A Ten-Year Journey Towards Teacher Collaboration and Integrated Curriculum:
A Story of Leadership

Ann M Farley and Peter C Taylor

Science & Mathematics Education Centre
Curtin University of Technology
GPO Box U1987, Perth, WA 6845
Phone: (+61) (08) 9266-7501 Fax: (+61) (08) 9266-2503
Email: afarley@bggs.qld.edu.au & p.taylor@curtin.edu.au

Paper presented at the annual conference of the Australasian Association for Research in Education (AARE), Melbourne, 28 November - 2 December 2004
A Ten-Year Journey Towards Teacher Collaboration and Integrated Curriculum: A Story of Leadership

ABSTRACT

Whilst much current research on Middle Schooling suggests that the most effective learning environment for young adolescents is created through a combination of teaching teams and integrated curriculum, many students continue to be educated in secondary schools organised in faculties dominated by subject discrete curricula. This paper presents insights from a case study of a group of secondary school teachers who, over a period of ten years, created integrated curricula and year-level teams within a school organisational structure characterised by a discrete subject environment. The group was led by a specialist teacher (the first author) who, in the role of teacher-researcher, investigated their profound journey of curriculum transformation. This doctoral thesis research adopts an historic structure and employs narrative inquiry to present the stories and voices of both the facilitator and teachers as they struggled to establish an innovative culture of integration and negotiation. We discuss a number of emergent issues and critical incidents that appeared instrumental in shaping the teachers’ journey towards a shared understanding of what constitutes an effective learning environment. In order to facilitate the full realization of this ideal, we propose a model of team leadership for expediting the school’s continuing transformation towards a fully integrated curriculum.

EMERGING CHALLENGES

In many ways this paper is all about accepting challenges, struggling to overcome them, and recognizing the value of the learning that has occurred during the process. I am going to reflect on three areas of challenge that have impacted on me both personally and professionally during the past 10 years and which highlight several aspects of my doctoral thesis. The first was a group challenge that we, as a school learning community, encountered as we tried to move towards a culture of negotiation and integration. The second and third were my personal challenges. How do you be an effective leader (an unintended outcome of trying to be a more effective teacher) as you move from a small collaborative enterprise where the leadership is shared by a group of motivated, enthusiastic colleagues to a whole school initiative that involves all teachers at a year level being instructed to teach in a certain way? And more recently, how do you share the knowledge that you have gained through ten years of practical experience in the classroom with an audience that includes teachers, administrators and the academic community in a way that will engage both their hearts and their minds?

THE CHALLENGE TO TELL THE STORY

Perhaps I should start at the beginning by describing a story of ten teachers from Athenia (an inner city, private girls high school in an Australian capital city), who felt that they could improve learning for themselves and their students through collaborating to develop skills and content across their Year 8 (first year of high school) curriculum. However, in many ways I have to admit that many elements of the story seemed to gain
clearer focus as I struggled with the questions that Peter (my supervisor) constantly posed to challenge my assertions and to motivate me to analyse situations at a deeper, more comprehensive level. I will therefore begin at the end, but hopefully with a perspective and body of knowledge clarified through both the research and the writing process.

**Attempting a familiar route**

I did not want to lose the knowledge that we had gained at Athenia. We had created models that I felt could be used elsewhere and I was determined to tell our story. It is so easy to lose organizational knowledge if it is not institutionalized and recorded in some way. With all the confidence and passion of one convinced that their teaching methods were gaining improved learning outcomes for their students, I initially embarked on a descriptive case study written in a post positivistic form that included research questions, a literature review, methodology, pilot study, the major body of research, the results, and my conclusions. During one extended period of writing I even “forced” the material that I had gained into what I felt at the time were eight well constructed chapters. Even though I felt a fleeting sense of achievement I knew that they did not reflect the story as it had unfolded at Athenia.

Peter was gentle with me. He suggested that we should start at the beginning and “get each chapter right before going on to the next”. We started with Chapter 1: The Introduction, which ultimately took several months to form. I felt that Peter challenged every word that I had written. He questioned my role in the research, my assumptions and assertions, the historical context in which activities had been placed, my professional context at various stages of my research and my representation of the many voices which seemed to be fighting to be heard in the study. He constantly challenged me to be more “perspectival” – to distinguish between my perspective and that of others. Because the research took place over a ten year period my voice appeared in multiple time zones. How was I going to make this clear to the reader?

With each new draft I slowly began to realize that my initial writings were superficial and lacked the personal involvement and honesty that is so necessary if an audience is to identify with the written word. I realized that the story I was attempting to tell was an evolving one that did not fit neatly into the chapters I had initially proposed. I did not really have a pilot study that progressed to a next phase where I could control discrete variables. I was recording and investigating a series of teachers’ stories from multiple perspectives and their stories caused me to take unexpected turns. It was an historical study and I frequently had to rewrite text as I found that data, on further investigation, clashed with my recollection of situations. Questions, sometimes posed by myself and sometimes by other participants, were emerging that required further investigation or sometimes reinvestigation. Critical incidents (Tripp, 1994) were beginning to shape the overall narrative. It was taking on an unplanned shape that did not fit my preplanned chapters.

On reflection it seems that at times Peter saw my research and the impact that I was having on it more clearly than I did. He had called into question many of my preconceived ideas and personal perspectives and initially I could find nothing to replace them. I felt like I had lost my way. I did not want to advance on a journey of self discovery; I wanted to describe the units of work that we were implementing at Athenia. I had feedback from both teachers and students that I felt justified my knowledge claims.
but the quality criteria that I was applying in my naivety were far from those required by the academic community. Fortunately, I realized that as my ideas and perspectives gained less prominence other perspectives seemed to gain greater clarity and the story being told hopefully gained an honesty and integrity that resonate with you the reader.

**Narrative inquiry and teacher reflections**

This study is, for the most part, the story of a group of colleagues who came together at specific points in time in an effort to improve the learning environment for their students through improved teacher collaboration. This did not, however, turn out to be a simple task but one that involved much reflection, questioning of current thinking and practices, and testing of possibilities in terms of changed work patterns. How could I represent the process that was occurring with the minimum influence from me? I was very conscious of the impact of my personal involvement and beliefs. I had been part of the facilitation team during much of this process of collaboration at Athenia, yet I hoped that this study would lead me to a clearer understanding of, and a better way of “knowing” what was happening within the Year 8 program. I was aware, however, that whatever made it into print was ultimately censored by me and subject to the filter of my beliefs and aspirations. I could acknowledge my input but how could I minimise my impact?

Narrative inquiry provides an opportunity to capture the voices of teachers as they tell their stories, in their own words and from their perspectives. I felt it was essential that teachers had the opportunity to express their experiences and concerns in the way that was “comfortable” for them.

As curriculum choices and decisions are made, teachers’ values, beliefs, purposes and biographies come to the fore and influence how they think and what they do, thus determining the way the curriculum is lived out in the classroom. Curriculum design, curriculum planning, and curriculum change are fundamentally about teachers’ thinking and teachers’ actions and the focus of narrative research is therefore on understanding these in terms of personalised accounts of knowing.

(Beattie, 1997, p. 7)

The narrative also allowed consideration of the story from multiple perspectives. It gave individual teachers a voice so other teachers could hear their stories. Carter (1993) speaks of story as a mode of knowing that “captures in a special fashion the richness and nuances of meaning in human affairs”. It is a way “of capturing the complexity, specificity, and interconnectedness of the phenomenon with which we deal” (Carter, 1993, p. 6). Zeke, Foote and Walker (2001) suggest that as teachers tell their stories, “we hear the authority and perspective that comes from time spent with learners” (p.383). As a teacher this was very important to me, but how could I minimize my voice so that the voices of others others could be heard more clearly?

**Identifying yourself in the story**

Bullough and Pinnegar (2001) suggest that “self-study points to a simple truth, that to study a practice is simultaneously to study self: a study of self in relation to others” (p. 14). Throughout this study I have participated in multiple roles – researcher, participant, observer, change agent and leader. I must admit, however, that visualising myself in the role of narrative writer or autobiographical researcher, with all that that role entails, has
been a confronting challenge to face.

**The responsibility of the storyteller**

Picturing myself as a participant in a conversation with readers, with the responsibility to replay other people’s stories in a way that would engage and interest the reader was a task for which I did not feel well-prepared. When I began to write this story, I was aware that I had played an integral part in the development of the Year 8 program at Athenia and that my close personal involvement was going to complicate the process of story writing. To add to the dilemma, I also knew that I was struggling with a set of ideas related to teacher collaboration and the implementation of integrated curriculum that I felt deeply about. Denzin and Lincoln (2000) reminded me of the need to be aware of the “personal biography of the researcher, who speaks from a particular class, gender, racial, cultural and ethnic community perspective” (p. 18). As the researcher, I was conscious that I came to this study with my own “world view” and that everything I had experienced and processed was coloured by that view. I have tried to be critically self-reflective, but much of this study is very personal.

We must, then, become much more self-conscious than we have been in the past about the issues involved in narrative and story, such as interpretation, authenticity, normative value, and what our purposes are for telling stories in the first place.

(Carter, 1993, p. 11)

Whenever possible I have endeavoured to provide multiple perspectives but I was constantly aware that one perspective was always mine and that, as the editor, I had enormous power in the evolution of the story.

When curriculum is conceived as a story with a past, present and future, which can be told from a number of different perspectives, researchers and practitioners have the opportunity to deliberate on issues relating to authority, to who is the author of the story being told and whose stories are silenced, whose knowledge is of value, and to matters of power and control embedded in those issues.

(Beattie, 1997, p. 10).

Richardson (2000) reminded me that “sense making” is always value constituting – making sense in a particular way, privileging one ordering of the “facts” over others (p. 927). Although I had acknowledged intellectually that it was impossible to remove myself from the story that was evolving, eventually I realised that I had not really given myself permission to tell my story but rather continued to “trick” myself into believing that what I was doing was telling other people’s stories or perhaps Athenia’s story.

**Changing perspective**

When I accepted that the only story I could tell with any degree of confidence was my own and acknowledged that all other stories were viewed from my perspective with all the
influences I brought to the story in that particular instance, it seemed to free me from the challenge to “get it right”. I finally realised that I could not do that. I could gain data from alternative perspectives and reconsider the data on multiple occasions and ask other participants to read the stories and comment from their perspectives, but I could not guarantee a “perfect” representation.

The responsibility to make sure that the story was “correct” could not be mine as I was striving for something that was unachievable. The best I could do was to represent the story to you, the reader and attempt to explain, as clearly as I could, who was involved in the conversation at any particular stage of the story. Richardson (2000) suggests that poststructuralism does two important things for writers:

First it directs us to understand ourselves reflexively as persons writing from particular positions at specific times; and second, it frees us from trying to write a single text in which we say everything at once to everyone. (p. 929)

Once I relinquished my responsibility to achieve the “perfect” representation of everyone else’s story and accepted the freedom to tell my own story, the challenge then became to identify my story. Taylor and Settelmaier (2003) suggest “autobiographical research can be part of a multi-method participant – observation study, helping the researcher to see his/her research in the context of his/her biography and culture” (p. 233). As I reflected upon my own life history I came to see more clearly how my past experiences had influenced and shaped the person that I had become. I began to realise that my experiences were quite different to those of many of the Mathematics and Science teachers involved in the study and therefore my concept of learning could be quite different to theirs. Taylor and Settelmaier (2003) claim that autobiographical research conducted from a critical social perspective can raise teachers’ awareness of the impact, both positive and negative, that school and subject cultures are having on their actions.

By understanding deeply how social and cultural forces have shaped our lives, we may come to view our established professional practices with a fresh eye and, perhaps, feel more empowered to participate in reforms aimed at democratising the educational institutions in which we invest much of our lives and the lives of our children. (p. 234)

Many involved in this study seemed to be considering “established practices with a fresh eye” and looking towards alternative modes of operation, and so was I. However, in terms of writing the story, I was still struggling with how to represent and justify any knowledge claims that I made. Where were the data I was collecting leading me? Could I suggest conclusions? How did I know what I claimed to know? Would I ever overcome the feelings of confusion and uncertainty that I was experiencing? Henderson and Kesson (2004) suggest that “curriculum wisdom requires a multidimensional mindfulness” (p. 48). This is an appropriate way of describing a frame of mind that I required but did not possess initially, one that I developed as I wrote this story from multiple perspectives while keeping in mind the final goal of achieving a cohesive and coherent whole.
Knowing through writing

What I had not envisaged was the role of the actual thesis writing process in helping me to clarify my ideas and to organise my thoughts. Frequently, a pre-planned section structure became unusable as I struggled to find the “right” way to express an idea, or I realised that a sequence of material did not really represent the story in the most meaningful way.

Writing is also a way of “knowing” – a method of discovery and analysis. By writing in different ways we discover new aspects of our topic and our relationship to it. Forms and content are inseparable.

(Richardson, 2000, p. 923)

At times when I found myself faced with a particularly confusing array of ideas from a number of participants, some of which seemed contrary to one another, and there seemed to be no clear way forward, commencing the process of writing seemed to help crystallize ideas in my mind. Through writing I often seemed to be able to bring coherence to a group of fragmented chaotic meanderings, allowing me to “think” the message into reality through the writing.

Writing seemed to allow me to clarify my ideas, to sort through my emotions and to examine my motives. The following comments from Ellis and Bochner (2000) reflected my personal experience.

In conversation with ourselves we expose our vulnerabilities, conflicts, choices, and values. We take measure of our uncertainties, our mixed emotions, and our multiple layers of experience. Our accounts seek to express the complexities and difficulties of coping and feeling resolved, showing how we changed over time as we struggled to make sense of our experience. (p. 748)

Through recording and exploring my narrative and that of others I feel that I have learned to listen, to empathise, to clarify and to respect the perspectives of others but most of all I have learned that mine is but one perspective on learning that can be deeply enriched by the lives and views of my colleagues.

In the next section I will briefly share the challenges of curriculum transformation as I collaborated with a group of colleagues to work towards, what we perceived would enable an improved learning environment for ourselves and our students. The journey involved much negotiation, integration of skills and content across the Year 8 curriculum and ultimately the implementation of year-level teams.

THE CHALLENGE TO DEViate FROM THE NORM

For several years, a group of teachers at my school, Athenia had been struggling with a number of issues relating to effective skill development and management of our Year 8 program (first year of secondary school). In 1992, I wrote a workshop report for the Principal that focused on the lack of time available to develop student skills effectively, the degree of overlap between skill development in a number of subject areas and the value of a “team” who could collaborate to implement change.
If we continue to teach all skills in isolation, we can only reinforce the idea that we acquire different skills for use in different subject areas, for example, a group of Science research skills and a group of Introductory Humanities research skills. Are we teaching for transfer or for non-transfer? Instead of emphasizing the connections and building on what has been done in another subject area, we usually imply we are doing something new and that our way is the best way to do it.

We need to develop partnerships across subject areas. Our co-operative planning would take advantage of our varied experience, our different thinking styles and our variety of perspectives. Unfortunately though, co-operative planning often asks us to use new skills that may not feel completely comfortable. Like our students we need to be trained in the new skills we are being asked to use………..

Several teachers seemed to be beginning to see school from a different perspective, perhaps the perspective that the students were seeing

Given a pile of jigsaw puzzle pieces and told to put them together, no doubt we would ask to see the picture they make. It is the picture, after all, that gives meaning to the puzzle and assures us that the pieces fit together, that none are missing, and that there are no extras. Without the picture, we probably wouldn’t want to bother with the puzzle.

Ironically, this situation is very much like what we ask young people to do all the time in school. To students, the typical curriculum presents an endless array of facts and skills that are unconnected, fragmented, and disjointed. That they might be connected or lead toward some whole picture is a matter that must be taken on faith by young people or, more precisely on the word of adult authority. Like working the jigsaw puzzle, one can only trust that the pieces do make one, that they do fit together, and that there are just the right number and combination of pieces.

(Beane, 1991, p. 9)

The dilemma for secondary teachers in schools that are rigidly organised within a traditional faculty structure is that it is difficult, even with the best of intentions, to find the time, the space, the vision and the precedent to collaborate with teachers from other faculties.

Prior to 1991, the year this study commenced, teachers at Athenia had been concerned with the lack of "connectedness" across the first year of secondary school. Although, for many students, the range and variety of new teachers was part of the excitement of transferring to a new form of schooling, there were definitely some disadvantages. The teachers had concerns relating to a number of issues including:

- the inability of teachers to gain a holistic view of students and the curriculum;
- the duplication of content and skills covered in different subjects;
- the inability of the students to transfer skills learned in one subject area to another;
During the period 1991-1995, a series of modifications to the Year 8 program was trialled. Some teachers experimented with integrating their subjects for short periods of time; others experimented with joint assessment. Initially, many of the changes were of an ad hoc nature despite being part of a broad philosophy to provide the most effective transition into secondary school for young adolescents and to provide a strong foundation for all future educational experiences. By the end of 1995, many teachers seemed to feel that the time had come to reassess the situation and to take a more integrated approach to the development of the Year 8 curriculum, but questions remained. Which future direction would provide the most effective outcomes for our students? Who was going to determine which outcomes would be perceived as “most effective”?

In searching for answers to these questions, teachers developed a number of initiatives over the ten-year period: 1991-2000. The study examined critically the introduction, development and maintenance of cross-curricular initiatives within Athena. Through investigating the initiatives, and the process involved in their development, I hoped that others would gain insight and encouragement from what we had learned and be challenged to experiment with their own innovations.

The research questions

Three underlying questions were used to focus the study throughout.
1. Can teachers trained and experienced in working in discrete subject areas collaborate to implement cross-curricular initiatives?
2. What are the factors that facilitate this collaboration?
3. How can the barriers relating to this collaboration be overcome?

Although the questions initially seemed straight forward, it soon became apparent that the answers formed a complicated network that involved issues of leadership, communication, and organizational structure at multiple levels within the school community.

Polkinghorne (1992) writes of a “new” professionalism built on the concepts of “reflection in action” and “reflection on action” which asks teachers to “keep alive, in the midst of an action, a multiplicity of views of the situation”. This view of professionalism requires individuals to reflect upon their practice, to recognise the conflicts that exist between present actions and the demands of the future, to consider how to put theory into action, and to discuss and negotiate responses with their colleagues, while at all times constantly examining their motives. Through narrative inquiry and a discussion of critical incidents (Tripp, 1994), I created a picture of this “new” professionalism in action as the teachers involved worked to create an improved learning environment for their students through the development of a collaborative culture of negotiation and integration.
A JOURNEY OF CURRICULUM TRANSFORMATION

Table 1 on the following page contains an overview of our steps towards an alternative curriculum based on collaboration, negotiation and integration.

Section 1: Introducing elements of collaboration (1991-1995)

Two and three subject collaborations: Teach – Time Out

The study commenced with an examination of our first attempt at collaboration between two teachers in the form of a project titled, Profile of a Scientist. Teachers from the Science, English and Technology classes collaborated to develop a unit where students were asked to design and produce a poster profiling a famous scientist. The units collectively became known as Teach – Time Out activities as teachers from different subject areas were asked to teach the skills required for the unit from their subject perspective and then to allow their students to put those skills into action in an independent learning environment. Other examples of two-subject collaborations were included to demonstrate the range of activities that were being undertaken and the feedback supplied by parents and teachers added to the data sources. By the end of 1991, all Year 8 students had experienced one of these collaborations, a body of knowledge on teacher collaboration was building and teachers were forming opinions of the concept.

The following responses from the girls certainly helped to promote the Teach – Time Out activities to the staff at Athena.

- It wasn’t just sitting in the classroom; you had to find things for yourself.
- It was outside, it was a relaxed way of learning and it involved physical activity. There was no rush to finish work and it involved working with others.
- Being able to work at my own pace. It wasn’t dragged out. I didn’t have to stop and wait for everyone else to be at the same stage.
- We had fun while learning some new skills. The cards we were given each day were a good idea. They organised the lesson and were clear about what to do.
- Group work because you work with your friends and you can relax and help each other with any problems.
- It was out in the fresh air so you didn’t feel pressured. It was hands on learning which made it even better.
- We were given freedom and trust. We could then go about our activities the way we wanted to.

Although our aim had been to involve each Year 8 student in at least one collaborative activity, only some of the Year 8 teachers had been involved and the level of experience across all teachers was very diverse. Some teachers had been involved in various different units others had not been involved in any. Discussion across the cohort of Year 8 teachers was becoming difficult with such diversity of experience. Whispers were beginning to be heard: If these activities are worthwhile and supported by the school, why don’t we do them on a larger scale, for a longer time period, and involve all Year 8 teachers? Questions relating to equity and other issues were beginning to emerge in the minds of the organisers - the Deputy Principal and the Resource Teachers (teachers whose role involved supporting teachers in developing new initiatives).
Table 1: An overview and timeline for the study

<table>
<thead>
<tr>
<th>TIME</th>
<th>SECTIONS OF THE STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Section 1 – Introducing elements of collaboration</strong></td>
</tr>
<tr>
<td>1991</td>
<td>Teach-Time Out – investigation of two - and three - subject collaborations involving students working independently. These units were based on integrated skill development and common content.</td>
</tr>
<tr>
<td>1993-1995</td>
<td>Window in the Timetable – investigation of a fully integrated one-week unit. Data gathered during this unit helped to highlight issues related to the collaborative process. Two - and three - subject collaborations also continued during this time.</td>
</tr>
<tr>
<td>1995</td>
<td>In Semester 2, a Year 8 Curriculum Committee was formed.</td>
</tr>
<tr>
<td></td>
<td><strong>Section 2 – An examination of teams and critical incidents</strong></td>
</tr>
<tr>
<td>1996</td>
<td>The first concept of a team was trialled. This involved two teachers from each subject area. The teachers were timetabled at the same time and in adjacent rooms where possible to allow for increased flexibility.</td>
</tr>
<tr>
<td>1996</td>
<td>The &quot;Future Problem Solving&quot; process was used to create an environment where fruitful conversation relating to improved collaboration could develop. (Future Problem Solving Website, 2003)</td>
</tr>
<tr>
<td>1997</td>
<td>Teams were trialled across the entire Year 8 cohort. This involved the formation of 4 teams, consisting of the teachers of two classes and their (approximately 50) students.</td>
</tr>
<tr>
<td>1998-1999</td>
<td>Teams were reformed and continued to operate throughout the year. They were also introduced at Year 9 level.</td>
</tr>
<tr>
<td></td>
<td><strong>Section 3 – Reflections over time</strong></td>
</tr>
<tr>
<td>2000</td>
<td>Teams continued to operate throughout this year. Towards the end of the year, nine teachers who had been involved in the study throughout were asked to reflect on issues of collaboration through a series of open-ended questions.</td>
</tr>
<tr>
<td></td>
<td><strong>Section 4 – Realities and visions</strong></td>
</tr>
<tr>
<td>2001-2004</td>
<td>Possibilities for the future based in the realities of the current situation at Athenia are considered.</td>
</tr>
<tr>
<td>2004</td>
<td>A process for developing a shared vision leading towards structural change is discussed.</td>
</tr>
</tbody>
</table>
• Would teachers have more ownership of the activities if the concept emerged from all teachers involved working together rather than from one or two teachers?
• Would teachers want to develop "different" learning environments if they had the freedom to do so?
• Would there be more flexibility to develop activities if we had a longer time period without the constraints imposed by the timetable?
• Would the activities be more acceptable to the whole school population, and therefore more likely to become institutionalised, if all the teachers of a class were involved?

One week totally integrated project: A window in the timetable

By mid 1993, the concept of trialling a weeklong activity that involved two classes with all their teachers was gaining support. Students would focus on the same topic for the week. The teachers of those students would determine the topic, the structure of the week, the activities and the expected outcomes. Perhaps we could create a "window in the timetable" that allowed time and space to do something new and different.

In 1993, we trialled the Antarctic Expeditionner's Training Camp (a scenario) where students were invited to join trainers and trainees as they debated the future use of the Antarctic continent. Using materials gained from a portfolio collected in 1993, I attempted to paint a picture of our first attempt at an extended unit involving all the teachers of two classes in a week of integrated curriculum – an exciting week of learning and adventure. I also tried to recreate a sense of the joys and frustrations that seem to be an integral part of attempts at curriculum integration within a discrete subject environment. Data gathered from diverse sources during planning, implementation and upon completion of the unit pointed to a number of factors influencing teacher collaboration across subjects. These factors formed the focus of the study as it progressed.

Although we did not recognise it clearly at the time, we had developed a model of curriculum integration that was allowing us collaboratively to develop and reinforce skills used across the curriculum. It was important to determine whether or not the outcomes from one activity could be duplicated in other contexts. In 1994, two units based on this model, but using different contexts, were trialled. A brief overview of these is included as they helped to confirm or disconfirm assertions relating to collaboration that had been developed during the previous year.

During the planning, implementation and evaluation of these units elements that appeared to facilitate or inhibit teacher collaboration began to emerge. These factors are summarised in Figures 1 and 2. They provided an initial starting point and as I continued to investigate other initiatives the figures evolved to reflect my learnings over time.

By 1995, a Year 8 Curriculum Committee had also been formed. This group comprised two teachers from each subject area some of whom were heads of Faculty. What had begun as small experiments in teacher collaboration and integrated curriculum was now being considered from a whole school perspective.
Figure 1: Factors that seem to facilitate effective collaboration

- A group of willing, enthusiastic colleagues who are anxious to keep improving outcomes for their students
- Leadership and support from the school administration
- Unit models that can be debated and duplicated
- A person/persons who has the time and passion to facilitate the collaboration
- Enthusiastic students who obviously enjoy their work
- The skills being addressed and the expected outcomes for the students need to be clearly articulated before the unit is developed
- A sense of ownership of, and contribution to any “team” that you are asked to function within
- Acceptance of the project as part of the mainstream activity of the school rather than an “add on”

Figure 2: Barriers that seem to limit effective collaboration

- Traditions, routines and structures that facilitate past activities and militate against changing organisation
- Expectations of students, parents and teachers
- Demands of single subject
- Conflicting needs between faculty and
- Lack of team staffrooms
- Organisation al inertia
- Lack of time for planning and developing the common mind and the unit
- Lack of will to follow through with allotted tasks
- Confidence in the success of past activities and over caution about the possible outcomes of doing things differently

13
Section 2: An examination of teams and critical incidents

In most cases, the next step in the collaborative journey grew from perceived problems in the previous step – obstacles that needed to be overcome. Our first experiments in integrated curriculum were both exciting and frustrating. Constraints were recognised that did not seem to be able to be overcome using the present format. Many teachers felt that they were "add ons" and that if a "team" of teachers and students were given enough freedom to manage their own curriculum they could overcome constraints and develop a curriculum that would produce more effective outcomes for students.

Teacher teams

Would creating teams of teachers solve the problems? In 1996, two teachers from each subject were timetabled on at the same time and in adjacent rooms. They worked with a group of approximately 50 students. They were challenged to experiment, to be innovative, to be flexible, to collaborate, to provide a blend of integrated curriculum and discrete subjects. Data were collected from the staff involved at the beginning of the year and again in April, about three months into the school year. Although there were some positive outcomes, it was quickly realised that this form of grouping was placing an enormous strain on the timetable and preventing the school from continuing a variety of other activities that required special timetable management. By the end of this year, there was a growing sense of frustration. There seemed to be recognition that collaboration between teachers across the curriculum provided a more effective pastoral environment for the students. Skills had been mapped across the curriculum. Yet, taking the project the next step was causing great tension across the school. The Principal was encouraging us to take up the challenge but difficult question were emerging.

Emergent questions

- How does one facilitate the development of an effective group in terms of
  - Developing a shared vision?
  - Leadership?
  - Communication?
- Are organisational changes needed to support the growth of cross-subject collaborations?
  - Which changes are essential in terms of provision for planning time, etc?
- What is required to engender support from within the group and from the wider school population?
- Who holds the power?
  - When the group is given the freedom to create and their creation is different from that anticipated, who "holds the reigns"?
  - When faculties and teams clash, who "holds the reigns"?

And later as the result of teacher reflections, a fifth question was added:

- How do elements of the structure, development and implementation of a cross-curricular unit impact on teacher collaboration?

These questions ultimately provided a framework for the rest of the thesis as we looked for solutions to the problems that were raised.
Future problem solving

In 1996, at the same time as the school was struggling with difficult curriculum choices, a new problem solving process was being introduced (as a co-curricular activity at the school) – Future Problem Solving (FPS). This process was first developed by Dr Paul Torrance in 1974 in America (Future problem Solving International Website, 2003). It seemed that this process offered a technique that would allow us to think through the process of collaboration across the Year 8 curriculum, to consider our individual underlying philosophies of teaching, to talk to colleagues and to hopefully reach some consensus about our future directions. This process involves participants in identifying an underlying causal problem and then identifying the most effective solution. The problem identified was

*The academic ethos of the school with its emphasis on the outcomes at the conclusion of Year 12 has driven curriculum structures and choices within the school. How might we redress this imbalance in order to maximize the Year 8 experiences for the wide variety of young people in our care, for next year and beyond?*

The solution chosen by the majority of teachers involved was

*Years 8 and 9 will exist as a separate curriculum entity based on a vertically organised program. This structure would be implemented after one year of planning and development of units of work. Some of these units would be cross-curricular in nature. The opportunity for individualized learning would be maximized with this new structure; those involved with Years 8 and 9 would clearly perceive that the junior curriculum poses unique properties and has its own holistic integrity.* (43 points)

This was followed by two other solutions

*Intensive professional development that focuses on the differing needs of the students in the Junior School vis-à-vis Senior School to be commenced. Staff will be given the opportunity to develop and own the changes in the structure of the school.* (35 points)

*The Year 8 program to be controlled by cross-faculty teams of teachers who would facilitate integrated skills development and address specific Year 8 needs. Consultation would continue to occur with Heads of House and Faculty. This structure would empower teachers who would own the changes being made.* (35 points)

Ultimately, a decision was made by the school Principal to adopt a team-based approach at Year 8 – not the solution favoured by the majority but one that seemed an acceptable compromise based on the constraints of the school. For the next three years (1997 – 1999), Year 8 teachers worked as part of a team with each group of teachers caring and planning for approximately 50 students. There were four teams and the concept was that each group of teachers would be responsible for the total development of a group of students during their first year of high school. During those two years data were gathered from a diverse range of sources. This information was then analysed to reveal the factors facilitating and inhibiting teacher collaboration.
Section 3: Reflections over time (2000)

The third section of the study focused on the reflections of the nine teachers involved as they summarised their ideas based on ten years of involvement with the project. The questions were very similar to my original research questions:

1. Comment on whether or not teachers trained and experienced in working in discrete subject areas can collaborate to implement cross-curricular initiatives?
2. What are the factors that facilitate the collaboration and why do you feel that way?
3. What are the barriers to collaboration and how do you feel these barriers might be overcome? Or why do you feel the barriers are impossible/unlikely to be overcome?

Questions were introduced by the following comments designed to encourage the respondents to be open, honest and critical.

This is the final phase of the data collection for my doctoral study. For weeks now I have been trying to find a way to collect your ideas, both positive and negative. I have lots of ideas and comments to make about lots of issues and I didn't want this to lead your comments or to colour what you have to say.

I need you to be truly honest with no concern for the personalities involved (including me). I'm not using any names and your comments and ideas will not be used for anything other than my research … In short say anything that you have always wanted to say about the questions or related topics and I will be immensely grateful.

Their comments added to the evidence provided in previous areas of the thesis, and was used to add to and check the validity of conclusions drawn from previous sections. In this section I also attempted to broaden my perspective by considering some of the ongoing frustrations identified by participants at Athenia in their efforts at collaboration in the wider context of current research in middle schooling practices.

Their responses are incorporated in Figure 3: Factors that seem to develop effective team development and cross subject collaboration and Figure 4: Factors that seem to limit effective team development and cross-subject collaboration. These two figures provide a final summary of the factors identified by myself and other participants as facilitating or constraining our efforts.

Where to from here?

As I moved towards the conclusion of my study I had gained an increased realisation of the complexity of the issues that had emerged - the issues that probably needed to be addressed if Athenia’s ultimate aim was for sustainability of cross-subject collaboration. Fullan (2003) suggests that there are certain conditions and processes that encourage ownership and commitment within an organisation:

- Start with the notion of moral purpose, key problems, desirable directions, but don't lock in.
- Create communities of interaction around these ideas.
Team preparation, development and maintenance

- Team members must be **trained and prepared to work differently** – professional development in team building and effective collaboration appears to be essential.
- Team members must **value generic skill development** as well as content.
- A group of **willing, enthusiastic colleagues who complement each other**, are anxious to keep improving outcomes for their students and who recognize the relevance of the changes they are embarking upon is important.
- **Team maintenance** must be considered so that members have the opportunity to grow together, to build on each other’s strengths and weaknesses and to develop ideas so that they can grow into a cohesive team.
- A sense of **ownership** of, and contribution to any “team” that you are asked to function within.
- Team members with a background in more than one subject area may be helpful.

Unit development and implementation

- **Models** that can be debated and duplicated – recognition of the value of using a diversity of models to suit a diversity of teachers.
- **Skills** being addressed and expected **outcomes** for the students must be **clearly articulated** before the unit is developed.
- Team members must **value the collaborative unit** at least as much as the subject material replaced.
- A **person/persons** who has / have the **time and passion** to facilitate the collaboration appears necessary – the right person for the right project.
- **Tangible support** for this person from the administration must be evident.
- A sense that the unit is logical and developmentally sound and has achieved **student outcomes** that were not being achieved previously must exist.
- **Enthusiastic students** who obviously enjoy their work.

School support

- The provision of **ongoing professional development** appropriate to the needs of the team
- **Celebration of success** and continuing encouragement to move forward
- **Leadership and support** from the school administration who must also establish parameters and realistic expectations – a realistic number of meetings and projects that teachers can comfortably develop within a given time frame
- **Acceptance** of the project as part of the mainstream activity of the school rather than an “add-on”
- **Clear, well articulated vision** that is agreed upon and owned by all and that guides school action and decision making

School organisation

- **“Free up” timetable**
  - Time for meetings
  - Venues,
  - Space in the curriculum
- **Appropriate composition** of teams so that they remain small and function for optimum times

Issues of power and control

- **Delineation** of team and faculty responsibilities
- **Confidence** that the team is “in charge” and can execute their plans and responsibilities
- **Effective communication** between teams and faculties leading to collaborative decision making

Figure 3: Factors that seem to facilitate effective team development and cross-subject collaboration
Factors that appear to limit effective collaboration

Team preparation, development and maintenance
- Lack of preparation, perceived relevance and ownership
- Unwilling teachers - lack of will to follow through with allotted tasks
- Lack of team staffrooms
- Teacher overload
- Confidence in the success of past activities - over caution about the possible outcomes of doing things differently
- Lack of team cohesion

School support
- Traditions, routines and structures that facilitate past activities and mitigate against changing organisation
- Expectations of students, parents and teachers
- Lack of recognition of, and celebration of, the unique role that teams play within the school
- Organisational inertia

Unit development and implementation
- Lack of time for planning, developing the common mind and the unit
- Format of unit
- Lack of consistent supervision

School organisation
- The inability of the team structure to remain a priority in school planning
- Lack of ongoing organisational support in that the organisational structures that support initiatives do not remain in place over time

Issues of power and control
- Decision making without thorough consultation and explanation
- Conflicting needs between faculty and integrated units – with faculty needs taking priority
- Demands of single subject assessment
- Teachers becoming “too precious” of their subject.

Figure 4: Factors that seem to limit effective team development and cross-subject collaboration
- Ensure that quality information infuses interaction and related deliberations.
- Look for and extract promising patterns, i.e., consolidate gains and build on them. (p. 23)

Through the development of an historic structure and the investigation of a number of issues that have emerged during the study I have attempted to paint a picture of Athenia's journey towards a collaborative culture of integration and negotiation. Although not being aware of Fullan's conditions and processes at the time, I feel that we have attempted to follow a similar path.

In our efforts to move towards sustainability, we have tried to “extract promising patterns”, to “build on them” and we have tried not to “lock in”. At every corner new questions and possibilities seemed to emerge. I have investigated a small number of these but many others remain. Perhaps the answer for Athenia is to establish a separate Middle School. Would teams work better if they consisted of one class instead of two? Should the Year 8 curriculum be rewritten with an integrated format as the basis? Should we have teachers teaching more than one subject? Should all Year 8 classes be taught in a purpose built facility? Should the Year 8 or Year8/9 curriculum be “controlled” by the Head of Faculty or a Head of Middle School? Should we advertise for, and employ teachers with specific Middle Schooling teaching skills?

As one reflects upon the changes in learning environments that occur within a school over time, it seems that schools are in a constant state of transition as we recognise new ways of learning and attempt to address changes in the community of which we are such an integral part. From this perspective the realities of today become part of the transition towards the realities of tomorrow. Perhaps this new learning environment is one that will incorporate the best of teams and faculties to form a new collaboration – a collaboration that will make obsolete many of the constraints of today.

This journey began with a vision for an improved learning environment for my students. I am now going to consider another vision – my vision for the future.

**THE CHALLENGE TO DREAM**

I had learned an enormous amount. We had built a body of knowledge and created models, but we still struggled with many of the same issues that confronted us in 1991. In the final section of the thesis I took the factors that appeared to facilitate and limit effective collaboration and combined them with the principles of constructivism (Abbott and Ryan, 1999; Duit and Confrey, 1996; von Glasersfeld, 1993) that have influenced my perspective on learning and knowing for so many years and used them as a basis for developing a concept of a "Learning Centre of the Future" – a concept that I dreamed could be implemented at Athenia.

**A Learning Centre of the Future**

Within the Learning Centre of the Future at Athenia, students are engaged in diverse tasks with access to a range of learning resources. Some research alone at a computer; others sit in small groups discussing the results of an experiment recently completed - arguing about the reasons for the different results they have achieved; others are off-site collaborating with professional mentors; others are involved in community based programs devised by the students after needs assessment surveys; others participate in
evaluation activities negotiated with mentors; and others are engaged in follow-up activities designed to enable students to demonstrate specific skills and understandings.

Within the Learning Centre teams of educators collaborate to frame essential questions (Wilson and Horch, 2002) that engage and challenge learners. Teachers negotiate with individual students and groups to devise a relevant range of learning programs – programs that stimulate, enthuse, extend and consolidate.

This is a classroom without …

- **bells** because students learn at their own best rates and need different time periods to complete a variety of activities;
- **walls** because the school life of the student merges with life at home and within the laboratories of the working scientist, mathematician, sociologist, etc;
- **subject-specific teachers** and the constraints they place upon the student because of their preconceived ideas and inflexible traditions;
- **content defined, subject based courses** because learning is “framed” through “essential questions”, and “knowledge” from a variety of sources and at varying depths is available on the World Wide Web and from experts in the field both within the school and in the wider community;
- **subject boundaries** because the educators have generic skills which enable students to process information from a variety of subject areas as required; and mentors are available when subject specific knowledge and skills are required;
- **faculties** who compartmentalise learning and establish artificial barriers to integration and synthesis of knowledge;
- **cultural barriers** because it is the norm for students to consult with those in other countries collecting data to investigate similar environmental problems, etc;
- **common assessment** as students exhibit a variety of products that are most suited to the modes in which they have been working and the data that has been involved;
- **year levels** because students work at their own best rates capitalising on their learning styles. (Ultimately I hope that this concept would extend to other year levels in the junior secondary school.)

You may suggest I am dreaming but many futures are born in the dreams of today that develop into the realities of tomorrow.

**Putting principles into action**

The findings of this research, summarised in Figures 3 and 4, indicate that teachers at Athenia are likely to need more than the presentation and discussion of a model before they will be willing to become involved in a new initiative. They need to recognise as relevant and important to themselves the changes they are being asked to embark upon, and also in terms of facilitating improved learning outcomes for their students. If the initiative involves teacher collaboration then those involved need also to develop a shared vision in relation to the initiative. My research suggests strongly that teachers at Athenia need to engage in a process of collaborative investigation and analysis that enables them to determine whether the teaching and learning principles underlying the innovation are justified from their perspectives. They need to consider whether current research supports the vision. They need to be challenged to question many aspects of what is occurring within their classroom in relation to:
• the decision making processes,
• the value systems that are being promoted,
• the types of communication that exist,
• the nature of and approach to the topics being studied, and
• the connections that exist between the classroom, the lives of the participants
  and the society in which it is embedded.

To facilitate these processes I then examined each element of my vision in terms of
current literature relating to creating effective learning environments for young
adolescents (Daniels, 2002; George, 2003; Perkins, 2000; Vars and Beane, 2002) and
the current situation at Athenia.

The reality of today

You might say I am being too idealistic. All the old problems will soon re-emerge! I don’t
pretend that Athenia has wholly embraced my vision but there are “flickers” that might
grow. In many ways I perceive our present organisation at Year 8, for the most part, to
be similar to that described by Elmore (2002):

The organization chops knowledge into discrete bits – classrooms, grade-levels, pull-
out programs, and subjects – and then organizes the work of adults and students
around those bits without paying attention to what is going on in other bits. So, not
surprisingly, the experience of adults and students as learners in schools is anything
but cumulative and continuous. (p. 23)

In recent years I have been challenged to be part of a limited, but alternative model. I have
been made to look intensely at my own teaching practice. I have collaborated with teams
of teachers in other faculties who have called into question a lot of the underlying
assumptions that I had held relating to Science and Mathematics teaching, many of which
had resulted from my enculturation within the science and mathematics education
communities. I discovered that teachers “teach” in very different ways and that I had a lot
to learn, a lot to share and a lot to explore. I have been given the opportunity to direct my
own learning, to decide what is relevant to me and to work with a group of colleagues who
support and challenge me.

I have been fortunate to work within a school (and with a principal) in a position in which
I have been encouraged to be innovative in terms of my teaching practice. I have been
allowed to work outside of the traditional classroom setting (by suspending normal
classroom activities for a period of time) and I have been rewarded for participating in
these activities – through both the excitement of the students and the staff involved. I
have come to understand why George (2001), after reviewing 30 years of Florida’s
middle schools’ experiences (500 of them), can comment on interdisciplinary team
organisation in the following way:

Of all of the components of the middle school concept, teaming is the one that
school leaders refuse to give up. The great majority of middle schools are
organized so that teachers share the same students, the same part of the
building, the same schedule for common planning time, and the same
I have been able to utilise technology and the World Wide Web to increase student access to students in other countries with cultures quite different from our own. I have access to well resourced learning areas that allow students to work in a variety of ways. I have taken many of the initial steps towards the future and have proved to myself that education can be different. I have recognised constraints and I have been able to work outside of them.

This has not, however, removed the constraints. One soon realises that they are still there when one attempts to integrate an innovative project – no matter how successful – into the mainstream culture of the school or faculty. Although I know that I may never get to participate fully in my future vision – a total transformation of Year 8 – it is my view that the next step in the journey can be recognised only when one identifies the inadequacies of the present situation and dreams of a better future.

At Athenia we seem to have progressed a relatively long way towards developing a culture of collaboration. I hope that, through continued co-operation between teachers, negotiation between faculties and teams, and integration of appropriate content and skill development, Athenia will continue to move towards my vision for the future. In many ways I identify with a student (Raci) interviewed by Easton (2002) who spoke about what she felt prevented her from learning: “being afraid of knowing, scared of failing, not allowing myself to do what I’m capable of doing, building walls, and making excuses” (p. 65).

I recognise how easy it is to lose a vision and to sacrifice the gift of learning for the comfort of the status quo. I hope that our students at Athenia will not identify with Raci’s feelings but rather find themselves in a learning environment that encourages knowing, recognises diversity, does not acknowledge failing as a concept, supports team members (both teachers and students) through the rough times, challenges all to do their best, breaks down walls and doesn’t accept excuses, only solutions.

### THE CHALLENGE TO LEAD

At this point I thought that I had reached the end of this stage of my educational journey. That was, until Peter asked the following question.

> Does your final chapter address how you could enable your colleagues to develop a shared vision, one that might be sufficiently powerful and consensual that structural reform of the school would seem compelling leading progressively to the dismantling of existing structural/organisational constraints?

(Taylor, email, 10 March 2004)

Initially I felt that I was being asked to repeat the process in which I had already been involved. Then I realised that although the question was worded differently, it seemed very familiar. In 1990 the Deputy Principal had posed two questions in a staff newsletter:

- Should there be a re-definition of the underlying philosophy or structure for Year 8 curriculum and a subsequent re-writing of programs?
- Would cross-subject integration or co-ordination, i.e. a holistic or transdisciplinary approach, have merit in facilitating the transition of our students from a primary to
secondary setting?  

(Deputy Principal, August 1990, p. 3)

Peter’s challenge made me reflect critically on what I had learned while completing this research. I have realised that I am no longer at the end of a journey but am involved in an exciting transition. I am now equipped with knowledge and experience that I did not have in the early 1990s. What have I learned in the last ten years? What would I do differently if given the challenge?

A plan for the future

In the final section of this paper I take the elements that seemed to have influenced collaboration at Athenia, identified in Figures 3 and 4, and I use them in combination with my vision of the Learning Centre of the Future in order to address how I might “enable my colleagues to develop a shared vision, one that might be sufficiently powerful and consensual that structural reform of the school would seem compelling leading progressively to the dismantling of existing structural/organisational constraints”.

Please be aware, however, that what I present here is very limited due to the constraints of space.

School support

- Clear, well articulated vision that is agreed upon and owned by all and that guides school action and decision making;
- Effective communication at all levels encouraged by providing time, space and a process that will move discussion forward in a tangible way towards definite conclusions – timelines are essential;
- Leadership and support from the school administration who must also establish parameters and realistic expectations – a realistic number of meetings and projects that teachers can comfortably develop within a given time frame;
- Acceptance of the project as part of the mainstream activity of the school rather than an “add on”;
- The provision of ongoing professional development appropriate to the needs of the team;
- Celebration of success and continuing encouragement to move forward.

Initially the vision needs to be shared with a representative group of participants within Athenia that includes those who have the power to make the vision a reality (Year 8 Review and Planning Group). Rather than presenting this group with a vision, I feel that they need to undertake a process of reconsidering the current Year 8 program at Athenia, in terms of its history, teacher feedback, and the relevant literature, to (i) evaluate the extent to which we are providing an effective learning environment for our Year 8 students, and (ii) identify limitations within Athenia that prevent this from occurring.
At that point I would then present my vision, but very much as a starting point – perhaps as a document that could be taken away and considered before the next meeting. Hargreaves and Fink (2004) suggest that “one way for leaders to leave a lasting legacy is to ensure that others share and help develop their vision” (p.10). It is essential that all participants involved in this project reach consensus on a preferred vision for Year 8 to which they can commit. This is likely to emerge when those involved are given the opportunity to reflect on their philosophy and underlying beliefs and to debate a common vision into existence. Fullan (2003) offers the following caution when attempting to develop a vision.

Premature and false clarity, if convincingly presented, are dangerous precisely because they can capture people’s hearts and minds – thereby leading them down ill-conceived pathways. Clarity generated through interaction, problem solving, and communities of practice, delays premature closure enough so that the checks and balances of complexity theory serve to scrutinize ideas. (p. 30)

Acceptance of the new model by those with the power to make structural changes at Athenia is envisaged as the first step in the process leading towards change. Those involved in the initial process need to share it with others and to acknowledge and value the contribution of the group of teachers who will be asked to implement the new program within their classrooms. These teachers will need opportunities to examine the new vision and to make sense of it in terms of their own philosophies of teaching and learning (professional development). Therefore the new concept must be sufficiently flexible in terms of the implementation to allow other participants opportunity to reshape aspects of the vision.

My experience during this research suggests strongly that the development of a clear, well articulated vision that is shared by all is only the first step in enabling the vision to become “sufficiently powerful and consensual that structural reform of the school would seem compelling”. Although the initial impetus for the innovation may come from any area within the school, once critical participants have accepted it and the parameters have been established, ongoing leadership and support from the school administration is needed. It appears necessary to establish a timeline for implementation. If the vision is to become a reality all must know that it has now become part of the accepted practice of the school. It must be organised, maintained, sustained and celebrated as a concept that is expected to bring exciting new outcomes to Athenia and our Year 8 students in particular. The Year 8 Review Group needs to ensure that this support happens throughout the school. Although a “working vision” may exist, the next challenge is to make sure that it remains “powerful and consensual”. This research suggests that key participants need to remain involved throughout the development phase, and to be responsible for sharing their vision, for adjusting it in response to constructive criticism and for making sure that it evolves in the way that they have planned.

It seems that a vision can lose its power when it is “handed” to others to share and implement. The shape of a vision can easily warp when there is not effective communication between all involved. This research suggests strongly that a vision can lose its power when there is no longer consensus about future directions. Thus effective communication throughout the school seems to be essential. The vision and implementation plan needs to be sufficiently clear and detailed to ensure that it can be discussed with various groups of participants throughout the school community and that queries can be answered and concerns addressed. This research suggests also that
those sharing the vision need to explain its evolution so that the new ideas connect with the old and there is an obvious sense of transition from the past to the present to the future. This transition needs to make good sense to all involved, and time and opportunities need to be provided to enable this to happen.

**Issues of power and control**

- **Delineation** of team and faculty responsibilities;
- **Confidence** that the team is “in charge” and can execute their plans and responsibilities;
- **Effective communication** between teams and faculties leading to collaborative decision making.

I have chosen to place factors related to school support and issues of power and control at the beginning of this explanation because they are so intricately related and because they seem to be pivotal in enabling traditions, routines and structures to change. It seems to me that those responsible for establishing the parameters of this new initiative will face an enormous task that requires much time, consultation, debate and consensus making if this vision is to remain “powerful and consensual”. To establish clear parameters it seems that decisions need to be made in relation to many questions, including the following:

- Who is responsible for the implementation of the project? (The Director of Year 8?)
- What are the responsibilities of this person?
- What learning framework will underpin the Learning Centre?
- Will a team structure be used? What form will it take? How will it be staffed?
- What form will the curriculum take? Who is responsible for designing it?
- How will this new structure be separate from, and yet remain part of, Athenia?
- Which elements of the current Year 8 structures will remain, which will be dismantled?
- Will the Year 8 students be accommodated in a separate, purpose built environment?
- How will this alternative Year 8 be resourced?

Past experiences in relation to implementing collaborative ventures at Athenia have demonstrated that questions of **limited power, ultimate control and establishing alternative priorities** can severely limit the capacity of groups of enthusiastic teachers to implement new projects. I suggest that a director be appointed with responsibility for developing, implementing and maintaining the Learning Centre. This person is a **critical link in the communication chain**, with responsibility for ensuring that all involved understand the vision. The director needs to become part of the Year 8 Review and Planning Group so that a sense of continuity and effective communication continues to exist. Although the director’s role is important for ensuring that the vision remains consensual, the original members of the group need to remain active in supporting and encouraging this leader. This research has shown that roles that need to continue to be
shared are sometimes handed to newly appointed leaders before they have had the time to gain credibility, and the respect of the school community.

The director needs constantly to be mindful that she/he cannot impose a vision on others. It is essential that this person has the skills, status and power to implement the vision – to provide the conditions that enable teachers working in the Learning Centre to participate in a process that leads to the creation of their own powerful, consensual vision, but within the parameters determined by the school. From the teachers’ perspective, this must be a vision that they feel is possible for them to implement. Importantly, the director needs to have the skills to challenge the teachers to take the next step. Fullan (2003) suggests that five factors underlie effective leaders in the current time of such complex change.

Effective leaders combine a strong sense of moral purpose, an understanding of the dynamics of change, great emotional intelligence as they build relationships, a commitment to new knowledge development and sharing, and a capacity for coherence making (enough coherence on the edge of chaos to still be creative) (p. 93).

The role of the director is critical for establishing timelines, and determining the skill levels of the teachers involved and the framework for implementing new ways of teaching and leaning.

School organisation

- **“Free up” timetable**
  - Time for meetings
  - Venues,
  - Space in the curriculum;
- **Appropriate composition** of teams so that they remain small and function for optimum times.

I envisage the Learning Centre as a school within a school, but one that needs to be able to **devise its own timetable**, to suit its own specific needs. To enable the team structure to develop it seems that teachers are needed who, for the most part, are dedicated as teaching only in the Learning Centre. This strategy would help to **remove many of the tensions that have been shown in this research to exist between teams and faculties** at Athenia.

By limiting involvement in other areas of the school, teachers are then available within the Learning Centre to work more flexibly. Thus teams can more readily decide how they manage their time. This staffing strategy provides flexibility also in terms of student grouping, the provision of independent learning opportunities and staff meeting times.

In the staff feedback collected at the end of 2000, teachers suggested that the success of teacher collaboration depended very much on the composition of teams. This
research has indicated that appropriate composition of teams is likely to be a critical factor for their effective functioning. Perhaps start with enthusiastic members of staff from Athenia who wish to be involved in the Learning Centre and, if there are not enough “willing” staff, then advertise for new staff to fill specific vacancies. This would mean that all Learning Centre teachers are willing participants and are aware of the innovative parameters in which they are required to work. Hargreaves and Fink (2004) suggest that:

Standardisation is the enemy of sustainability. Sustainable leadership recognizes and cultivates many kinds of excellence in learning, teaching and leading, and it provides the networks for sharing these different kinds of excellence in cross-fertilizing processes of improvement. (p.12)

We would not be imposing on teachers who felt unprepared, uncomfortable or unwilling. Evidence suggests that this would remove a negative element from the environment at Athenia and perhaps encourage greater support for the new project from a majority of teachers. Heifetz and Linsky (2004) remind us that “although you may see with clarity and passion a promising future of progress and gain, other people will see with equal passion the losses you are asking them to sustain” (p. 34). My experience suggests that teachers support initiatives “in theory” although they may not wish to be personally involved.

The teachers of the Learning Centre would, however, need to have frequent liaison with teachers involved in other sections of the school so that academic standards and curriculum and other whole school requirements are negotiated in terms of maintaining a smooth transition from Year 8 to Year 9.

**Team preparation, development and maintenance**

- A group of willing, enthusiastic colleagues who complement each other, are anxious to keep improving outcomes for their students and who recognize the relevance of the changes they are embarking upon is important;
- A sense of ownership of, and contribution to any “team” that you are asked to function within;
- Team members must be trained and prepared to work differently – professional development in team building and effective collaboration appears to be essential;
- Team members must value generic skill development as well as content;
- Team maintenance must be considered so that members have the opportunity to grow together, to build on each other’s strengths and weaknesses and to develop ideas so that they can grow into a cohesive team;
- Team members with a background in more than one subject area may be helpful.

To this point I have, for the most part, considered the acceptance and implementation of a vision from the perspective of those who have the power to implement structural changes. In the classroom, however, it is the teachers who have the “power”
Before a vision can become a reality in the classroom, teachers need **time and professional development to prepare**, to consider the vision from multiple perspectives. They must consider what they are being asked to do and why. How does working in a collaborative culture impact on their philosophy of teaching and learning? I suggest that unless the Learning Centre teachers feel that what they are being asked to do is important and relevant to them they will be unlikely to work towards the implementation of the vision. The teams of Learning Centre teachers need to be given the opportunity to develop their own vision based on the parameters determined by Athenia. I suggest that if they feel the parameters do not work, then the teachers need to have an opportunity to question them, and that those with the decision making power (the Administration?) be obliged to respond so that all understand clearly the reasons underpinning various decisions. Beattie (1997) suggests that:

> Curriculum change comes about in classrooms, when teachers engage in inquiry into the nature of their practice, the origins of their understandings, the meaning making structures they have used to construct their professional knowledge, and to reconstruct what they know in the light of new understandings and changed perspectives. (p. 8)

The Learning Centre director is essential for determining, in consultation with other staff, the implementation timeline for the initiative. The director must understand the “comfort zones” of teachers and recognise when they are being stressed. A realistic timeline that can be managed from the perspective of the participants seems essential to successful implementation. If the plan is to develop a culture of collaboration that leads to negotiation and integration then perhaps during the first year of implementation of the program it is sufficient for teachers to collaborate in terms of getting to know one another, their strengths and weaknesses, their areas of expertise and their subjects.

I suggest that one of the keys to the successful development of a collaborative Learning Centre culture is the **preparation of the teams** so that they are both supported and challenged in a way that enables them to feel that taking a somewhat “risky” next step will be supported and applauded. In the Learning Centre teachers need to acquire new skills and they need to think and plan. To **sustain the vision**, the school must be willing to provide professional development and planning time to enable the teachers not only to envisage the next step but also to reach the point where they realise that it is worthwhile and achievable.

Although this research has indicated that it is not so much the skills that teachers bring to the team that is important but their enthusiasm, various teachers acknowledged the need for teachers to develop an array of skills that help them work together. Regardless of the enthusiasm of individual team members, the development of a cohesive, productive team from a diverse group of individuals does not necessarily come naturally, especially if the school environment is not conducive to teacher collaboration. Teachers need time and the appropriate professional development to enable them to develop the skills for working together effectively as a team. Skills of negotiation, consensus reaching and conflict resolution seem essential. Hackman (cited in Fullan, 2003) discusses five conditions required for teams to be effective over time.

> The likelihood is increased when a team (1) is a real team rather than a team in name only, (2) has a compelling direction for its work, (3) has an enabling structure that facilitates rather than impedes teamwork, (4) operates within a
supportive organizational context, and (5) has available ample expert coaching in teamwork (pp. 95-96).

**Teams need to be maintained and valued.** Teachers must be given the opportunity to grow together as a team over time. They need to focus on learning to work together as well as on the type of activities they will undertake as a group. They need to be given the time to accept that they are responsible for a group of students and to recognise all that is involved. Through building curriculum together and solving problems it seems that team members increase in flexibility and learn to appreciate, support and value each other.

A collection of ‘I’s’ with individual agendas is replaced by an attitude of ‘We’; competition is replaced by collaboration, and individual purposes, values and agendas are replaced by collaborative vision-making and the creation of shared values.

(Beattie, 2000, p. 18).

It also needs to be recognised, however, that despite careful selection of team members, appropriate preparation and ongoing support that sometimes a team does not appear to be capable of functioning effectively. This issue needs to be addressed, as does the optimum time for a team to remain together. I suggest that the following questions might be useful in assessing the effectiveness of a team’s development over time.

- Have the individuals in the group been given the opportunity to prepare, as individuals, for the demands of working collaboratively?
- Does the group produce fertile discussion?
- Does trust and understanding exist within the group?
- Is the group capable of negotiating and reaching consensus on essential issues?
- Is the group capable of producing outcomes?

**Unit development and implementation**

| **Models** that can be debated and duplicated – recognition of the value of using a diversity of models to suit a diversity of teachers; |
| **Skills** being addressed and expected outcomes for the students must be clearly articulated before the unit is developed; |
| Team members must value the collaborative unit at least as much as the subject material replaced; |
| A person/persons who has / have the time and passion to facilitate the collaboration appears necessary – the right person for the right project; |
| Tangible support for this person from the administration must be evident; |
| The sense that the unit is logical and developmentally sound and has achieved student outcomes that were not being achieved previously; |
| Enthusiastic students who obviously enjoy their work. |

For those of us who have a history of teaching discrete subjects within individual classrooms, developing a shared vision of integrated curriculum can be quite a challenge. When we first attempted this process at Athenia we had very little other than
our enthusiasm to guide us. Some of us recognised that there was overlap in terms of skill development across subjects and that we might have been confusing our students when we introduced new skills without positioning them in terms of similar skill development in other areas. We also realised that sometimes we asked our students to use skills they did not possess because we assumed that other teachers had taught them the skills. It seemed obvious that we could improve on this situation by taking an integrated approach to skill development.

When we first attempted to develop integrated curricula at Athenia we were determined to demonstrate that through teacher collaboration we could provide more effective skills development for our students, and we did. This study has provided much evidence from teachers and students that demonstrates the success of various integrated units. However, evidence also indicates that many teachers had become critical of the format of some of the integrated units that were being implemented.

This research indicates that developing a shared vision of integrated curriculum requires time, effort and a process that leads towards the articulation of a clearly defined set of goals for the unit that are understood and agreed upon by all. Hopefully, issues such as lack of consistent supervision will no longer be of concern as the Learning Centre teachers are based in staff areas and have less conflicting demands from other areas within the school.

I suggest also that the team could develop a series of questions or guidelines that would help to focus the initial development of integrated units. Questions could include:

- What is our purpose in developing this unit?
- What skills are we trying to develop and what outcomes will demonstrate these?
- What context could achieve these outcomes?
- What knowledge is worth knowing? Is there an essential question?
- How does this unit fit into our work programs?
- What activities could we use?
- Is the unit logical and developmentally sound?
- What assessment will demonstrate that our students have achieved the outcomes?
- Does the assessment reinforce the teaching and learning strategies that were used within the unit?

Experience suggests that professional development directed towards responding to this list would be useful, as would the availability of models of various forms of integrated curricula. This research suggests strongly that an essential factor affecting the process that leads towards the implementation of the vision of integrated curriculum is the flexibility to allow those involved the time to gain experience.

Allowing groups to come to their own sense of meaning of “what”, guided by a collaborative vision is important. Others, seeing the energy and enthusiasm of those actively involved, are often inspired to join. Show them that their jobs will be easier” or “better” has convinced many who are hesitant to make a true commitment.

(Drake, 1993, p. 10)

It seems that in order to achieve the best results for all involved, timelines for implementation need to be established by the team so that they can gain confidence in
each other and reshape their vision of integrated curriculum based on their growing experience. I suggest that the greatest achievement is not to develop a shared vision but to sustain the vision through a context that both supports and challenges those involved as they move towards “progressively dismantling existing structural/organisational constraints”.

THE CHALLENGE TO ENVISION AND ENACT

I am grateful that Peter challenged me to take the next step, to consider the future and the reality of having to translate my learnings into a plan of action that I could share with others at Athenia. I have experienced the freedom of looking towards developing a collaborative culture, not from within a context constrained by the limitations of present organisational constraints, but from a context determined by current research and my perceived needs of the teachers and students involved.

I feel that I have achieved not only a clearer understanding of the process needed to develop a collaborative culture through negotiation and integration, but also a greater appreciation of my colleagues and the constraints they face. I realise now that developing a powerful and consensual vision is but the first step in establishing an environment that will support and sustain the vision over time. It is my feeling that individual visions have little power except to stimulate the collective mind. The vision needs to be interpreted within a collaborative culture so that those involved at each stage of implementation have the opportunity to build on it and to make it their own.

Henderson and Kesson (2004) speak of teachers developing “curriculum wisdom”. They pose the question:

What are the habits of mind, ways of thinking, and the professional knowledge base essential for the exercise of wise curriculum judgment that is grounded in moral insight and oriented towards deep democracy? (p 45)

They suggest an inquiry model involving “seven modes of inquiry” that lead to both “envisioning and enacting”. “Phronesis” encapsulates the form and purpose of the research that I have tried to achieve.

Phronesis involves deliberative, collaborative inquiry into problem definitions and solutions. One of the qualities of a democratic frame of mind is a commitment to shared decision making and to process of consultation, discussion, negotiation and the democratic sharing of power. (p. 57)

“Theoria” provides justification for envisioning as part of the research process.

We believe that there is a role for such visionary intelligence, characterized by the presence of both reason and intuition. Mindful of the various aspects of the situation, but unconstrained by conventional wisdom or habitual thinking, theoria allows us to speculate, to imagine, and to envision possibilities. (p. 62)

What more can teachers ultimately ask than that both they and their students have the courage to envision and to enact based on wise judgment that is grounded in moral insight and oriented towards deep democracy?
REFERENCE LIST


