

Fantasy, Fashion and Fact in Middle Schooling: A critique

KENNETH J. ROWE AND STEPHEN DINHAM

SINCE THE MID-1960S, there has been a much greater focus on effective schools, both primary and secondary, and on school change and improvement. However, while the primary and upper secondary years have received the bulk of attention from researchers and policy makers, the middle years have until recently been described as “forgotten”, and a “black hole”. The middle years have been problematised as a critical period when young people experience substantial physical and emotional change which prepares them for adulthood. During this time, some students disengage or are alienated from learning, and growth in academic attainment can plateau or even fall. There are concerns over literacy and numeracy achievement as well as concerns over failure to engage with, and continue studies in subjects such as mathematics and science in the senior secondary years and beyond.

These are also the years where attitudinal, behavioural and social problems can escalate, and absenteeism, suspension and expulsion from school are most common, especially for boys. It is a period when matters such as body image and sexual orientation can become critical issues for some. There is an important principle underpinning middle schooling that these phenomena are attributable, at least in part, to “traditional schooling”, and can be ameliorated by different organisational, curriculum, assessment and pedagogical approaches.

It is important to note, however, that it is unwise to over-generalise about young people during their middle years, or indeed to generalise about the different phases of schooling. While some young people during their middle years of schooling may experience powerlessness, social estrangement, meaninglessness and “normlessness” (ACT DET, 2005:8), many will not. While some may find the transition from primary to high school difficult, many will be ready for and will relish this change. Whereas some may benefit from an extended period of primary-like education, others will not.

Nevertheless, since the mid-1980s, middle schooling approaches and the establishment of middle schools have been considered key educational reform initiatives in English-speaking countries, including Australia, New Zealand, the United Kingdom and the USA, although it needs to be noted there are numerous models and approaches to middle school organisation. Middle schools have been seen by many as a panacea for the problems of upper primary-lower secondary schooling and adolescence in general. Because of interest in the area, the published literature on middle schooling is voluminous, and includes papers, articles, government-commissioned studies and reports, books, curriculum documents and dissertations that are numbered in their hundreds of thousands. Moreover, professional associations devoted to the advocacy of middle years schooling are well known and active (eg, the Australian Middle Years of Schooling Association, Inc. www.mysa.org.au; the New Zealand Association of Intermediate and Middle Schooling, www.nzaims.co.nz; the UK National Middle Schools Forum, www.middleschools.org.uk; and the USA National Middle School Association, www.nmsa.org — to cite just a few).

Despite the large volume of published work in this area, strong evidence-based research into schooling during the transitional years known as middle schooling is less than adequate in policy terms. Nonetheless, while middle schooling might be relatively under-researched, there is no shortage of strong views on the subject, both pro and con. Thus, the available literature advocating positive student outcomes from middle schooling approaches and middle schools requires careful examination and critique, which is a key purpose of the review upon which this article is based.

The present article is drawn from an original report prepared by the Australian Council for Educational Research (ACER) under a contract with the New Zealand Ministry of Education (Dinham & Rowe, 2007), undertaken for the purposes of informing policy and practice relating to middle schooling in New Zealand. As stipulated by the New Zealand Ministry of Education, the key purpose of the report was to conduct:

... a critical examination and analysis of the literature, to assess what we know about the impact of teaching and learning during the middle school years (years 7 to 10) on student engagement, achievement and attitudes to learning. The results from this literature review will complement the series of case studies the Ministry of Education will be undertaking looking at innovative and effective curriculum and teaching approaches linked to student outcomes in different middle schooling contexts across the system.

OVERVIEW OF MAJOR FINDINGS OF THE REVIEW

As noted, in contrast to the voluminous and predominately qualitative nature of the literature on middle schooling, there is a serious paucity of quantitative studies employing strong evidence-based methods that have investigated the relative effects of various forms of middle/non-middle schooling, thus constituting a major limitation of the present review. The concern is that writings from advocates for middle schooling tend to be little more than aspirational, frequently bordering on rhetoric and ideology.

Indeed, there have been persistent concerns from some quarters as to whether middle schools actually deliver in terms of improved student achievement and engagement. The widespread adoption of standardised testing and other accountability measures has cast doubt on the efficacy of middle schools in the USA. In this context, Yecke (2005:1) defines middle schooling somewhat disparagingly as "an approach to educating children in the middle grades (usually grades 5-8), popularised in the latter half of the 20th century, that contributed to a precipitous decline in academic achievement among American early adolescents".

Responses to the issues of middle schooling have ranged from the adoption of single strategies or interventions to totally integrated approaches, although the latter is more challenging and less common. Whilst data on student achievement and phenomena such as suspension and absenteeism are fairly readily available, linking these outcomes to matters such as curriculum, pedagogy, assessment and school organisation is more difficult.

One of the issues with attempting to measure the outcome of any intervention is that it is difficult to distinguish the effect of that initiative from the many activities that schools will be undertaking in the middle years at any time. For example, measuring and quarantining the effect of an initiative intended to improve boys' literacy implemented in Year 7 from the effects of "general" learning and development will be difficult, given that literacy is the basis of all subject areas and that reading and writing occur outside school.

Multiple, overlapping initiatives complicate any attempt at obtaining evidence of effectiveness. A further problem occurs where more than one school is implementing an initiative, often from a centrally determined (systemic) and supported program. In this case, there is frequently a range in program "take up" and thus effect. Some schools will be "early adopters" and will enthusiastically take up and support an initiative, whilst other schools will do only the minimum in supporting and driving the intended change. Thus, in measuring or evaluating the overall outcome of any initiative, there is likely to be a wide range of both adoption and impact.

Another problem with evaluating and measuring the effectiveness of interventions geared towards issues and problems in the middle years is that school staff frequently lack the skills, time and resources to accomplish these tasks. Longitudinal data on student achievement and how these relate to any initiative are also difficult to obtain and measure, with the result that there is often an initial "halo" or "Hawthorne" effect, with judgements of success and failure based largely on teachers' perceptions, rather than on evidence linking interventions to measurable student achievement outcomes.

Teacher professional development is vital in the success of any initiative or intervention. Teachers need time, space and external assistance if a strategy is to have a realistic chance of success. Reluctance of teachers (and schools) to change, poor preparation for and “selling” of the change, together with imposition of extra responsibilities, can all put a brake on the success of new programs and approaches. What many empirical studies have demonstrated is that change management can be as important as the nature of the change itself. There can also be problems with mandated versus voluntary and self-directed change, the latter often having a greater deal of commitment, empowerment and resultant effectiveness (see Dinham, 2008).

WHAT IS THE EVIDENCE?

It has already been noted how the research evidence for middle schooling is patchy, inconclusive and questionable overall. In reviewing the research evidence in favour of middle schooling, the Northern Territory Council of Government School Organisations concluded (2005:3):

- There is little research evidence available in Australia on the effect of middle schooling on student outcomes. Most of the numerous studies published consist of advocacy or focus on student and teacher attitudes rather than actual outcomes for students. Little data has been collected on the effect on student achievement. ...
- More research is needed to determine how middle schooling practices might best be implemented in different circumstances.

In the conclusion to our review we noted that despite the large and burgeoning literature claiming positive effects of approaches to middle schooling that focus on the cognitive, developmental, social and emotional needs of adolescents, evidence to substantiate the claims remain elusive. Moreover, there are both substantive and methodological “gaps” in the available research as bases for informing both policy and practice. As a consequence, it is suggested that emphasis is best directed at building evidence-based pedagogical capacity in a school’s most valuable resource — its teachers. It is further argued that whereas prevailing adherence to the moribund philosophies of biological and social determinism are foremost among several “barriers” to reform, they are not justified by findings from evidence-based research. For example, Edmonds (1978:33) long ago made the following comment:

The belief that family background is the chief cause of the quality of student performance ... has the effect of absolving educators of their professional responsibility to be instructionally effective.

More recently, the summary of findings from evidence-based research for the effects of quality teaching on student outcomes provided by Professor Linda Darling-Hammond at Stanford University is pertinent and requires emphasis:

The effect of poor quality teaching on student outcomes is debilitating and cumulative. ... The effects of quality teaching on educational outcomes are greater than those that arise from students' backgrounds. ... A reliance on curriculum standards and statewide assessment strategies without paying due attention to teacher quality appears to be insufficient to gain the improvements in student outcomes sought. ... The quality of teacher education and teaching appear to be more strongly related to student achievement than class sizes, overall spending levels or teacher salaries (Darling-Hammond, 2000:3).

So what matters most? The imperative of quality teaching and learning provision, supported by the specification and maintenance of teaching standards and ongoing teacher professional learning focused on evidence-based teaching practices that are demonstrably effective in maximising students' engagement, learning outcomes and achievement progress (Dinham, 2008; Dinham, Ingvarson, & Kleinhenz, 2008; Rowe, 2007).

In education, too frequently, too much attention is paid to the *conditions* of teaching — “fiddling around the edges” with matters such as school and class organisation (see Hattie’s work, 2007, on effect sizes of interventions in teaching on student achievement). This is compounded by a failure to critically and empirically evaluate fashionable teaching approaches such as “discovery learning”, “problem-based learning” and “inquiry-based teaching”, which are taken on trust by many educators as being effective when research evidence suggests otherwise (see Mayer, 2004; Kirschner et al, 2006). Middle schools are neither a good thing nor a bad thing, although it should be noted that middle schools are in serious decline in the US and UK, the two “heartlands” of middle schooling.

What is actually done within classrooms and schools is the most important thing, not structure; and quality teaching and quality teachers are central to student achievement. On this, the research literature is powerful and unequivocal (see the work of John Hattie, 2003, 2007, for example).

REFERENCES

- Australian Capital Territory Department of Education and Training (2005). *Teaching and Learning in the Middle Years in the ACT*. Canberra: ACT DET.
- Dinham, S (2008). *How to Get Your School Moving and Improving: An evidence-based approach*. Melbourne: ACER Press.
- Dinham, S, Ingvarson, LC & Kleinhenz, E (2008). Investing in teacher quality: Doing what matters most. In BCA, *Teaching Talent: The best teachers for Australia's classrooms*. Melbourne: Business Council of Australia.
- Dinham, SK & Rowe, KJ (2007). *Teaching and Learning in Middle Schooling: A review of the literature*. Final report to the New Zealand Ministry of Education. Camberwell VIC: Australian Council for Educational Research.

- Dinham, S & Rowe, K (2008). Fantasy, Fashion and Fact: Middle schools, middle schooling and student achievement. Paper presented to British Educational Research Association annual conference, Edinburgh, UK, 3-6 September. Available at: http://www.acer.edu.au/documents/Dinham-Rowe_FantasyFashionFact.pdf
- Dinham, SK & Rowe, KJ (2009). Middle Schools and Middle Schooling: A critical review of the literature. *ACER Research Monograph 64*. Camberwell, VIC: Australian Council for Educational Research.
- Darling-Hammond, L (2000). Teacher Quality and Student Achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8(1)*; at: <http://epaa.asu.edu/epaa/v8n1>.
- Edmonds, R (1978). A Discussion of the Literature and Issues Related to Effective Schooling. Paper presented to the National Conference on Urban Education, CEMREL, St Louis, US.
- Hattie, J (2003). "Teachers Make a Difference: What is the research evidence?", <http://www.leadspace.govt.nz/leadership/articles/teachers-make-a-difference.php>
- Hattie, J (2007). "Developing Potentials for Learning: Evidence, assessment, and progress", EARLI Biennial Conference, Budapest, Hungary. <http://www.education.auckland.ac.nz/uoa/education/staff/j.hattie/presentations.cfm>
- Kirschner, PA, Sweller, J & Clark, RE (2006). Why Minimal Guidance During Instruction does not Work: An analysis of the failure of constructivist, discovery, problem-based, experimental, and inquiry-based teaching. *Educational Psychologist, 4(2)*, pp75-86.
- Mayer, R (2004). Should There be a Three-strikes Rule Against Pure Discovery Learning? *American Psychologist, 59(1)* pp14-19.
- Northern Territory Council of Government School Organisations (2005). A Review of Middle Schooling Concepts and Approaches. Darwin: NT COGSO.
- Rowe, KJ (2007). School and teacher effectiveness: Implications of findings from evidence-based research on teaching and teacher quality. In Townsend, A (Ed), *International Handbook of School Effectiveness and Improvement* (Part Two, pp767-786). Dordrecht, The Netherlands [ISBN-13 978-1-4020-4805-0].
- Yecke, CP (2005). *Mayhem in the Middle: How middle schools have failed America — and how to make them work*. Washington DC: Thomas B. Fordham Institute.