *The Activist Teaching Profession.* Buckingham: Open University Press.

Scardamalia, M., & Bereiter, C. (1999). Schools as Knowledge Building Organisations. In D. P. Keating & C. Hertzman (Eds.), *Developmental Health and the Wealth of Nations* (pp. 274-289). New York: Guilford.

Sparks, D. (2001). Why Change is so Challenging for Schools: An Interview with Peter Senge. *Journal of Staff Development.* 22(3). http://www.nsdc.org/library/jsd/senge223.html

Wilson, S. M., & Berne, J. (1999). Teacher Learning and the Acquisition of Professional Knowledge: An Examination of Research on Contemporary Professional Development. *Review of Research in Education, 24,* 173-209.