
A Framework for Research into Australian Middle School Practice

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Abstract

As a new reform in Australian education, middle schooling has been gaining momentum. The rationale behind middle schooling is to bridge the traditional primary-high school gap and provide a more developmentally appropriate educational experience for young adolescents. Middle schooling in the USA has gone through a “boom-to-bust” cycle and is currently undergoing a “reinvention” as research on practice and reporting of research on practice has, in the most part, been ad hoc and piecemeal. If Australian middle schools are to avoid the boom-to-bust-to-reinvention cycle experienced in parts of the USA (Beane 2001), then a more systematic approach to researching practice is required. Research-based criteria for systematic study and improvement of middle school practice have been identified as (a) acceptance as part of planning alternative practice, (b) effectiveness as part of implementing alternative practice, and (c) sustainability as part of evaluating alternative practice.

In Australian schools, middle schooling has become a popular educational reform that aims to meet the academic and socioemotional developmental needs of young adolescents. Many other major educational reforms and innovations, which have clearly been recognised as a good idea, have not endured. Stevens (2004, p. 389) noted that ‘teachers tend to implement in their classrooms what they know and understand, in spite of whatever innovation may be adopted by the school’. Like other reforms, middle schooling has had a remarkably insecure history in replacing traditional teacher practice and in justifying teacher efforts to make changes in terms of similar or improved student outcomes. The major challenge to the sustainability of middle schooling in other western educational systems has been a lack of universal

acceptance as “best practice” for effectively educating middle school students, the piecemeal implementation of middle schooling practices (Bean 2001, Taylor & Garson 1982), and the uncoordinated evaluation of practices. Yet this reform’s increasing visibility as an alternative approach to schooling preadolescent and early adolescent students in Australia has made the need for local research on teacher practice more urgent. This paper is a review of literature based on current research and aims to highlight the need for a framework for research into Australian Middle School practice and the essential elements of such a framework. Furthermore, some specific research items to be included within each of the main elements of the framework are discussed.

Research on alternative practice for middle school has reflected overarching problems in educational research (Anfara et al. 2003). A recent evaluation of the research literature on educational reforms has shown that effectiveness does not appear to predict greater longevity for an innovation (Stevens 2004). There have been severe criticisms of the contribution of much research to educational change. For example, Weiss and Vickers (1999) noted that research issues accounted for 17 of 35 obstacles in the translation of research into educational policy. Barriers in, for example, the usefulness of data obtained from investigatory methodologies, relevance to the local context, timeliness, and the fragmentary and unsystematic approach to research have helped to render otherwise effective innovations and reforms unsustainable. Moreover, conflation of research evidence and practice achievements (Yates 2004) has made it difficult to distinguish between adaptation of a reform to its local context (i.e., comparable to a school engaging in rich and valued, real-world intervention) and methodological sloppiness (i.e., comparable to a school tinkering with specific practices and their measurement at the expense of rigor and replicability).

Evidence about the effectiveness of middle schooling as a whole has been inconclusive, despite some positive findings on specific aspects of middle schooling (e.g., Felner, Jackson, Kasak, Mulhall, Brand, & Flowers 1997). In Australia, Linke (1999, p. 1) urged caution about middle schooling trials without ‘evidence of the benefits to students of the things we do’. In the USA, Anfara et al. (2003) reviewed 30 years of research into middle schooling. They found widespread problems in research to evaluate reform efforts, training of teachers to implement the reform, and practice guidelines for the planning and dissemination of middle school programs, thus highlighting the piecemeal and ad hoc approach to the reform. The paucity of evidence of positive outcomes from middle schooling reforms has not only contributed to a pattern of reversion to traditional practice in many middle schools but also has prompted, in some instances, more general calls to abandon middle school practices (Reising 2002).

Yet Australian acceptance of middle schooling has been gaining momentum. The impetus behind the introduction of middle schooling in Australia has been to provide a more developmentally appropriate educational experience for Years 6-9 students (approximately ages 10-11—14-15) and a smoother transition between the traditional primary and secondary divide (Chadbourne, 2001). However, for Australian schools, as elsewhere, the challenge has been to convert developmental arguments that support its strong value base into a coherent approach to educational practice. If Australian middle schools are to avoid the boom-to-bust-to-reinvention cycle experienced in parts of the USA (Beane 2001), a more systematic approach to researching practice in the planning and implementation stages of reform is needed.

Main and Bryer (2005) identified acceptance, effectiveness, and sustainability as research-based criteria for systematic study and improvement of middle school practice. The aims of this research agenda should be to:

- increase informed acceptance and support in the learning community within the school and in the wider community, as part of planning alternative practice;
- strengthen effectiveness of recommended teacher practice in local contexts, as part of implementing alternative practice;
- clarify policy issues such as training, certification, placement, and staffing that affect sustainability, as part of evaluating alternative practice; and to
- enhance theoretical understanding of the middle schooling alternative(s) as a developmental approach to building student competence.

Middle school research and practice have been tied together through the reform cycle of boom-to-bust-to-reinvention. According to Lipsitz, Mizell, Jackson, and Austin (1997), many schools commenced with a “boom” of intense focus and made a heavy investment in time and resources at the implementation phase of a middle grades reform. Reforming schools generally focused their efforts on the physical changes necessary to create a “middle school” such as structural reform, teaching teams, and block timetables, which are initially easier to establish. However, schools often failed to progress beyond this “physical” stage to create a middle school culture that ‘enables young adolescents to achieve at high levels academically while developing socially, physically, and emotionally’ (Lipsitz et al. 1997, p. 3; see also Chadbourne & Harslett 1998).

In a climate of increasing accountability, failure to make inroads into improved student outcomes can be perceived as the middle school “failing” the very students that it set out to support. This perceived failure has created the “bust” part of the cycle

(e.g., Reising 2002). Barriers to continued commitment to the reform identified by Lipsitz et al. (1997) included not only loss of intensity of focus and reduced commitment of resources but also frequent turnover in leadership at a school level. Furthermore, there was a lack of district-level support for the reform in terms of both philosophical and operational understanding (Lipsitz et al. 1997). However, advocates committed to the middle years have argued that schools that are failing to achieve improved student outcomes have failed because they have been “picking” and implementing only some of the recommendations for reform. For example, Swain, (2004) argued that the tenets of middle school reform are interconnected and, to be successful, must be implemented holistically. Schools must then decide whether to abandon or, as Beane (2001) suggested, reinvent their middle school programs.

Australian education systems can avoid the boom-to-bust-to-reinvention cycle experienced in the US. Planning in the “boom” or initiation phase of middle school implementation needs to incorporate specific goals for school improvement rather than diffuse enthusiasm. Goal directed action has a consciously held purpose for implementing changes and increases motivation for those implementing the change (Locke & Latham 1996). Moreover, measurable indicators of change can be addressed to the specified goals. When schools ‘embrace data-based decision making as a school-improvement tool, they make measurable progress in attaining their objectives’ (Lipsitz et al. 1997, p. 4). Planning of steps in school reform needs to include research plans to verify outcomes rather than to focus planning on “gut” feelings, “fads”, and intuition rather than research-based selection of middle school practices.

Implementation also requires attention to data. Pendergast et al. (2005) described the implementation of a middle school reform as a three-phase process, with an initiation phase, a development phase, and a consolidation phase. They reported a major barrier to success in the “typical” trajectory of implementation: During the cross-over between the initiating and developing phases, reforming schools experienced a major “dip” in their implementation efforts manifested in the inefficiency with which they are able to operate. This dip may be linked to the “bust” part of the cycle. Pendergast et al. (2005) suggested that several key factors (viz., effective teaming, strong leadership, and effective use of data-based decision making) could reduce the severity and duration of this dip. Schools using data-driven decision making processes can document the extent to which planned reform strategies are being implemented. Desired outcomes can be evaluated, and implementation can be adjusted.

Evaluation of middle school practice needs to be undertaken within the local contexts in which it is being implemented. Teacher evaluation of practice effectiveness can be expected to ensure favourable conditions for implementation and to increase genuine acceptance and teacher capacity to sustain middle schooling. Systematic efforts to

research alternative practices within the school community may help to avoid historically noted errors of past research on reform processes, in which research has been divorced from the needs and constraints of the setting. Caskey (2005) has argued that teachers, who are the stakeholders charged with planning, implementing, and evaluating middle school reform, need to actively engage in such research. Arhar (2005) expressed an urgent need for middle school practitioners to engage in action research (i.e., the notion of teacher as researcher, reflective practitioner, and architect of practice change).

The problems of good research can be viewed as related to the problems of planning, implementing and evaluating good practice. Contextual instabilities in school-by-school innovations have limited wider acceptance of the advantages of reform and undermined a sound basis for sustainability. Simultaneously, it is difficult to distinguish effective and ineffective practices within or across school contexts because there has been too much willingness to defer evaluation of practice changes and identification of effective practices in the climate of a hyperflexible reform agenda for middle schooling.

Recommended practice for middle school

Indicators of effective practice from the Turning Points 2000 listing (Jackson & Davis 2000) have provided a logical and systematic framework for any school proffering a middle school program, within which the school can plan and implement practices in its local context and can evaluate outcomes in that context. The seven recommendations outlined by the Carnegie Corporation account for most of the reform features published, rearranged, and republished by assorted professional organisations in the USA and, more recently, in Australia. This seven-practice listing for exemplary middle schools identified practices in curriculum, pedagogy, staff, relationships, democratic government, safe environment, and community partnerships, respectively.

School-based researchers can directly investigate their own participation in these seven practice topics for middle schooling. Lipsitz et al. (1997) identified 10 indicators that high-performing middle schools in the USA found to be essential elements for sustainable improvement. These indicators can be shown to match well with all of the seven Carnegie recommendations (Jackson & Davis 2000), but the scope of support extended beyond the immediate school context to include two additional elements. First, state-wide policy support and leadership “legitimised” local reform efforts and minimised “political” animosities between schools, districts, and states that can occur when policies are not aligned. Second, the coordination of policy support included networking among participating schools, districts, and wider organisations to assist in ongoing professional development and dissemination of practice.

Table 1 presents an outline for an Australian research agenda for middle school innovation encompassing practice acceptance, effectiveness, and sustainability for teachers, students, and the wider community (Main & Bryer 2005). The expansion of stakeholders from teachers and students into the wider community reflected not only Turning Points 2000 recommendations but also the extra high-performing policy indicators external to the school identified by Lipsitz et al. (1997). The three levels of criteria for research on middle school practice mirrored planning, implementation, and evaluation of reform. Moreover, these criteria reflected the need for local school reformers to confront and study the contextual issues that can destabilise their implementation of recommended practices. Anfara (2004) also proposed that intermediate variables that contextualise effective practice should be investigated. Teachers' work can be expected to be sensitive to the quality of school life and job satisfaction. Students' outcomes can be expected to be sensitive to supports, resources, and stresses. A school's climate can be expected to be sensitive to the deeper culture of interactions within this learning community.

Practice criterion	Stakeholders		
	Teachers	Students	Community and School as community
Acceptance	<ul style="list-style-type: none"> • Informed consent: Choice to teach • Access to training • Awareness of benefits (data driven) • Supportive leadership 	<ul style="list-style-type: none"> • Informed consent: Voice • Learning based on students' interests, preferred teaching and learning styles, and assessment models 	<ul style="list-style-type: none"> • Informed consent: Involvement in consultation process
Effectiveness	<ul style="list-style-type: none"> • Relationships: Teacher-Students Teacher-Teacher Teacher-Others • Access to training • Networking through middle school organisations and other middle schools • Supportive leadership • Essential skills: Curriculum and pedagogy Sense of efficacy Alternative classrooms 	<ul style="list-style-type: none"> • Relationships: Student-Student Student-Teacher • Curriculum: Exploratory Safe environment Autonomy 	<ul style="list-style-type: none"> • Relationships: School-Parents School-Community • Ongoing community partnerships demonstrating a democratic ideology
Sustainability	<ul style="list-style-type: none"> • Teacher support is derived from improved student outcomes in both affective and academic domains (evidence is data-based) • Access to training • Supportive leadership • Avoiding labels such as "experimental" or "rigid orthodoxy" 	<ul style="list-style-type: none"> • Improved student outcomes occur in both affective (behavioural and socioemotional) and academic domains (evidence is data-based) 	<ul style="list-style-type: none"> • Policy support is derived from improved student outcomes in both affective and academic domains (evidence is data based). • State-wide supportive leadership combining both "top-down" and "bottom-up" approaches

Table 1. Research Agenda for Middle School Practice

Adapted with permission from the authors from Main & Bryer, 2005, p. 96.

Within this framework, planning can be understood in terms of stakeholders and the quality of their acceptance of alternative practices. It can be argued that all stakeholders in many local reform efforts have accepted practice reform with insufficient information: Students and parents have engaged in an “innocent” buy-in to the new reform, and teachers lacking licensure and training have engaged in a “naïve” buy-in (i.e., across the top row of the table). It can be argued that direct study of the recommended practice indicator of teacher training involves issues in teacher acceptance, effectiveness, and sustainability (i.e., down the left-hand column of the table). Ongoing training and research on training-related practice might improve teachers’ acceptance of middle school reform, might augment their practice effectiveness, and might increase its sustainability from one year to the next. It can also be noted that a direct focus on improved student outcomes explicit to students and teachers may need to allow for the effects of continued community support as well as policymaker support for sustainability (Baker 2003). These effects may also interact with other cells in this matrix.

Research in Australian middle schools

Some Australian research into middle schooling is beginning to filter the growing professional consensus about this policy change (e.g., Chadbourne 2004, Luke et al. 2003, Main 2003, Pendergast 2005). A systematic and holistic research agenda enables careful and critical analysis of what is currently occurring in Australian middle schools. This agenda outlines a checklist against which to review efforts to change practice and to document conditions under which practice is liable to revert. In this paper, observations of local conditions for reform in conjunction with current research on practice provide a starting point rather than an exhaustive reckoning of research priorities.

It can be argued that student perceptions and performance need to be prioritised because these learners are the direct stakeholders in the purpose of the reform. Yet it is investment of school resources in the teacher-centric practices of middle schooling that drive its implementation (Main & Bryer 2005). The breadth of teachers’ knowledge of the curriculum, effective pedagogical skills, and interpersonal and communication skills affect other practice indicators for effective middle schools. Furthermore, teachers’ skill levels on these indicators are directly related to curriculum delivery for students and whether the program is authentically responsive to students’ needs.

Acceptance

Research is needed on university acceptance of curriculum design and training practices that bridges the gap to work in a middle schooling setting. Formal

comparisons of middle school training with primary and secondary training have yet to be made. Expectations of good teacher practice for all levels of schooling (Chadbourne 2001) and for all teacher training programs (e.g., Hester 2003) have been clearly articulated. Yet the task of adapting existing systems to a middle school program has fallen to individual teachers and individual schools. Hence, research is needed on the transferability and adaptability of the traditional repertoire of a classroom teacher (Hughes, Abbott-Campbell, & Williamson 2001) to these new settings.

Data are needed on the school conditions for staff commitment to and acceptance of middle school practice. The rising number of middle school initiatives has made staffing a critical issue for research on, for example, rapid staff turnover and staff selection criteria. American researchers have reported that inadequate preparation in specific “middle school” training cause many staffing problems (Useem 2001). Placement of middle school teacher graduates is unlikely to be prioritised for middle school vacancies until policymakers have clear evidence for selective placement (Luke et al. 2003). Moreover, the work of these graduates in middle schools warrants immediate investigation.

There might be many ways for teachers, schools, and administrators to compromise practice fidelity. Anfara (2004) pointed out that, for example, team teaching practice in different schools might show little likeness. The conceptual and practical (i.e., practitioner-friendly and “do-able”) foundations of specific practices need to be clarified in order to move middle schooling from an improvised and piecemeal reform accepted into a single school community into a demonstration of what constitutes “effective practice” for middle school students in many schools.

Research on teacher acceptance of team practice needs to ascertain actual benefits realised by teachers working in this environment and to determine the limiting conditions. For example, socioemotional benefits have been claimed for teamwork in the middle school environment rather than in isolated classrooms (Lortie 2002). Expected benefits of middle school teaming include (a) enabling teachers to try out new teaching techniques, (b) providing teachers with direct opportunities to learn from each other, and (c) offering professional and personal support that prevents teachers from feeling isolated. Yet the emphasis on implementing reform may be creating extra pressure on teachers in terms of planning and interpersonal skills.

A complex issue for practice acceptance is the sensitive balance between “top-down” administrative support for a school’s reform process and “grassroots” participation. Lipsitz et al. (1997) argued for the alignment of local, district, and state leadership. Yet the “choice” ratios of leader : led (i.e., strong community support – lukewarm

principal support and vice versa) that contribute to practice adoption need to be documented. Moreover, there are malalignments in district-wide, state-wide, and nation-wide educational policies on middle schooling in Australia.

Acceptance of the reform and responsibility for the reform among all stakeholders could be improved by wider consultation and reorganisation of school practices to facilitate ongoing consultation (e.g., forums for students, parents, and staff, respectively; advisory groups to report on latest research findings). The principal is widely viewed as the single most important individual to the success of a middle school (Jackson & Davis 2000, Weller 2004). The principal guides the direction of the school by putting into practice methods and strategies that are backed by empirical evidence. Moreover, the incumbent principal is the person who can manage a smooth transition between principals, particularly by implementing procedures that share leadership throughout the school and school community. Principals who lack knowledge about middle schooling and frequent changes among school administrators could undermine reform efforts. Access to a central database on Australian research on middle schooling (e.g., a clearinghouse) might be a valuable scholarly resource for schools and their principals.

Community acceptance needs to be established. Community consultation might be critical to avert widespread resentment at disruption of students' learning. Middle school reform may seem particularly appealing for school improvement especially in some public schools with a poor academic standing on national benchmarks. If school resources are already limited, then parents may view regrouping of middle school students into larger groups as another cost-cutting exercise rather than a genuine effort to improve learning authenticity and increase the security of the learning environment. On the other hand, wider stakeholder acceptance of middle schooling may be unlikely when a school has strongly valued traditions and a history of academic success. In some private schools, family stakeholders might see "experimenting" with practice innovations as failing to "give value for money", although an integrated curriculum might provide academic benefits for student learning.

The process and the outcome of community acceptance need to be examined. More research is needed on the conditions for good consultation involved in larger scale changes in school practice (e.g., Bryer, Beamish, Davies, Marshall, Wilson & Caldwell 2005). Parents and other community members need clear and easy access to data on student engagement and learning outcomes (French 2004). There are "big gaps" between (a) what is being implemented and what is being researched and (b) what is being researched and which data are easily accessible and understandable to stakeholders. A compelling presentation of projected benefits for students is needed to enlist community acceptance and to stimulate active support for change.

The middle school vision of more engaged students requires an assessment of the relative benefit to students against the relative upheaval of change. If student outcomes in a school are currently acceptable, then the case for change must specify the additional benefits against the possible costs. If current outcomes are poor, then the case for change must specify expected gains, both to evaluate reform progress and to disseminate actual gains to the community.

Effectiveness

“Effectiveness” in this instance is used to refer to measurable improvements in terms of the practice indicators for middle schooling. The recycled listings of practice specify the diverse roles of the middle school teacher. In Australia, the Junior Secondary Review (JSR) was used to ‘discuss primary teachers, explicate secondary school cultures, and construct an ideal middle school teacher’ (Whitehead 2000, p. 1). As the source of JSR teacher data was Canadian research (Hargreaves & Earl 1990), it offered a ‘limited and limiting perspective’ (Whitehead 2000, p. 1) on existing Australian primary and secondary cultures and local conditions for middle school reform. Moreover, teachers have moved by necessity to fill the vacuum with practice they have designated as “middle schooling”. Australian researchers need to determine whether attributes identified as being essential for middle school teachers in overseas research hold true in Australian schools and how local staff are implementing these practices.

The practice indicator of improved relationships affects all middle school stakeholders. This practice indicator includes the many human interrelationships between students, teachers, administration, parents, and the community (Brown 2001, Hill et al. 2001, Jackson & Davis 2000). There is little published evidence of either training or research on relationships in middle schools in Australia. As an integral indicator of reform, the complex web of relationships within middle schooling warrants investigation.

Research into the essential skills for middle school teachers may assist in the development of teacher training and professional development programs for this phase of schooling. Literature supporting the strong positive correlation between teachers’ knowledge and skills and students’ learning has emphasised the importance of staffing middle schools with competent middle school staff (Darling-Hammond 2000, Van Zandt, Allen & McEwin 2001). A teachers’ sense of job satisfaction, efficacy as a middle school educator, and continued commitment to the profession may be challenged when they have not been specifically trained to teach within this new environment.

Middle school teachers have become the source of the middle curriculum. Teachers have been challenged to create a curriculum that is relevant, integrative, and exploratory. Their role is that of a facilitator (i.e., finding the balance between student voice and the required elements of a state mandated curriculum). The fluidity of this balance needs to be contained by some specific outcome targets, in order to monitor academic preparation for senior school and other specified learning goals. On the one hand, the matter-of-fact need to have curriculum ready to teach appears to be diametrically opposed to a democratic ideology of student involvement. On the other hand, abandoning a planned curriculum to pursue new directions with students can also add to the pressure on teachers. Documenting and disseminating effective curriculum and pedagogical methods amongst middle school practitioners is an important but frustrating aspect of their ongoing professional development.

When structural reforms are still in flux, there is little immediate prospect of longitudinal monitoring of student outcomes across academic and socioemotional variables. There is, however, room to develop and measure specific indicators of whether the curriculum is student-centred, allows students a belief in their autonomy as learners, and provides a safe environment in which all students experience success. There is room for immediate investigation of the engagement and motivation of middle school students as compared to students in traditional programs (e.g., Martin 2003).

Sustainability

The tendency of teachers to revert to previous practice is lessened when the school improvement process does not rely solely on a committed principal. A system of shared leadership allows all stakeholders to build capacity for continued and sustained improvement. Researchers need to explore the spread of responsibility for school reorganisation and leadership activities within the introduction of a middle school community of learners. Part of the responsibility of principals and teachers for shared leadership is to learn how to collect and analyse data from a variety of sources (including action research projects and student, teacher, and community surveys). Moreover, leadership teams need to learn how to use this information actively to make decisions about school improvement and to guide new teacher practice.

The pragmatic “day-to-day” struggles of teachers and other participants working within a middle schooling framework need to guide research, because it is the conditions for practice that determine sustainability. Recognition of everyday emotional pressures is an important mechanism in building honest, grounded capacity for the long haul and in encouraging participants to pursue their vision for Years 6-9 students. Main (2003) found that teachers participating in an interview about

their practice in a new middle school environment often felt that it was unprofessional to talk negatively about aspects of teaching. These teachers further commented that it was important to show that they were coping and that the job was being done. Such a halo effect needs to be acknowledged and the daily struggles legitimated, documented, and addressed within the learning community.

The high mobility of some Australian students may pose a major challenge for a middle school program, with a need for ongoing induction and support for students who have not received the socialisation of continuing students. Evidence of best practice for middle school students must consider local contextual and demographic factors such as race, income, gender, and school location. These influences on sustainability are pressing when the aim of the school initiative is improving an already disadvantaged learning environment.

Ongoing data collection needs to track students' engagement in various ways. A school's ability to attract students is one demonstration of short-term success. A stronger indicator of sustainable success is the school's ability to keep students, especially into the senior grades. Traditional indicators of engagement have included 'waiting lists and rates of attendance, suspensions, expulsions, dropouts, and transfers' (French 2004, p. 103). Such indicators enable external comparisons to other schools or internal comparison to the school's prior records. Tracking of academic achievements over time and space would include a range of indicators such as "below average" achievements and grade retentions, standardised test scores and authentic assessments, and external student rankings and OP outcomes.

The best argument for policy change in favour of middle schooling programs will come from evidence of improved student outcomes in both the affective and academic domains rather than teacher satisfaction. Withdrawal of policy support, on the other hand, may be based on the kinds of teacher dissatisfaction characteristic of other failed reforms. Sustainability would be best served by a culture of support from the community inside and outside of the reforming school, which would require rich investment of school resources in relationships with the wider community.

Conclusion

Australian research into middle schooling needs to consider and learn from the experience of the USA by drawing together the results of many years of research in order to avoid the middle school "boom-to-bust-to-reinvention" cycle. The proposed research framework serves to identify essential elements for specific stakeholders for the successful planning, implementation, and evaluation of a middle school reform. Furthermore, the framework aims to give direction for a more systematic research agenda for Australian

middle school practice in place of ad hoc and piecemeal implementation and the resulting ad hoc and piecemeal research agenda that has been undertaken in the USA.

The acceptability, effectiveness, and sustainability of middle schooling in Australia require careful planning and implementation of the reform. Acceptance of the reform requires an understanding of the philosophies underpinning middle schooling and a “voice” for all stakeholders. The effectiveness of the reform is based on measurable performance indicators together with easy access to and transparency of results. The sustainability of the reform is driven by ongoing data collection and feedback into practice as evidence of ongoing commitment to the reform. Middle schooling in Australia also requires that research is fed into a central organisation able to collate and disseminate positive data, to facilitate wider acceptance. In turn, other schools embarking on a middle years program can confidently use these data-based practices to direct their planning, implementation, and subsequent evaluation of their new reform, thereby creating an ongoing cycle of evidence based practice.

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