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Ken Rowe  
ACER

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# The importance of *Teacher Quality* as a key determinant of students' experiences and outcomes of schooling

Ken Rowe

Australian Council for Educational Research

Dr Ken Rowe is the Research Director of ACER's *Learning Processes and Contexts* program. Ken's substantive research interests include: 'authentic' educational and psychological assessment; multilevel, 'value-added' performance indicators and bench-marking; teacher and school effectiveness; and differential gender effects of schooling in the context of teaching and learning. Ken has a particular interest in the overlap between education and health, including: the impact of auditory processing and externalising behaviour problems on students' learning outcomes; and the educational/epidemiological effects of Attention-Deficit/Hyperactivity Disorder (AD/HD) and Chronic Fatigue Syndrome (CFS) in children and adolescents.

**Abstract:** Much of the traditional and prevailing dogmas surrounding 'factors' affecting students' experiences and outcomes of schooling throughout their primary and secondary years – especially socio-cultural and socio-economic factors – are now understood to be products of methodological and statistical artefact, and amount to little more than 'religious' adherence to the moribund ideologies of *biological* and *social determinism*. Moreover, post-modernist perspectives espoused by academics promoting the de-construction of *gender-specific pedagogy* and 'middle-class' *curricula*, are equally unhelpful. Above all, a good deal of this 'discourse' is not supported by findings from evidence-based research. In this paper, key findings are presented highlighting '**real**' effects from recent and emerging local and international research on *educational effectiveness*. For example, whereas students' literacy skills, general academic achievements, attitudes, behaviours and experiences of schooling are influenced by their background and intake characteristics, **the magnitude of these effects pale into insignificance compared with class/teacher effects**. That is, the **quality of teaching and learning provision** are by far the most salient influences on students' cognitive, affective, and behavioural outcomes of schooling – regardless of their gender or backgrounds. Indeed, findings from the related local and international evidence-based research indicate that '**what matters most**' is **quality teachers and teaching, supported by strategic teacher professional development!**

## Prelude

(Sources: Rowe, 2000b; Slade, 2002):

*Ms xxx is a great teacher; she really cares about us. The other teachers at this school are crap!*

(Year 6 student)

*Our Maths teacher is bloody useless – he just gives out work sheets, then sits down and falls asleep!!*

(Year 7 student)

*There are too many bad teachers in this school who don't give a shit about us kids*

(Year 8 student)

*Whatever they do, is what we do. If they're a good teacher and they do better stuff, we do better stuff. If they're a crappy teacher, we do bad stuff*

(Year 9 student)

*English is boring, but Mr xxx knows his stuff and gets excited about it. So we don't muck-around; we work hard and get a lot out of it*

(Year 10 student)

*Next year in Year 12, I want to get a good ENTER score so I'm doing those subjects that have the best teachers. The trouble is, there's not enough good teachers. Good teachers make all the difference!*

(Year 11 student)

## Educational effectiveness and teacher quality

### The international context

The provision of schooling is one of the most massive and ubiquitous undertakings of the modern state. Schools account for a substantial proportion of public and private expenditure and are universally regarded as vital instruments of social and economic policy aimed at promoting individual fulfilment, social progress and national prosperity. Moreover, since schooling generates a substantial quantity of paid employment for teachers and administrators, it is not surprising that there has long been an interest in knowing how *effective* the provision of school education is and how it can be improved.<sup>1</sup> What is surprising is the shakiness of our knowledge about *educational effectiveness* in terms of both experiences and outcomes of schooling for students, teachers, parents and the wider community. Even more intriguing is that the journey<sup>2</sup> taken by researchers since the 1960s in search of answers appears, 40 years later, to have only begun casting light on what **really matters** in affecting students' experiences and outcomes of schooling, namely, **teacher quality**.

Disappointingly, this 'light' was **not** evident in the bulk of keynote addresses and papers presented at the 2003 conference of the *International Congress for School Effectiveness and Improvement* (ICSEI) held at the

<sup>1</sup>See, for example: Coleman et al. (1966); DES (1984); Goodlad (1982, 1983); Jencks et al. (1972); Mortimore (1992); OECD (1983); Reynolds, Hopkins & Stoll (1993); Rowe (2001); Rutter et al. (1979).  
<sup>2</sup>For sustained accounts of this journey see: Bosker & Scheerens (1994); Creemers & Scheerens (1994); Mortimore (1991, 1992); Reynolds & Cuttance (1992); Reynolds et al. (1994); Scheerens (1992, 1993); Scheerens & Bosker (1997).

Sydney Convention Centre (January 5–8, 2003). With very few exceptions (for example, Watts, 2003), presentations focusing on the importance of *teacher quality* were conspicuous by their absence. Rather, the conference was characterised by ‘offerings’ advocating *structural* changes for systemic, standards-based reform (including curriculum *deconstruction* and *reconstruction*) that have a long and not-so-distinguished history of rarely ‘penetrating the classroom door’.

Consistent with the adoption of corporate management models in educational governance and the prevailing climate of ‘outcomes-driven’ economic rationalism in which such models operate, policy activity related to issues of *accountability*, *assessment monitoring*, *performance indicators*, *quality assurance* and *school effectiveness* is widespread. However, economic and industrial issues surrounding *school effectiveness* and *teacher quality* are especially sensitive ones at the present time given the level of consensus regarding the importance of school education as an essential element of both micro- and macro economic reform, and in meeting the constantly changing demands of the modern workplace (OECD, 1986, 1989, 1993). Proclamations by the international media magnate Rupert Murdoch at the National Press Club on October 12, 2001, serve to underscore this importance. On this occasion, Murdoch asserted that if Australia continues with its reluctance to invest in the quality of its primary, secondary and tertiary educational infrastructure, and especially in *teacher quality*, ‘...Australia will end up even further behind the international economic “8-ball” than it is at present, such that Paul Keating’s “banana republic” prognostications will become a reality’.

Despite the difficulties entailed in defining an *effective school* or a *quality teacher* (see Cheng, 1996; Mortimore, 1991; Sammons, 1996),<sup>3</sup> the work on school effectiveness to date has primarily focused on the search for ways to measure the *quality* of a school – defined almost exclusively in terms of students’ academic achievement progress in Literacy and Numeracy. Although the term *quality* is likewise problematic (see Istance & Lowe, 1991), the ‘...measurement of the quality of schooling is of critical importance at a time when so much school reform in so many parts of the world is being undertaken’ (Mortimore, 1991, p. 214). Nonetheless, for the past 25 years, concern about the *quality* of school education has become a high priority policy issue in all OECD countries where attention has focused on ways of assessing the *quality* of schools, of identifying factors associated with *effective schooling*, and on using such knowledge to achieve further improvements in quality.<sup>4</sup>

It has been noted frequently that school effectiveness research grew out of studies of *educational effectiveness* focusing on production functions (Fraser, Walberg, Welch & Hattie, 1987; Hanushek, 1979, 1985, 1986; Monk, 1992), and more especially out of the initial sociologically oriented input-output studies by Coleman et al. (1966), and by Jencks et al. (1972). These researchers were interested primarily in issues of social ‘equity’ and the influence of the school relative to that of ‘sociologically-determined’ background characteristics of students. Their findings were interpreted as casting serious doubts on the capacity of schools to make a difference relative to the influence of the socio-cultural and economic capital of home background. Indeed, for the past 40 years, the major theories (or models) of learning processes (for example, Bennett, 1978; Bloom, 1976; Carroll, 1963), and the ‘process-product’ research generated by them (Brophy, 1986; Fraser et al., 1987), have primarily focused on *school learning*, or ‘...holistic conceptions of student learning in classroom settings’ (Boekaerts, 1986, p. 129). Such has been the case despite consistent findings indicating that school factors including, financial and material resources, class size, teachers’ qualifications, classroom organisation and teaching methods, account for less than 15 per cent of the variance in measures of student achievement.<sup>5</sup>

Rather, during these 40 years, influential studies such as those reported by Coleman et al. (1966) and Jencks et al. (1972) in the USA, and Bernstein (1971), Peaker (1967) and Plowden (1967) in Britain, ‘...provided evidence that schools and teachers are not effective in enhancing achievement’ (Hattie, 1992, p. 9). Indeed, findings from these early studies suggested that school effects have little impact on students’ learning outcomes. For example, after estimating that only nine per cent of the variance in student achievement measures was due to school effects, Coleman et al. (1966) came to the somewhat depressing conclusion that ‘...schools bring little influence to bear on a child’s achievement that is independent of his background and general social context’ (p. 325). The consensus of findings from these studies was that ethnic and family socio-economic (SES) background factors constituted the dominant determinants of students’ educational outcomes. Reynolds, Hargreaves and Blackstone (1980, p. 208) summarised this consensus in the following terms: ‘...variations in what children learn at school depends largely upon variations in what they bring and not on variations in what schools offer them’. In what has become a familiar pattern, the conclusions arrived at by this early research were consistent with prevailing social and political opinion. However, a growing number of researchers have since

<sup>3</sup>Mortimore (1991, p. 216) suggests the following ‘outcomes-oriented’ definition: ‘An effective school is one in which pupils progress further than might be expected from consideration of its intake.’

<sup>4</sup>See Ainley, Fleming & Rowe (2002); Banks (1992); Chapman et al. (1991); Coleman & Collinge (1991); Creemers & Scheerens (1989); Cuttance (1992); Hill et al. (1996); Forster, Masters & Rowe (2001); McGaw, Piper, Banks & Evans (1992); Reynolds & Cuttance (1992); Rowe (2001a); Rowe, Holmes-Smith & Hill (1993).

<sup>5</sup>For example: Bosker et al. (1994); Bosker & Witziers (1995); Hanushek (1979, 1986); Glass (1992); Glass et al. (1982); Hattie (1992); Monk (1992).

provided contrary evidence to the claims that relative to home background influences the effects of schooling are negligible.<sup>6</sup> Many of these researchers have been critical of findings from studies such as Coleman et al. and Jenks et al. because the inherent hierarchical nature of the data had not been taken into account.

Early studies of school effectiveness such as those by Brookover, Beady, Flood, Schweitzer and Wisenbaker (1979); Edmonds (1979a) and by Rutter, Maughan, Mortimer, Ouston and Smith (1979), were conceived largely as a reaction to the Coleman and Jencks conclusions. The Brookover, Edmonds and Rutter studies adopted a different starting point and focused on identifying contextual features of schools in which students were performing better than their counterparts in comparable schools, after adjusting for the effects of intake characteristics. Given this starting point, the positive conclusions from such studies and the enthusiasm with which they were promoted was not unexpected. The message from this work is that effective schools are characterised by an 'ethos' or 'culture' oriented towards learning, expressed in terms of high standards and expectations of students, an emphasis on basic skills, a high level of involvement in decision-making and professionalism among teachers, cohesiveness, clear policies on matters such as homework and student behaviour, and so on. Moreover, 'effective schools' were also supposed to be characterised by outstanding educational leadership, particularly as exercised by the principal and directed at establishing agreed goals, increasing competence and involvement of staff and at clarifying roles and expectations. Edmonds (1979b) was the first to summarise these features into what has become known as the 'five factor model' of school effectiveness, namely:

1. purposeful educational leadership;
2. challenging teaching and high expectations of students;
3. involvement of and consistency among teachers;
4. a positive and orderly climate; and
5. frequent evaluation of student progress.

This 'five factor model' continues to form the basis of what might be termed the *optimistic account* of school effectiveness research – an account that presents a positive picture of the role and efficacy of *structural* or *contextual* school influences. In addition to the well known critiques of the 'five-factor model' (for example, Ralph & Fenessey, 1983; Scheerens & Creemers, 1989), there are several problems with the *optimistic account*, not the least of which is that it was built upon an extremely fragile research base.

First, the little empirical evidence available was not extensive, with most of the knowledge base being derived from small-scale case studies; but mostly from scholarly reviews and comment (for example, Good & Weinstein, 1986; Purkey & Smith, 1993; Levine & Lezotte, 1990; Wilson & Corcoran, 1988). For example, the 1979 study by Rutter et al. was based on observations made in just 12 inner London schools. Banks (1992, p. 19) noted that '...the relevant (research) literature on effective schools is not extensive, with scholarly comment and critique constituting the major proportion'.

Second, there have been relatively few large-scale studies capable of providing valid generalisations, and fewer still that have collected longitudinal data that are essential for the estimation of specific effects of schools over and above that which students bring with them (see Raudenbush, 1989). Nuttall et al. (1989, p. 775) suggest that it is necessary to be cautious in interpreting '...any study of school effectiveness that relies on measures of outcome in just a single year, or stability over time'. While the advice is apt, the logistical problems in mounting and maintaining such studies entail severe practical constraints, resulting in a virtual absence of studies conducted over long periods of time.

Third, the methods typically used to analyse the derived data have not allowed for the modelling of complex interrelationships between inputs, processes and outcomes, including indirect effects and reciprocal effects; nor have they taken into account the inherent nested structure of schooling and the organisation of students into classes taught by particular teachers.<sup>7</sup> In the preface to their edited collection of related research articles, Raudenbush and Willms (1991, p. xi) observed:

*An irony in the history of quantitative studies of schooling has been the failure of researchers' analytic models to reflect adequately the social organization of life in classrooms and schools. The experiences that children share within school settings and the effects of these experiences on their development might be seen as the basic material of educational research; yet until recently, few studies have explicitly taken account of the effects of particular classrooms and schools in which students and teachers share membership.*

(1996); Scheerens (1992, 1997); Scheerens & Bosker (1997); Stringfield (1994); Teddlie (1994); Tymms, Merrell & Henderson (1997).

<sup>6</sup>There is now a large literature attesting to the effects of schooling on student learning outcomes. Among the most notable include: Bosker et al. (1994); Bosker & Witziers (1995); Creemers (1994a,b, 1997); Creemers & Reezigt (1996); Creemers & Scheerens (1994); Goldstein (1980, 1987, 1997); Goldstein & Sammons (1997); Hattie (1992); Hill (1997); Hill et al. (1993, 1996); Hill & Rowe (1996); Lee & Bryk (1989); Mortimore (1995); Raudenbush & Willms (1991); Reynolds & Cuttance (1992); Reynolds et al. (1994); Rowe (1991a,b, 1995, 1997a); Rowe & Hill (1994, 1997b); Sammons

<sup>7</sup>See: Bosker & Scheerens (1989, 1994); Hill & Rowe (1996, 1998); Rowe & Hill (1998); Rowe, Hill & Holmes-Smith (1995); Rowe & Rowe (1999); Scheerens (1992); Scheerens & Bosker (1997).

<sup>8</sup>For structural equation modelling, see: Arbuckle & Wothke (1999); Bentler (1980, 1989); Jöreskog & Sörbom (1989, 2002); Kaplan (2000); McDonald (1978); Muthén (1984); Rowe (1997a, 2001a, 2002a).



These are problems that only relatively recent methodological advances have addressed. Two developments are especially worthy of comment. The first is the development of structural equation modelling techniques that enable the simultaneous estimation of interdependent effects among variables within a framework that takes into account measurement error, as well as structural prediction residual.<sup>8</sup> The second is the development of multilevel analysis techniques that can account for the inherent hierarchical structure of the data, and enable estimation of the influence of variables operating at different levels of analysis.<sup>9</sup>

Fourth, the criterion measures used in school effectiveness studies have typically been limited to scores on standardised tests of cognitive achievement (or on public examinations), with scant attention being paid (if at all) to other highly valued outcomes of schooling that include attitudinal, social and behavioural competencies. Whereas the use of scores on achievement tests for the measurement and identification of *educational effectiveness* is typically justified on the grounds of maximising reliability, this has often been at the expense of validity. That is, while such tests have moderate correlations with measures of student intake characteristics and background factors, they are questionable in terms of their validity as measures of the curriculum taught in classrooms within schools. Moreover, there has long been criticism of the utility of such tests as measures of either learning or competence.<sup>10</sup> Such criticism has gained credence in the areas of standards monitoring and performance assessment, where new approaches to obtaining more curriculum-specific and “authentic” (Wiggins, 1989) measures of assessment are being tried,<sup>11</sup> but it is a criticism that has been largely ignored in almost all studies of school effectiveness.

These methodological criticisms of the early school effectiveness research have provided the impetus for a relatively small number of ‘second generation’ studies and to an even smaller number of what Scheerens (1992, 1995), and Scheerens and Bosker (1997) refer to as ‘state-of-the-art’ studies.<sup>12</sup> These more recent studies consistently find that differences between schools, when relevant prior achievement and ‘intake’ characteristics of students are taken into account, are

important but not especially large – a finding that is confirmed by results from a comprehensive meta-analytic study by Bosker and Witziers (1995) and by the work of Marks (2000). Moreover, they are of an order of magnitude close to that estimated by Coleman and Jencks (that is ~ nine per cent of the variance).<sup>13</sup> At the same time, those studies that have been designed to enable the estimation of class-level effects have consistently identified larger proportions of between-class/teacher variance. This, in turn, has prompted a renewed focus on *teacher quality* and *instructional effectiveness*, and to some redefinition of the fundamental questions underpinning educational effectiveness research (see: Creemers, 1992; Slavin, 1994, 1996; Rowe, 2003a; Rowe & Rowe, 2003).

The small number of ‘state of the art’ educational effectiveness studies undoubtedly reflects the fact that the technical and logistical demands of such studies are immense. In the Australian context, the *Victorian Quality Schools Project* (Hill, Holmes-Smith & Rowe, 1993; Hill & Rowe, 1996, 1998; Hill et al., 1996; Rowe & Hill, 1998; Rowe & Rowe, 1999) was the first major empirical study of school and teacher effectiveness, although there has been an important national study by McGaw and colleagues into parent and teacher perceptions of what makes an effective school (McGaw, Piper, Banks & Evans, 1992) – mentioned in more detail later.

Nonetheless, the little relevant research that has been done during the past 25 years has tended to suggest that administrative and social organisational features of schools are important factors influencing both teachers and students.<sup>14</sup> This work, focused mostly on student achievement outcomes, has stemmed mainly from two sources: research on effective schools,<sup>15</sup> and the relative effectiveness of public and private schools.<sup>16</sup> In fact, organisational factors were seen as important determinants of effective schools,<sup>17</sup> with frequently cited features including the school’s organisational culture, ethos or climate (Grant, 1988; Lightfoot, 1983; Rutter *et al.*, 1979).

Even where empirical work has been done, difficulties in demonstrating direct links between school organisation and student outcomes continue to be commonplace. The reasons for these difficulties are

<sup>8</sup>See: Aitkin & Longford (1986); Bock (1989); Bryk & Raudenbush (1988, 1992); Goldstein (1986, 1987, 1995); Hox (1994); Kreft & de Leeuw (1998); McDonald (1994); Rasbash et al. (1996, 2002); Raudenbush & Willms (1991); Rowe (1999a, 2003b).

<sup>9</sup>For example, see: Darling-Hammond (1994); Frederiksen (1984); Lacey & Lawton (1981); Linn (1986); Newman & Archbald (1990, 1992); Rowe & Hill (1996); Wigdor & Garner (1982).

<sup>10</sup>See, for example: Goldstein & Lewis (1996); Lesh & Lamon (1992); Masters & Forster (1997a,b); Moss (1994); Murphy (1995); Nisbet (1993); O’Connor (1992); Resnick & Resnick (1992); Rowe & Hill (1996); Shavelson (1994); Taylor (1994).

<sup>11</sup>That is: Bosker, Kremers & Lugthart (1990); Brandsma (1993); Mortimore et al. (1988); Hill et al. (1996); Hill & Rowe (1996, 1998); Rowe (1991, 1997); Rowe & Hill (1998); Rowe & Rowe (1992a,b); Teddlie & Stringfield (1993).

<sup>12</sup>See, for example: the *ILEA Junior School Project* reported by Mortimore et al. (1985, 1988, 1989); the re-analysis of IEA data reported by Scheerens, Vermeulen & Pelgrum (1989); findings from the *Victorian Quality Schools Project* (Hill et al., 1993, 1996; Hill & Rowe, 1996, 1998; Rowe & Hill, 1998; Rowe & Rowe, 1999); and key results from the *VCE Data Project* reported by Rowe, Turner & Lane (1999, 2002).

<sup>13</sup>See: Ainley, Reed & Miller (1986); Hill et al. (1993, 1996); Lee, Dedrick & Smith (1991); Rosenholtz (1989); Rowe (1991).

<sup>14</sup>For comprehensive reviews at this time, see: Banks (1992); Bosker, Creemers & Scheerens (1994); Creemers & Scheerens (1989); McGaw et al. (1992); Raudenbush & Willms (1991); Reynolds & Cuttance (1992); Rowe, Hill, and Holmes-Smith (1994); Scheerens (1993).

<sup>15</sup>For example, see: Anderson (1990, 1992); Graetz (1990); Lee & Bryk (1989); Steedman (1983); Williams & Carpenter (1990, 1991).

<sup>16</sup>See: Chubb (1988); Chubb & Moe (1990); McNeil (1986); Metz (1986); Newman, Rutter & Smith (1989).

<sup>17</sup>See: Bidwell & Kasarda (1980); Ecob et al. (1982); Goldstein (1980); Rowe & Hill (1998); Mortimore et al. (1988a,b); Ralph & Fenessey (1983); Rowe (1989); Rowe & Hill (1994).

both substantive and methodological.<sup>18</sup> The substantive difficulties arise from a general failure to realise that it is more appropriate to conceptualise the link between schools and students as *indirect* and mediated by teachers (Lee, Dedrick & Smith, 1991). According to this view, school organisation factors influence how teachers conduct their work and how they teach. In turn, teachers' practices influence students' learning. While strong relationships have been demonstrated between student achievement and teachers' levels of "efficacy" (Ashton & Webb, 1986) and 'commitment' (Rosenholtz, 1985), the findings from such studies are limited because their analyses did not take hierarchical relationships into account.

## The Australian context

In March 1991, focus on school and teacher effectiveness issues were given particular impetus by the Australian government's provision of \$10.5 million for the three-year *Good Schools Strategy* and its related projects, namely, the *National Schools Project* (NSP) and the *National Project on the Quality of Teaching and Learning* – NPQTL (Schools Council, 1991).

Nevertheless, Hill (1992, p. 403) missed the crucial point about *quality teaching and learning* by noting: 'The NSP is a major action research activity of the NPQTL to investigate how changes to **work organisation** can lead to improved student learning outcomes'.

Furthermore, following guidelines for school self-management linked to quality outcomes, as outlined by Caldwell (1993) and Caldwell & Spinks (1988, 1992), the incoming Victorian government at the time launched its *Schools of the Future* policy initiative (Directorate of School Education, 1993) that was designed to:

*... maximise the proportion of the educational dollar which is deployed at the school level and give schools the capacity to match resources to the educational needs of students. Its major features include the equitable allocation of resources to schools, ... increased accountability for outcomes, and a strengthening of the role of the principal as an educational leader (Caldwell, 1993, p. 1).*

Similarly, the expressed aim of the Quality Assurance Directorate of the New South Wales Department of School Education at that time was to '...bring together two distinct aspects of work in education systems: accountability and school development' (Cuttance, 1992, p. 1). In this context, Rowe and Sykes (1989, p. 129) had noted earlier that: 'One of the effects of such proposals has been to signal major shifts in government policy intention to bring the delivery of "professional" educational services into "public sector" accounting, underscored by a concern to ensure that such services represent "value for money"'.

However, the focus on *teacher quality* via the NPQTL remained as a mere artefact of political and bureaucratic rhetoric.

Whereas this activity confirmed an increasing national approach to educational governance and accountability by the Australian Federal Government, first signalled in the paper entitled *Strengthening Australia's Schools* (Dawkins, 1988), the research base and related evidence to support these major policy initiatives was, and continues to be, extremely limited. On the basis of an intensive study of models of school effectiveness up to that time, Banks (1992, p. 199) observed:

*Research on effective schools is being used to shape major policy-making initiatives in Australia and overseas, even though what makes some schools more effective than others remains an open question. Because clear and unequivocal messages to educators and policy makers are yet to emerge from the research, unquestioning acceptance of the current findings should be a cause for concern.*

## References

- Ainley, J., Fleming, M., & Rowe, K.J. (2002, April). *Evaluating systemic school reform: Literacy advance in the early years*. Paper presented at the American Educational Research Association (AERA) conference, New Orleans, April 1–5, 2002.
- Ainley, J., Reed, R., & Miller, H. (1986). *School organisation and the quality of schooling: A study of Victorian government secondary schools* (ACER Research Monograph No. 29). Hawthorn, Vic: Australian Council for Educational Research.
- Aitkin, M., & Longford, N. (1986). Statistical modelling issues in school effectiveness studies. *The Journal of the Royal Statistical Society, Series A (General)*, 149 (1), 1–43.
- Anderson, D.S. (1990). *Long term effects of public and private schooling*. Paper presented at XIIth World Congress of Sociology, Madrid, July 1990, Mimeograph.
- Arbuckle, J.L., & Wothke, W. (1999). *AMOS 4.0 users' guide*. Chicago, IL: SPSS, Inc.
- Ashton, P., & Webb, R. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Banks, D.K. (1992). *Effective schools research: A multilevel analysis of the conceptual framework*. Unpublished doctoral dissertation, The University of Melbourne Institute of Education.
- Bennett, S.N. (1976). *Teaching styles and pupil progress*. London: Open Books.
- Bentler, P.M. (1980). Multivariate analysis with latent variables: Causal modeling. *Annual Review of Psychology*, 31, 419–56.
- Bentler, P.M. (1989). *EQS: Structural equations program manual*. Los Angeles, CA: BMDP Statistical Software.
- Bidwell, C., & Kasarda, J. (1980). Conceptualizing and measuring the effects of school and schooling. *American Journal of Education*, 88, 401–430.
- Bloom, B.S. (1976). *Human characteristics and school learning*. New York: McGraw-Hill.
- Bock, R.D. (Ed.) (1989). *Multilevel analysis of educational data*. New York: Academic Press.
- Boekaerts, M. (1986). Motivation in theories of learning. *International Journal of Educational Research*, 10 (2), 129–141.

- Bosker, R.J., Creemers, B.P.M., & Scheerens, J. (Guest Editors) (1994). Conceptual and methodological advances in educational effectiveness research. *International Journal of Educational Research*, 21, 121-231.
- Bosker, R.J., Kremers, E.J.J., & Lugthart, E. (1990). School and instructional effects on mathematics achievement. *School Effectiveness and School Improvement*, 1, 213-248.
- Bosker, R.J., & Sheerens, J. (1989). Issues in the interpretation of the results of school effectiveness research. *International Journal of Educational Research*, 13, 741-751.
- Bosker, R.J., & Scheerens, J. (1994). Alternative models of school effectiveness put to the test. *International Journal of Educational Research*, 21 (2), 159-180.
- Bosker, R.J., & Witziers, B. (1995, January). *School effects: Problems, solutions and a meta-analysis*. Paper presented at the 8th International Congress for School Effectiveness and Improvement, CHN, Leeuwarden, The Netherlands, January 3-6, 1995.
- Brandsma, H.P. (1993). *Characteristics of primary schools and the quality of education*. Groningen: RION
- Brookover, W.B., Beady, C., Flood, P., Schweitzer, J., & Wisenbaker, J. (1979). *School social systems and student achievement: Schools can make a difference*. New York: Praeger.
- Brophy, J. (1986). Teacher influences on student achievement. *American Psychologist*, 41, 1069-1077.
- Bryk, A.S., & Raudenbush, S.W. (1988). Toward a more appropriate conceptualization of research on school effects: A three-level hierarchical linear model. *American Journal of Education*, 97 (1), 65-108.
- Bryk, A.S., & Raudenbush, S.W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Caldwell, B.J. (1993). *Liberating leaders in schools of the future*. Paper presented at the conference of the Victorian Primary Principals Association, Melbourne, February 15, 1993.
- Caldwell, B.J., & Spinks, J.M. (1988). *The self-managing school*. London: The Falmer Press.
- Caldwell, B.J., & Spinks, J.M. (1992). *Leading the self-managing school*. London: The Falmer Press.
- Carroll, J.B. (1963). A model of school learning. *Teachers College Record*, 64, 723-733.
- Chapman, J., Angus, L., Burke, G., & Wilkinson, V. (Eds.) (1991). *Improving the quality of Australian schools*. Australian Education Review No. 33. Hawthorn, Vic: Australian Council for Educational Research.
- Cheng, Y.C. (1996). *School effectiveness and school-based management*. London: The Falmer Press.
- Chubb, J.E. (1988). Why the current wave of school reform will fail. *The Public Interest*, 90, 93-105.
- Chubb, J.E., & Moe, T.M. (1990). *Politics, markets and America's schools*. Washington, DC: The Brookings Institute.
- Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F., & York, R. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.
- Coleman, P., & Collinge, J. (1991). In the web: Internal and external influences affecting school improvement. *School Effectiveness and School Improvement*, 2 (4), 262-285.
- Creemers, B.P.M. (1994a). *The effective classroom*. London: Cassell.
- Creemers, B.P.M. (1994b). Effective instruction: An empirical basis for a theory of educational effectiveness. In D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield & C. Teddlie (Eds.), *Advances in school effectiveness research and practice* (189-205). Oxford: Pergamon Press.
- Creemers, B.P.M. (1994c). The history, value and purpose of school effectiveness studies. In D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield & C. Teddlie (Eds.), *Advances in school effectiveness research and practice* (9-23). Oxford: Pergamon Press.
- Creemers, B.P.M. (1997). *Effective schools and effective teachers: An international perspective*. Warwick, UK: University of Warwick, Centre for Research in Elementary and Primary Education.
- Creemers, B.P.M., & Reezigt, G.J. (1999). The role of school and classroom climate in elementary school learning environments. In H.J. Freiberg (Ed.), *School climate: Measuring, improving and sustaining healthy learning environments* (pp. 107-135). London: Falmer.
- Creemers, B.P.M., & Scheerens, J. (1994). Developments in the educational effectiveness research programme. *International Journal of Educational Research*, 21 (2), 125-140.
- Cuttance, P. (1992a). *The development of quality assurance reviews in the NSW education system*. Sydney: New South Wales Department of School Education.
- Cuttance, P. (1992b). Evaluating the effectiveness of schools. In D. Reynolds and P. Cuttance (Eds.), *School effectiveness: Research, policy and practice* (pp. 71-95). London: Cassell.
- Darling-Hammond, L. (1994). Performance-based assessment and educational equity. *Harvard Educational Review*, 64 (1), 5-29.
- Dawkins, J.S. (1988). *Strengthening Australia's schools: A consideration of the focus on the content of schooling*. Canberra, ACT: Australian Government Publishing Service.
- DES (1984). *School standards and spending: Statistical analysis - a further appreciation*. London: Department of Education and Science.
- Ecob, R., Evans, J., Hutchison, D., & Plewis, I. (1982). *Reading between the numbers: A critical guide to educational research*. London: BSSRS Publications Ltd.
- Edmonds, R.R. (1979a). Effective schools for the urban poor. *Educational Leadership*, 37 (1), 15-17.
- Edmonds, R.R. (1979b). Some schools work and more can. *Social Policy*, 9, 28-32.
- Forster, M., Masters, G.N., & Rowe, K.J. (2001). Measuring learning outcomes: Options and challenges in evaluation and performance monitoring (Rev. edn.). *Strategic Choices for Educational Reform; Module IV - Evaluation and Performance Monitoring*. Washington, DC: The World Bank Institute.
- Fraser, B.J., Walberg, H.J., Welch, W.W., & Hattie, J.A. (1987). Syntheses of educational productivity research. *International Journal of Educational Research*, 11, 145-252.
- Glass, G.V. (1992). Class size. In M.C. Alkin (Ed.), *Encyclopedia of educational research* (pp. 164-166). New York: Macmillan.
- Glass, G.V., Cahen, L.S., Smith, M.L., & Filby, N.N. (1982). *School class size: Research and policy*. Beverly Hills: Sage Publications.
- Goldstein, H. (1980). The statistical procedures. In B. Tizard (Ed.), *Fifteen thousand hours: A discussion*. Bedford Way Papers, No. 1: University of London Institute of Education.
- Goldstein, H. (1986). Multilevel mixed linear model analysis using iterative generalized least squares. *Biometrika*, 73 (1), 43-56.
- Goldstein, H. (1987). *Multilevel models in educational and social research*. London: Charles Griffin & Co. Ltd.
- Goldstein, H. (1995). *Multilevel statistical models*. London: Edward Arnold.
- Goldstein, H., & Lewis, T. (Eds.) (1996). *Assessment: Problems, developments and statistical issues*. Chichester: John Wiley & Sons Ltd.
- Goldstein, H., & Sammons, P. (1997). The influence of secondary and junior schools on sixteen year examination performance: A cross-classified multilevel analysis. *School Effectiveness and School Improvement*, 8, 219-230.
- Good, T.L., & Weinstein, R.S. (1986). Schools make a difference: Evidence, criticisms, and new directions. *American Psychologist*, 41, 1090-1097.
- Goodlad, J. (1983). A study of schooling: Some implications for school improvement. *Phi Delta Kappan*, 64 (8), 552-558.
- Graetz, B. (1990). Private schools and educational attainment: Cohort and generational effects. *Australian Journal of Education*, 34, 174-179.



- Grant, G. (1988). *The world we created at Hamilton High*. Cambridge, MA: Harvard University Press.
- Hanushek, E.A. (1979). Conceptual and empirical issues in the estimation of educational production functions. *Journal of Human Resources*, 14, 351-388.
- Hanushek, E.A. (1985). Production functions in education. In T. Husén & T.N. Postlethwaite (Eds.), *The international encyclopedia of education* (Vol. 7, pp. 4059-4069). Oxford: Pergamon Press.
- Hanushek, E.A. (1986). The economics of schooling: Production and efficiency in public schools. *Journal of Economic Literature*, 24, 1141-1177.
- Hattie, J.A. (1992). Measuring the effects of schooling. *Australian Journal of Education*, 36, 5-13.
- Hill, P.W. (1992). Commentary: The National Schools Project. *Schools Bulletin*, 2 (18), October 5, 1992.
- Hill, P.W., Brown, T., Rowe, K.J., & Turner, R. (1997). Establishing comparability of Year 12 school-based assessments. *Australian Journal of Education*, 41, 27-47.
- Hill, P.W., Holmes-Smith, P., & Rowe, K.J. (1993). *School and teacher effectiveness in Victoria: Key findings from Phase 1 of the Victorian Quality Schools Project*. Centre for Applied Educational Research, The University of Melbourne Institute of Education.
- Hill, P.W., & Rowe, K.J. (1996). Multilevel modeling in school effectiveness research. *School Effectiveness and School Improvement*, 7 (1), 1-34.
- Hill, P.W., & Rowe, K.J. (1998). Modeling student progress in studies of educational effectiveness. *School Effectiveness and School Improvement*, 9 (3), 310-333.
- Hill, P.W., Rowe, K.J., Holmes-Smith, P., & Russell, V.J. (1996). *The Victorian Quality Schools Project: A study of school and teacher effectiveness*. Report to the Australian Research Council (Volume 1 – Report). Centre for Applied Educational Research, Faculty of Education, The University of Melbourne.
- Hox, J.J. (1994). *Applied multilevel analysis*. Amsterdam: TT-Publikaties.
- Jencks, C., Smith, M., Acland, H., Bane, M. J., Cohen, D., Gents, H., Heynes, B., & Michelson, S. (1972). *Inequality: A reassessment of the effect of family and schooling in America*. New York: Basic Books.
- Jöreskog, K.G., & Sörbom, D. (1989). *LISREL 7: User's Reference Guide*. Chicago: Scientific Software International, Inc.
- Jöreskog, K.G., & Sörbom, D. (2002). *LISREL 8.53: Interactive LISREL for MS Windows 2000, Windows '95, Windows '98 and Windows NT*. Lincolnwood, IL: Scientific Software International, Inc.
- Kaplan, D. (2000). *Structural equation modeling: Foundations and extensions*. Advanced Quantitative Techniques in the Social Sciences Series (No. 10). Thousand Oaks, CA: Sage Publications.
- Kreft, I.G., de Leeuw, J. (1998). *Introducing multilevel modeling*. Thousand Oaks, CA: Sage.
- Lee, V.E., & Bryk, A.S. (1986). Effects of single-sex secondary schools on student achievement and attitudes. *Journal of Educational Psychology*, 78, 381-395.
- Lee, V.E., Dedrick, R.F., & Smith, J.B. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64, 190-208.
- Lesh, R., & Lamon, S.J. (Eds.) (1992). *Assessment of authentic performance in school mathematics*. Washington, DC: American Association for the Advancement of Science.
- Levine, D.U., & Lezotte, L.W. (1990). *Unusually effective schools: A review and analysis of research and practice*. Madison, WI: National Centre for Effective Schools Research & Development.
- Lightfoot, S.L. (1983). *The good high school*. New York: Basic Books.
- Marks, G. (2000). *The measurement of socioeconomic status and social class in the LSAY project*. Longitudinal Surveys of Australian Youth (LSAY), Technical Paper No. 14. Camberwell, VIC: Australian Council for Educational Research.
- Masters, G.N., & Forster, M. (1997a). *Literacy standards in Australia*. Canberra, ACT: Commonwealth of Australia.
- Masters, G.N., & Forster, M. (1997b). *Mapping literacy achievement: Results of the 1996 National School English Literacy Survey*. A report on behalf of the Management Committee for the National School English Literacy Survey. Canberra, ACT: Commonwealth Department of Employment, Education, Training and Youth Affairs.
- Masters, G.N., & Forster, M. (2002). *Accepting the challenge: assessing the moral and ethical outcomes of schooling*. Camberwell: Australian Council for Educational Research.
- Masters, G.N., Meiers, M., & Rowe, K.J. (2003). Understanding and monitoring children's growth. *Educare News*, 136 (May 2003), 52-53.
- McDonald, R.P. (1978). A simple comprehensive model for the analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology*, 31, 59-72.
- McDonald, R.P. (1994). The bilevel reticular action model for path analysis. *Sociological Methods and Research*, 22, 399-413.
- McGaw, B., Piper, K., Banks, D., & Evans, B. (1992). *Making schools more effective: Report of the Effective Schools Project*. Hawthorn, VIC: Australian Council for Educational Research.
- McNeil, L.M. (1986). *Contradictions of control: School structure and school knowledge*. London: Routledge & Kegan Paul.
- Metz, M.H. (1986). *Different by design: The context and character of three Magnet schools*. London: Routledge & Kegan Paul.
- Monk, D.H. (1992). Education productivity research: An update and assessment of its role in education finance reform. *Education Evaluation and Policy Analysis*, 14, 307-332.
- Mortimore, P. (1991). School effectiveness research: Which way at the crossroads? *School Effectiveness and School Improvement*, 2 (3), 213-229.
- Mortimore, P. (1992). Issues in school effectiveness. In D. Reynolds & P. Cuttance (Eds.), *School effectiveness: Research, policy and practice* (pp. 154-163). London: Cassell.
- Mortimore, P. (1995). *Effective schools: Current impact and future potential*. Director's Inaugural Lecture. Institute of Education, University of London.
- Mortimore, P., Sammons, P., Stoll, L., Lewis, D., & Ecob, R. (1985). *The Junior School Project, Part C*. London: Inner London Education Authority.
- Mortimore, P., Sammons, P., Stoll, L., Lewis, D., & Ecob, R. (1988). *School matters: The junior years*. Wells: Open Books.
- Moss, P.A. (1994). Can there be validity without reliability? *Educational Researcher*, 23, 5-12.
- Murphy, P. (1995). Sources of inequity: Understanding students' responses to assessment. *Assessment in Education*, 2, 249-270.
- Muthén, B. O. (1984). A general structural equation model with dichotomous, ordered categorical, and continuous latent variables. *Psychometrika*, 49, 115-132.
- Newman, F.M., Rutter, R.A., & Smith, M.S. (1989). Organizational factors affecting school sense of efficacy, community and expectations. *Sociology of Education*, 64, 221-238.
- Newmann, F.M., & Archbald, D.A. (1990). Organizational performance of schools. In P. Reyes (Ed.), *Teachers and their workplace: Commitment, performance and productivity*. Newbury Park, CA: Sage Publications.
- Newmann, F.M., & Archbald, D.A. (1992). The nature of authentic academic achievement. In H. Berlak, F.M. Newmann, E. Adams, D.A. Archbald, T. Burgess, J. Raven, & T.A. Romberg (Eds.), *Toward a new science of educational testing and assessment* (pp. 71-83). Albany: State University of New York Press.
- Nisbet, J. (1993). Introduction. In OECD, *Curriculum reform: Assessment in question*. Paris: Organisation for Economic Cooperation and Development.
- Nuttall, D.L., Goldstein, H., Prosser, R., & Rasbash, J. (1989). Differential school effectiveness. *International Journal of Educational Research*, 13, 769-776.
- OECD (1986). *Education and training for manpower development*. Paris: Organisation for Economic Cooperation and Development.



- OECD (1989). *Schools and quality: An international report*. Paris: Organisation for Economic Cooperation and Development.
- OECD (1993). *Curriculum reform: Assessment in question*. Paris: Organisation for Economic Cooperation and Development.
- Purkey, S.C., & Smith, M.S. (1983). Effective schools: A review. *Elementary School Journal*, 83 (4), 427-452.
- Ralph, J.H., & Fennessey, J. (1983). Science or reform: Some questions about the effective schools models. *Phi Delta Kappan*, 64 (10), 689-695.
- Rasbash, J., Browne, W., Healy, M., Cameron, B., & Charlton, C. (2002). *MLwiN (Version 1.10.007): Interactive software for multilevel analysis*. Centre for Multilevel Modelling, Institute of Education, University of London.
- Rasbash, J., Woodhouse, G., Yang, M., & Goldstein, H. (1996). *MLn: Software for multilevel analysis. Command Reference (Version 1.0a)*. London: Institute of Education, University of London.
- Raudenbush, S.W. (1989). The analysis of longitudinal, multilevel data. *International Journal of Educational Research*, 13, 721-740.
- Raudenbush, S.W., & Willms, J.D. (Eds.). (1991). *Schools, classrooms and pupils: International studies of schooling from a multilevel perspective*. New York: Academic Press.
- Resnick, L.B., & Resnick, D.P. (1992). Assessing the thinking curriculum. In B.R. Gifford & M.C. O'Connor (Eds.), *Changing assessments: Alternative views of aptitude, achievement and instruction* (pp. 37-75). Boston: Kluwer Academic Publishers.
- Reynolds, D., Creemers, B.P.M., Nesselrodt, P.S., Schaffer, E.C., Stringfield S., & Teddlie C. (Eds.) (1994). *Advances in school effectiveness research and practice*. Oxford: Pergamon Press.
- Reynolds, D., Hargreaves, A., & Blackstone, T (1980). Review symposium of Rutter et al.'s *Fifteen thousand hours*. *British Journal of Sociology of Education*, 1, 207-219.
- Reynolds, D., Hopkins, D., & Stoll, L. (1993). Linking school effectiveness knowledge and school improvement practice: Towards a synergy. *School Effectiveness and School Improvement*, 4 (1), 37-58.
- Reynolds, D., & Packer, A. (1992). School effectiveness and school improvement in the 1990s. In D. Reynolds & P. Cuttance (Eds.), *School effectiveness: Research policy and practice* (pp. 171-187). London: Cassell.
- Reynolds, D., Teddlie, C., Creemers, B.P.M., Cheng, Y.C., Dundas, B., Green, B., Epp, J.R., Hauge, T.E., Schaffer, E.C., & Stringfield, S. (1994). School effectiveness research: A review of the international literature. In D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield & C. Teddlie (Eds.), *Advances in school effectiveness research and practice* (pp. 25-51). Oxford: Pergamon Press.
- Rosenholtz, S.J. (1985). Effective schools: Interpreting the evidence. *American Journal of Education*, 94, 352-358.
- Rowe, K.J. (1991). The influence of reading activity at home on students' attitudes towards reading, classroom attentiveness and reading achievement: An application of structural equation modeling. *British Journal of Educational Psychology*, 61 (1), 19-35.
- Rowe, K.J. (1995). Factors affecting students' progress in reading: Key findings from a longitudinal study. *Literacy, Teaching and Learning*, 1 (2), 57-110.
- Rowe, K.J. (1996). Assessment, performance indicators, league tables, value-added measures and school effectiveness: Issues and implications. *IARTV Seminar Series*, No. 58, October, 1996.
- Rowe, K.J. (1997a). *Advanced structural equation modeling: An integrated course* (2nd ed.). The 13th ACSPRI Summer Program in Social Research Methods and Research Technology, The Australian National University. Melbourne: Centre for Applied Educational Research, The University of Melbourne.
- Rowe, K.J. (1997b). Factors affecting students' progress in reading: Key findings from a longitudinal study. In S.L. Swartz & A.F. Klein (Eds.), *Research in Reading Recovery* (pp. 53-101). Portsmouth, NH: Heinemann.
- Rowe, K.J. (2001a). Educational performance indicators. In M. Forster, G.N. Masters and K.J. Rowe, *Measuring learning outcomes: Options and challenges in evaluation and performance monitoring* (Rev. edn.; pp. 2-20). Strategic Choices for Educational Reform; Module IV – Evaluation and Performance Monitoring. Washington, DC: The World Bank Institute.
- Rowe, K.J. (2002a). Estimating interdependent effects among multilevel composite variables in psychosocial research: An annotated example of the application of multilevel structural equation modeling. In N. Duan & S. Reise (Eds.), *Multilevel modeling: Methodological advances, issues and applications* (pp. 1-28). Hillsdale, NJ: Lawrence Erlbaum & Associates.
- Rowe, K. J. (2003a). School and teacher effectiveness: Implications of findings from the Australian and international evidence-based research. In B. Shedvin (Ed.), *Crises in Australian education*. Melbourne, Vic: University of Melbourne Press.
- Rowe, K.J. (2003b). *Practical multilevel analysis with MLwiN & LISREL: An integrated course* (Revised edition). 19th ACSPRI Summer Program in Social Research Methods and Research Technology, The Australian National University. Camberwell, Vic: Australian Council for Educational Research [ISBN 0 86431 357 8].
- Rowe, K.J., & Hill, P.W. (1994, January). *Multilevel modeling in school effectiveness research: How many levels?* Paper presented at the 7th International Congress for School Effectiveness and Improvement, The World Congress Centre, Melbourne, January 3–6, 1994.
- Rowe, K.J., & Hill, P.W. (1996). Assessing, recording and reporting students' educational progress: The case for 'Subject Profiles'. *Assessment in Education*, 3 (3), 309-352.
- Rowe, K.J., & Hill, P.W. (1998). Modeling educational effectiveness in classrooms: The use of multilevel structural equations to model students' progress. *Educational Research and Evaluation*, 4 (4), 307-347.
- Rowe, K.J., Hill, P.W., & Holmes-Smith P. (1995). Methodological issues in educational performance and school effectiveness research: A discussion with worked examples. *Australian Journal of Education*, 39 (3), 217-248.
- Rowe, K.J., Holmes-Smith, P.D., & Hill, P.W. (1993, November). *The link between school effectiveness research, policy and school improvement: Strategies and procedures that make a difference*. Paper presented at the 1993 Annual Conference of the Australian Association for Research in Education, Fremantle, W.A., November 22-25, 1993.
- Rowe, K.J., & Rowe, K.S. (1992a). The relationship between inattentiveness in the classroom and reading achievement (Part A): Methodological Issues. *Journal of the American Academy of Child and Adolescent Psychiatry*, 31 (2), 349-356.
- Rowe, K.J., & Rowe, K.S. (1992b). The relationship between inattentiveness in the classroom and reading achievement (Part B): An Explanatory Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 31 (2), 357-368.
- Rowe, K.J., & Rowe, K.S. (1999). Investigating the relationship between students' attentive-inattentive behaviors in the classroom and their literacy progress. *International Journal of Educational Research*, 31 (1/2), 1-138 (Whole Issue). Elsevier Science, Pergamon Press.
- Rowe, K.J., & Rowe, K.S. (2000b). Literacy and behavior: Preventing the shift from what should be an 'educational issue' to what has become a major 'health issue'. *International Journal of Behavioral Medicine*, 7 (Supp. 1), 81-82.
- Rowe, K.J., Rowe, K.S. (2003, January). *The 'myth' of school effectiveness – especially for boys*. Paper presented at the 16th International Congress for School Effectiveness and Improvement, Sydney Convention Centre, January 5–8, 2003.
- Rowe, K.J., Turner, R., & Lane, K. (1999, December). *The 'myth' of school effectiveness: Locating and estimating the magnitudes of major sources of variation in students' Year 12 achievements within and between schools over five years*. Paper presented at the 1999 AARE-NZARE Joint Conference of the Australian and New Zealand Associations for Research in Education, Melbourne Convention Centre, November 29 – December 2, 1999 (Index Code: ROW99125).
- Rutter, M., Maughan, B., Mortimer, P., Ouston, J., & Smith, A. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. Somerset: Open Books.

- Sammons, P. (1996). Complexities in the judgement of school effectiveness. *Educational Research and Evaluation*, 2 (2), 113-149.
- Scheerens, J. (1992). *Effective schooling: Research, theory and practice*. London: Cassell.
- Scheerens, J. (1993). Basic school effectiveness research: Items for a research agenda. *School Effectiveness and School Improvement*, 4 (1), 17-36.
- Scheerens, J. (1995, January). *School effectiveness as a research discipline: Some comments with country report*. Paper presented at the eighth annual International Congress for School Effectiveness and Improvement, CHN, Leeuwarden, The Netherlands, January 3-6, 1995.
- Scheerens, J., & Bosker, R. (1997). *The foundations of educational effectiveness*. Oxford: Pergamon.
- Scheerens, J., & Creemers, B.P.M. (1989). Conceptualizing school effectiveness. *International Journal of Educational Research*, 13 (7), 691-706.
- Scheerens, J., Vermeulen, C.J.A.J., & Pelgrum, W.J. (1989). Generalizability of instructional and school effectiveness indicators across nations. *International Journal of Educational Research*, 13 (7), 789-799.
- Shavelson, R.J. (Guest Editor) (1994). Performance assessment. *International Journal of Educational Research*, 21, 233-350.
- Slade, M. (2002). *Listening to the boys: Issues and problems influencing school achievement and retention*. Series: Flinders University Institute of International Education Research Collection, Number 5. Adelaide, SA: Shannon Research Press.
- Slavin, R.E. (1994). Quality, appropriateness, incentive, and time: A model of instructional effectiveness. *International Journal of Educational Research*, 21 (2), 141-157.
- Slavin, R.E. (1996). *Education for all*. Lisse: Swets & Zeitlinger.
- Steedman, J. (1983). *Progress in secondary schools*. London: National Children's Bureau.
- Stringfield, S. (1994). A model of elementary school effects. In D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield & C. Teddlie (Eds.), *Advances in school effectiveness research and practice* (pp. 153-187). Oxford: Pergamon Press.
- Taylor, C. (1994). Assessment for measurement or standards: The peril and promise of large-scale assessment reform. *American Educational Research Journal*, 31, 231-262.
- Teddlie, C. (1994). The integration of classroom and school process data in school effectiveness research. In D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield & C. Teddlie (Eds.), *Advances in school effectiveness research and practice* (pp. 111-132). Oxford: Pergamon Press.
- Teddlie, C., & Stringfield, S.C. (1993). *Schools make a difference: Lessons learned from a 10-year study of school effects*. New York: Teachers College Press.
- Tymms, P., Merrell, C., & Henderson, B. (1997). The first year at school: A quantitative investigation of the attainment and progress of pupils. *Educational Research and Evaluation*, 3, 101-118.
- Watts, L. (2003, January). *Advantaging the disadvantaged*. Keynote address presented at the International Congress for School Effectiveness and Improvement, Sydney Convention Centre, January 5-8, 2003.
- Wigdor, A.K., & Garner, W.R. (Eds.). (1982). *Ability testing: Uses consequences and controversies*. Washington, DC: Academic Press.
- Wiggins, G. (1989). Teaching to the (authentic) test. *Educational Leadership*, April, 41-47.
- Williams, T.H., & Carpenter, P.G. (1990). Private schooling and public achievement. *Australian Journal of Education*, 34, 3-24.
- Williams, T., & Carpenter, P.G. (1991). Private schooling and public achievement in Australia. *International Journal of Educational Research*, 15 (5), 411-431.
- Wilson, B.L., & Corcoran, T. (1988). *Successful secondary schools: Visions of excellence in American public education*. London: Falmer Press.