

Fast-tracking middle schooling reform: A model for sustainability

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Abstract

To participate effectively in the post-industrial information societies and knowledge/service economies of the 21st century, individuals must be better-informed, have greater thinking and problem-solving abilities, be self-motivated; have a capacity for cooperative interaction; possess varied and specialised skills, and be more resourceful and adaptable than ever before. Attempts to meet these demands are reflected in a plethora of reforms in schools and education systems around the world, including a focus, in Australia, on middle schooling reform and the development of attributes of lifelong learners. This paper reports on one outcome from a national project funded by the Ministerial Council on Education, Employment, Training and Youth Affairs, which investigated what practices, processes, strategies and structures best promote lifelong learning and the development of lifelong learners in the middle years of schooling. The investigation linked lifelong learning with middle schooling because there were indications that middle schooling reform practices also lead to the development of lifelong learning attributes, which is regarded as a desirable outcome of schooling in Australia. While this larger project provides depth around these questions, this paper specifically reports on the development of a three-phase model that can guide the sequence in which schools undertaking middle schooling reform attend to particular core component changes, not on the connection between middle schooling and lifelong learning. The model is developed from the extensive analysis of 25 innovative schools around the nation, and provides a unique insight into the desirable sequences and time spent achieving reforms, along with typical pitfalls that lead to a regression in the reform process. It is an invaluable guide for schools and education systems on the reform path. Importantly, the model confirms that schooling reform takes much more time than planners typically expect or allocate, and there are predictable and identifiable inhibitors to achieving it.

Context

Middle schooling is currently a key focus of educational reform in Australia (Chadbourne 2001; Pendergast 2005; Education Queensland 2002). While middle schooling does not have one generic meaning, in the Australian context it is generally taken to mean a progressive approach to curriculum, pedagogy and assessment (and sometimes organisational) practices that are responsive to the developmental needs of young learners in their societal context, and typically aged from approximately 11–12 to 14–15 years of age (Chadbourne & Pendergast 2005). School systems around Australia have, to varying degrees, prioritised middle schooling reform in an attempt to achieve outcomes such as re-engaging learners, enhancing higher order thinking outcomes, improving literacy and numeracy standards, and optimising lifelong learning attributes. Hence, studies are currently being undertaken into various aspects of these reforms, and the three-phase model presented in this paper is an outcome of a larger study which investigated middle schooling reform around the nation. The project had the following research question:

What practices, processes, strategies and structures best promote lifelong learning and the development of lifelong learners in the middle years of schooling?

Intensive case studies of 25 schools were conducted. A comprehensive report of the study has been produced which provides details regarding practices, processes, strategies and structures that have been used to:

- promote lifelong learning and the development of lifelong learners in the middle phase of schooling
- develop curriculum and pedagogical initiatives that have proved successful in developing the characteristics of lifelong learners
- help teachers become managers of learning, and students become successful learners (see Pendergast et al 2005).

As an unexpected outcome of the project, a three-phase model for effective and sustainable middle year's reform was developed. This paper documents the development of the model within the context of the larger project, and suggests ways in which it will be a useful tool for those undertaking reform in the middle years.

Literature review

An extensive review of the literature in the three key areas of lifelong learning, middle schooling and school reform was conducted as a foundation for the national study. This review is available in the comprehensive report (Pendergast et al 2005). Much of the literature presented in the report notes that lifelong learning is a desirable approach to learning resulting from the establishment of generic skills and attitudes and enabling contexts (see Table 1). But the literature fails to present an adequate picture of what these skills and attitudes and contexts look like in the classroom—what strategies, organisational patterns, programs and community connections act together to bring about the development of lifelong learning habits in early adolescence.

The middle school literature provides an insight into the focus and purpose of the reform approach in the Australian context, but lacks direction in terms of sequence and importance of practices to be addressed (see Table 2). The school reform literature highlights the need for an innovative approach that incorporates an understanding of the wider principles of schooling reform—such as appropriate sequencing of practices and allowing enough time to achieve sustainable reform (see Table 3). When combined, the literature from the three broad areas of lifelong learning, middle schooling, and school reform suggests the need to develop a functional model for sustainable innovation.

Methodology

It is necessary to give an overview of the processes involved in the overall project to explain how the data was collected and used to develop the model. The national study involved two major primary data-collection activities. Both were undertaken following the extensive literature review, which shaped the direction of the research activities undertaken.

Table 1: Core component changes identified from the literature as most appropriate to effect educational renewal

| Key components | Explanation |
|--|---|
| <i>School vision and visioning processes</i> | The importance of conceptualising a vision for school learning to provide the foundation for the key characteristics of a lifelong learner |
| <i>Student transitions and transitioning procedures</i> | The prevalence and importance of transitions in the process of lifelong learning Changing social and economic |
| <i>Changing social and economic conditions demanding a broader skill set</i> | Recognition of changed economic, technological, social and cultural contexts for student learning. Hence the need for a broader set of 'basic' or 'essential' skills, conceptualised to embrace the ICT-based multiliteracies increasingly demanded in knowledge-based economies and societies |
| <i>Learner- and learning-focused programs</i> | The need for lifelong learning to become an overall 'orientation' to learning, rather than an add-on to existing school structures and cultures. Students are able to exercise choice and negotiate with teachers regarding the structure and content of learning activities. The organisation of learning incorporates a recognition of difference which leads to a student-driven (as opposed to a content-driven) approach to learning |

Table 2: Core component changes identified from the literature as most appropriate to effect educational renewal from the middle schooling literature

| Key components | Explanation |
|--|--|
| <i>Student engagement in learning</i> | The importance of increased engagement for motivating learning, and acknowledging the extent of disengagement among many students in the middle years. 'Fun' is seen as an accidental by-product of programs. 'Pleasure' and 'satisfaction' are derived from sustained engagement in interesting learning activities. Group activities predominate, and students (and their learning) are valued by teachers and peers |
| <i>Greater diversity of adolescent needs and capacities</i> | The recognition of a clientele who have changed, along with changes in their social, cultural and economic contexts. Identification of special requirements for greater experience of active, self-directed and negotiated learning. Increased depth of experience and involvement in the development of new knowledge |
| <i>Improved alignment of curriculum, pedagogy and assessment systems</i> | Need to balance and link changes in the three instructional 'message' systems—curriculum, pedagogy and assessment—as innovations are developed and implemented |
| <i>Enhanced pedagogies, especially the provision of greater intellectual challenge</i> | Need for increased repertoires of pedagogy to address the needs of increasingly diverse learners, including increasing the intellectual demand placed on students in classrooms. Grades and marks are supplemented by insights into students and their knowledge, understanding, synthesis of learning and learning styles. Students contribute to teachers' knowledge about their learning through reflective writing and contributions to assessment and reporting processes |

Table 3: Core component changes identified from the literature as most appropriate to effect educational renewal from the school reform literature

| Key components | Explanation |
|---|---|
| <i>Sustainable innovation</i> | The need to acknowledge and plan for whole-school organisational reform as a long-term commitment by all participants |
| <i>Focus on both social and academic student outcomes</i> | Improved student outcomes require a systematic focus on making corresponding changes to curriculum, pedagogy and assessment. A focus on developing the whole person over time requires attention to be given to social as well as academic achievement |
| <i>Linking school culture change with innovative structures</i> | Sustained leadership and innovative organisational procedures are keys to establishing and maintaining the conditions for effective school reform. Use of 'time blocking' to enable deeper exploration of content (by using higher order thinking to elicit deeper understandings about key issues and about selves), and to develop enhanced student–teacher relationships. As a result of time spent together over longer periods, adversarial relationships can be broken down, with superficiality around content and tasks giving way to mutual exploration of issues and concepts, to allow the achievement of new learning for both teacher and student |
| <i>Professional learning communities, with teachers as learners</i> | Investment in the establishment and maintenance of professional learning and development is essential for effective and sustained school reform. Commitment to professional development—which manifests as a philosophical positioning about middle schooling—as a key driving concept, and as an alignment of values and beliefs (about teaching and learning) that evolve across the middle years of schooling |
| <i>Evidence-based policy development processes</i> | Reforming schools, over recent times, emphasise the building of a capacity and specific mechanisms to collect, analyse, review (and provide feedback on), key data related to school progress, student engagement and attainment, and perceptions of quality held by teachers, students and parents. The major function of this evidence is to ensure that practices are aligned with policies, and that implementation effort is expended in the directions likely to have maximum 'payoff' for the school, as it attempts to generate and sustain reform. There is an increasing need for this evidence to integrate data from within and from beyond the school, from system-wide evaluations and from school-based indicators |

The data collection involved:

- school site study (including interviews with administrators and teachers, and meetings with student focus groups)
- student survey (using a questionnaire for selected students – a randomly generated sample)

School site case-studies

Twenty-five schools were carefully selected on the basis that they would be able to present clear evidence of innovation in response to the research question:

What practices, processes, strategies and structures best promote 'lifelong learning' and the development of 'lifelong learners' in the 'middle years of schooling'?

The selection of schools was completed after consultation with, and formal approval from, senior staff in relevant education authorities in six of the Australian states and territories (Victoria, South Australia, Western Australia, Queensland, New South Wales, and the Australian Capital Territory) and from all systems (State, Catholic and Independent). Schools were chosen on the basis of information supplied by their system representatives, indicating that their orientation was

towards encouraging and assisting students to acquire the habit of learning for life, and that innovations and reforms in the middle years of schooling, aimed at achieving that objective, were well underway. The project schools were purposively chosen to maximise diversity in school types and, to achieve this diversity, the following additional variables were considered in the process of school selection:

- size of school (small/medium/large)
- type of school (primary/secondary/primary + secondary/middle);
- school location (metropolitan/provincial/rural)
- broad socioeconomic-status level of the community served (low/medium/high).

Methodology for school sites investigations

A project investigator visited each site after completion of all necessary university ethical research clearances and system/school approval protocols. At each school site the following activities were conducted, usually over two days:

- interview(s) with key school administrators (including with a Coordinator or Head of the Middle School, if appointed and available)

- interview(s) with key teacher(s) operating a designated initiative for middle years' students
- a focus group meeting with a group of selected middle years' students
- a student survey ('School and me!') of a 5% random sample of diverse middle years' students currently experiencing the designated initiative.

Structured interviews and student focus groups meetings

All project investigators used common guidelines for the structured interviews (with administrators and key teachers), and for the focus group meetings (with selected students). As part of their enquiries at each site, investigators were asked to rate the apparent evidence for existence of each of the core component changes according to the following scale:

- A = Strongly and currently evidenced throughout the school
- B = Some evidence that this component is in operation in part of the school
- C = Little or no evidence that this component is operating, or has been operating in the school.

These ratings were collated, with groupings of components identified for particular periods in the reform trajectory of each school.

Development of the model

The development of the model was an unexpected outcome of this study. The range of sources being used increased the richness, depth and consistency of the material presented, and once data had been collected and analysis was underway, it became apparent that there were overlaps in process, in problems, and in pathways. Tables were constructed showing links across the key component areas, and ratings collected from schools were used to establish the potency of relationships. The model emerged using this information, combined with school reform principles.

Key findings

The study found that schools which had begun reform in both middle schooling and lifelong learning were undertaking a range of innovations. Furthermore, it was apparent that there was a pattern in the way these innovations were typically implemented, progressed, and sustained, with some preferred pathways evident. Thus, in the overall attempt to identify the practices and processes, strategies and structures to best promote lifelong learning in the middle years of schooling, and how to efficiently attend to the reforms across each of the aspects over a period of time, it was possible to determine from the data, a relationship between innovation features and when they were attended to.

Three-phase model of change

The three-phase model shows the general sequence in which reforming schools attend to particular core component changes in their reform initiatives, in an ideal situation.

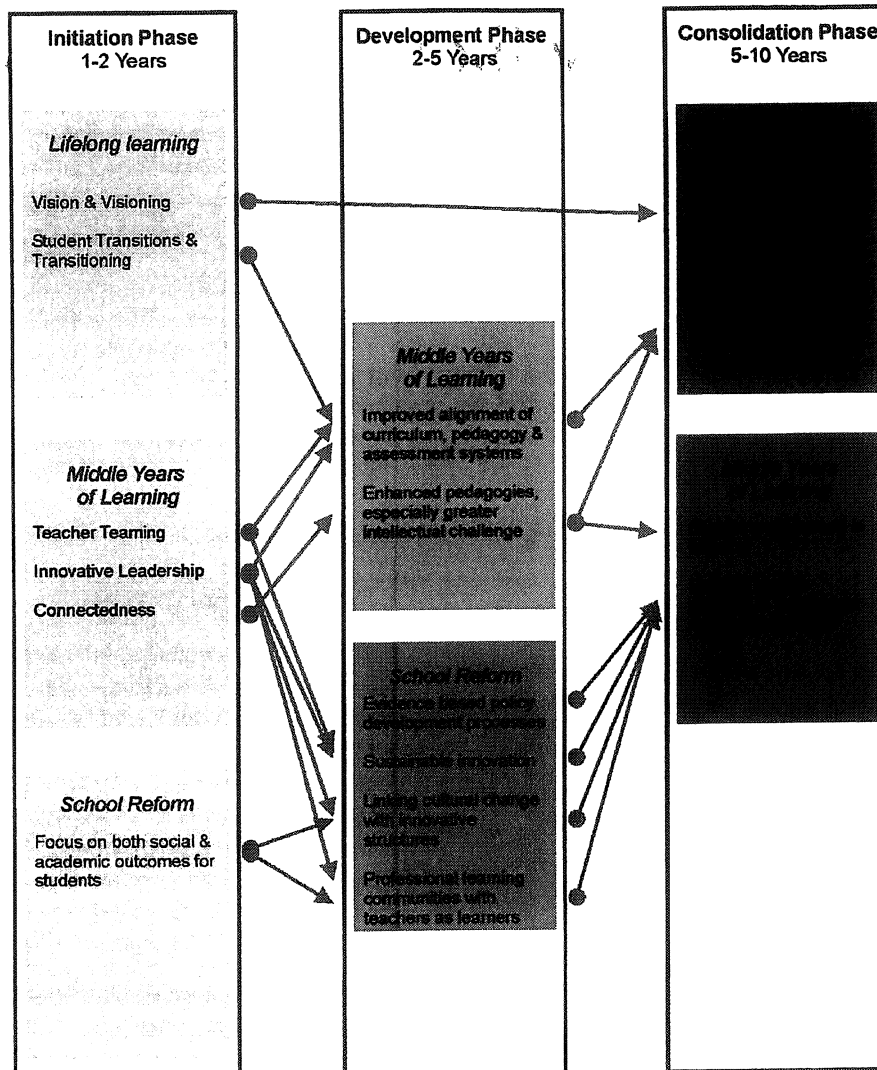
As this figure indicates, the three broad phases of any major school-based reform in the middle years are:

- the initiation phase that typically occupies the first year or two
- the development phase that typically consumes the next two to five years
- the consolidation phase that can last a further five to ten years.

The periods associated with each of the three phases are indicative only, as they are based on the experience of the reforming schools investigated in this project. However, they do reinforce many other findings in the research literature attesting to the fact that schooling reform takes much more time than planners typically expect it to or allow for. The initiation phase includes aspects of school visioning (in this case around lifelong learning), as well as key practices associated with middle schooling and school reform. The development phase is generally focused on teachers and the development of processes and systems that engage them in realising the vision and practice that have been initiated in the school. The consolidation phase focuses on refinement, and focusing more clearly on student learning.

The arrows in Figure 1 indicate typical pathways that project schools used to sustain their reforms and to progress from one phase to another. This pattern also suggests that some core change variables may be more critical in this trajectory, as some factors appear to connect more variables across two phases. For example, instigating teacher teaming, developing new models of innovative leadership, and focusing on both social and academic outcomes for students appear to be the most critical factors in progressing from the initiation to the development phases. Enhancing pedagogies, especially by providing greater intellectual challenge in classroom work, appears to be most critical for successfully progressing from the development to the consolidation phase.

The full report expands on the main features of this broadly sequential model, and readers are encouraged to access the full document, which includes illustrative examples from the full case-study reports for a range of the school sites surveyed. It is timely to note that schools in this case study were chosen on the basis of information supplied by their system representatives, indicating that their orientation was towards encouraging and helping students to acquire the habit of learning for life, and that innovations and reforms aimed at achieving that objective in the middle years of schooling

Figure 1: The three-phase model of core component Changes in reforming schools


Source: Pendergast, D., Flanagan, R., Land, R., Bahr, M., Mitchell, J., Weir, K., Noblett, G., Cain, M., Misich, T., Carrington, V. & Smith, J. (2005) *Developing lifelong learners in the middle years of schooling*. Brisbane: The University of Queensland, p.65

were well underway. Most of these schools—whether primary, secondary or other types; whether state, Catholic or independent; whether rural or city, wealthy or poor—were in the second (or development) phase of implementation. Some were still in the initiation phase, or progressing from it to the development phase. Relatively few schools were clearly progressing into, or fully operating in, the final (or consolidation) phase.

Discussion and summary

The model serves as a useful guide for schools at any stage of middle schooling reform. In addition to the actual sequential model, with enablers for shifting from one phase to the next, the study showed that it was typical for schools to experience a 'dip' in the reform process. The nature of this varied, but included loss of continuity

in the reform, substantial changes to its nature, loss of momentum, loss of financial commitment, refusal by staff to continue to be involved, and the like. The dip was often the result of predictable events, such as the loss of 'champions', changes in leadership, breakdown of teacher teams, and failure to establish protocols for determining the efficacy of the process, all of which can be predicted from the list of key components in the model.

Importantly, it was evident that the reform process can be less traumatic and achieved in the most expedient time when the following key factors are aligned and sustained:

- team membership over several years
- congenial, philosophically-aligned dynamics among team members

- sensitive and sustained leadership
- early adoption of the process, and shared risk-taking among members who challenge each other to extend themselves
- a strong emphasis on posing and solving problems as a team
- effective use of research in evidence-based planning.

These provide for what the report describes as optimal or 'fast track' conditions for implementation.

Possible inhibitors of reform, as noted or suggested in the foregoing discussion and elaborated upon in the report (Pendergast et al 2005), include:

- weak or inconsistent leadership
- insufficient dispersal of leadership
- poorly conceived or poorly expressed vision statement
- uncooperative, non-supportive, or inadequately trained staff;
- discontinuity of staff
- rigid traditionalism among the majority of staff
- failure to provide an appropriate support structure
- failure to redirect and redefine the school culture
- insufficient funding to provide essential equipment or to finance innovations
- failure to align curriculum, pedagogy and assessment
- resistance from the community
- dramatic upward or downward trends in student population
- impatience and loss of enthusiasm resulting from slow progress in the process of renewal.

This model is the first of its kind. It has been developed from real school-based reform grounded in the literature of school reform, middle schooling and lifelong learning. While the model is not intended to be a formula for middle schooling reform, it has the potential to serve as a valuable guide and comparative base for schools undertaking reform and seeking direction, particularly with regard to key components, potential inhibitors and enablers, and the timelines involved. Importantly, while there is no single, 'right' way to undertake reform in the middle years of schooling, there is a typical progression through three phases that involve the systematic linking of many components of a school's operation.

References

- Chadbourne, R. (2001). *Middle schooling for the middle years: What might the jury be considering?* Victoria: Australian Education Union.
- Chadbourne, R. & Pendergast, D. (2005). The philosophy of middle schooling. In D. Pendergast & N. Bahr (Eds) *Teaching middle years: Rethinking curriculum, pedagogy and assessment*. Sydney: Allen & Unwin, pp. 21–47.

Education Queensland (2002). *Education and Training Reforms for the Future: A White Paper*. Brisbane: Author.

Luke, A., Elkins, J., Weir, K., Land, R., Carrington, V., Dole, S., Pendergast, D., Kapitzke, C., van Kraayenoord, C., Moni, K., McIntosh, A., Mayer, D., Bahr, M., Hunter, L., Chadbourne, R., Bean, T., Alverman, D. & Stevens, L. (2003). *Beyond the middle: A report about literacy and numeracy development of target group students in the middle years of schooling, Volume 1*. Brisbane: JS McMillan Printing Group. ISBN 1 864996765.

Pendergast, D. (2005). The emergence of middle schooling. In D. Pendergast & N. Bahr (Eds) *Teaching middle years: Rethinking curriculum, pedagogy and assessment*. Sydney: Allen & Unwin, pp. 3–20.

Pendergast, D., Flanagan, R., Land, R., Bahr, M., Mitchell, J., Weir, K., Noblett, G., Cain, M., Misich, T., Carrington, V. & Smith, J. (2005) *Developing lifelong learners in the middle years of schooling*. Brisbane: The University of Queensland.

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<http://education.qld.gov.au/curriculum/middle/docs/mceetya-full-version.pdf>.

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