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# School Effectiveness and Equity: Making Connections

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**Introduction**

Over the last decade globalisation has been recognised, with environmental change and population growth as one of the major drivers of social and cultural change. The growth of the internet has dramatically affected the communication of information and ideas and played a major role in this change process. Increased awareness of the interdependence of societies, and the destabilising impact of poverty and environmental degradation is leading to a greater focus on promoting equity as a policy goal for many governments and trans-national organisations (UN, OECD, World Bank etc).

Education is both affected by and influences the process of globalisation in different ways in different contexts.  In many societies the prime concern is to increase access to education and IT, to achieve the goal of universal primary education for all children and, in particular, improve the education prospects of girls, given the high proportion of older women who are illiterate. The current gender gap in illiteracy for women over 60 in 105 less developed countries is projected to reduce from 28% to 25%r between 2000 and 2010 but still 55% of women and 30% of older men will remain illiterate[1] The education of girls in particular is seen to promote health goals for children, reduce population growth and economic prosperity. In other contexts the concern is to raise quality and standards, increase participation rates in higher education and promote life long learning.

Raising standards of achievement is seen as fundamental to economic performance and the promotion of democratic engagement. Education reform has moved centre stage as many governments embark on substantial programs of reform in a bid to modernise their education systems to face the challenges of the 21st century, making schools more effective and demanding greater returns for their investment in education in terms of student achievement levels.[2] International surveys of student achievement such PIRLS, TIMSS and PISA receive considerable media coverage with the creation of 'league tables' of country results. They have become increasingly influential with governments concerned to boost their average attainment levels and reduce the achievement gap between different groups of students (boys and girls, those from low compared with high SES, minority ethnic groups). The political impact of low performance has been considerable, for example in both Denmark and Germany reviews of the education system were conducted in response to poor performance in PISA 2000 and interestingly both countries adopted a SER framework to inform their reviews. Most education reform strategies, however, have not made explicit use of the school effectiveness and improvement  (SESI) knowledge base, although in the UK, particularly in England there has been increasing interest in SESI approaches during the last decade.

What are the  messages from school effectiveness research for practitioners and policy makers concerned to create more successful schools? Many leading researchers in the field have addressed this topic (Creemers, Mortimore, Reynolds, Scheerens, Teddlie, Townsend).  This paper explores the contribution SER studies have made to our understanding of school performance and its implications for school improvement for those engaged in the  search to promote quality in education and raise standards in the 21st century. The field's strong links with the study of equity in education are also relevant given the increasing attention paid to education as a means of promoting wider policies of social inclusion and reducing the achievement gap in many countries and the paper

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[1] http://www.un.org/esa/population/publications/worldageing19502050/pdf/91chapterv.pdf
[2] Hopkins & Levin 2000

examines some of the findings on the characteristics of successful or improving schools in challenging contexts.

**School effectiveness and equity**
Attempts to define equality and equity in education draw on notions of social justice and social inclusion.  Four aspects are relevant according to :
- Formal equality of access/provision
- Equality of circumstance
- Equality of participation
- Equality of outcome
      After Gillborn and Youdell (2000)

Since its inception the International Congress for School Effectiveness and Improvement (ICSEI) has brought together researchers, practitioners and policy makers to co-contstruct knowledge about the study and processes of effective and improving schools in different international contexts and equity considerations have remained a key focus of many studies.

In most systems students from disadvantaged backgrounds (especially those from minority ethnic backgrounds, and those experiencing a range of social disadvantages such as low income, parents lacking qualifications, unemployed or in low SES work, poor housing etc) are more likely to experience educational failure or under-achievement, though the equity gap in achievement is wider in some systems than others.  Multiple disadvantage can have a cumulative effect while  inter-generational transmission of disadvantage is illustrated by the concept of the  'cycle of disadvantage'. The reasons for addressing school failure include:
- philosophical/ethical – to promote fairness and improve the quality of life and opportunities for all groups, as well as to encourage positive attitudes to learning and promote self-esteem and self-efficacy;
- political – to promote social cohesion and inclusion and empower young people as active and informed citizens to participate in a successful democracy;
- economic – to promote future prosperity for individuals and families, prevent the waste of talent, reduce crime and avoid the social and economic burden on Government.

It is difficult to pin point the 'start' of SER exactly since many different sub-disciplines have studied schools and classrooms from a variety of perspectives.[3]  In the US and UK the chief catalyst seems to have been the publication of influential studies during the 1960s to early 1970s which claimed that the particular school attended by a student had little influence on their educational outcomes in comparison with factors such as IQ, 'race', and socio-economic status (SES).[4]  The focus was thus on structural inequalities rather than on the influence of schools. These studies suffered from a number of limitations and subsequent research conducted in the US, UK and a growing number of countries has pointed to the existence of significant  school effects, while acknowledging the important influence of student background.[5]

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3 For more detailed discussions of school effectiveness  see United States Department of Education (1986);;  Northwest Educational Research Laboratory (1990); Firestone (1991); Mortimore (1991, 1995, 1998); Scheerens (1992); Creemers (1994); Reynolds *et al* (1994); Goldstein (1997;1998); Scheerens & Bosker (1997); Gray *et al* (1999); Sammons (1999), Townsend et al (1999), Teddlie  & Reynolds (2000), Wendell (2000)
[4] Coleman et al (1966) and Jencks *et al.* (1972).
[5] (Edmonds, 1979; Goodlad et al, 1979; Rutter *et al* 1979; Madaus et al, 1979; Willms & Cuttance, 1985; Mortimore et al, 1988; Smith & Tomlinson, 1989).

The last decade has seen a rapid growth in research and in policy and practitioner interest in school effectiveness and its potential as a catalyst for school improvement. Government policy in the UK and elsewhere has sought to draw on school effectiveness and school improvement research in attempts to raise educational standards.[6] The Every Child Matters agenda in the UK and  No Child Left Behind  in the US suggest a new policy commitment o promote greater equity and greater recognition of the need for additional resources and better strategies to enhance the life chances of vulnerable groups. This paper attempts to summarise the key findings from SER and their implications for improvement. It thus seeks to take stock of current knowledge and how we can improve existing schools rather than speculating about radical new forms of schooling and learning or school for the Third Millenium.

**The question of values**
The question of values in education, the purposes of schooling, the quality of students' educational experiences and of what constitutes a 'good school' rightly remain the subject of much argument and are unlikely to be resolved easily.[7] Views often differ amongst practitioners, parents and students, as well as amongst policymakers, and respect for diversity of opinion is an important feature of democratic society.

Critics of school effectiveness have argued that, if the teacher-learning relationship is 'right', then the educational outcomes will take care of themselves.  Against this the need to gauge learning (which cannot be observed) by measuring its outcomes in some way, and to investigate **how** these outcomes are influenced by teachers' classroom practices and by wider features of school processes over several years, has been argued by proponents of SER.[8] Indeed, the very term 'right' is in my view essentially problematic, since different groups of practitioners, parents and students may quite justifiably have very different views, as noted above.  Fitness for purpose surely needs to be explored before we can judge what is 'right'.  How can we assess what is 'right' without studying the impact of different approaches to classroom practice on students?

SER is most appropriately seen as a method of increasing our understanding of school and classroom processes and the way these can influence students' educational outcomes.  Such research provides much needed empirical evidence, which should assist in the essential process of the evaluation and critique of classroom practice and educational policy.[9]

**Section 1: Measuring School Effectiveness and Identifying Effective Schools**

The central focus of SER concerns the idea that,  *'schools matter, that schools do have major effects upon children's development and that, to put it simply, schools do make a difference'* [10] How can we try to measure the influence of schools, and by implication of teachers, on their students?  This deceptively simple question lies at the heart of SER. In many ways SER reflects wider debates within the social and educational research communities about the merits and limitations of empirical research.

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[6] (Barber,1999),
[7] (White & Barber, 1997).
[8] For  further discussioo of these issues see the criticism of  SER  by (Elliott, 1996) and the response by Sammons & Reynolds (1997)
[9] Mortimore & Sammons (1997).
[10] Reynolds & Creemers (1990, p1).

School effectiveness research seeks to disentangle the complex links between the student's 'dowry' (the mix of abilities, prior attainments and personal and family attributes) which any young person brings to school, from those of their educational experiences at school and to explore the way these jointly influence their later attainment, progress and development. The main foci are: the impact of social institutions (including size of school effects); characteristics that promote students' educational outcomes; the influence of contexts on outcomes and processes, the processes of institutional change; and the long term impact f schooling on life chances.

SER seeks to provide empirical evidence to assist the evaluation and critique of classroom practice and educational policy.[11] The field offers the prospect of more appropriate and 'fairer' comparisons of schools, contributes to increased practitioner and policy understanding about the processes that promote effectiveness and can thus help to stimulate improvement.

The key features of SER methodology are that it:
- is mainly quantitative, but case studies and mixed methods approaches are increasing in importance also;
- values reliability and replicability;
- seeks to make generalisations;
- works in partnership with practitioners;
- values the views and perceptions of teachers, students and parents.

The use of quantitative methods, however, does not mean that SER is deterministic or mechanistic in nature. Indeed, it stresses the probabilistic nature of the findings and highlights the need to measure change over time and the impact of context. The perceptions and views of those involved (students, parents or teachers) are vital keys, that help to illuminate our understanding of the experience of schools and the way in which school culture can develop and influence both staff and students.

**Aims and goals of effectiveness research**
'Effectiveness is not a neutral term. Defining the effectiveness of a particular school always requires choices among competing values' and that the 'criteria of effectiveness will be the subject of political debate'[12] Early SER studies in the US were committed to the belief that children of the urban poor could succeed in school.[13] Such early SER research incorporated explicit aims concerned with equity and excellence and focused on the achievement in basic skills (reading and numeracy) of poor/ethnic minority children in elementary schools.

More recent research has studied broader samples of schools and is concerned with the concept of assessing progress over time (typically over a school year or several years), rather than cross-sectional 'snapshots' of achievement at a given point in time. This broadens the clientele to include all students, not just the disadvantaged. In addition to academic achievement more attention is now paid to social and affective outcomes such as attendance, attitudes, behaviour, and self-esteem.[14]

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[11] See Mortimore *et al (*1988); Harris, Jamieson & Russ (1995); Sammons, Thomas & Mortimore (1997); Reynolds (1997); Gray (1998), Hill & Rowe, (1998), Grosin (1995, 2002).
[12] Firestone (1991) p 2.
[13] For example, Edmonds (1979) or Goodlad *et al.* (1979)
[14] For examples of SER studies which have explored social and affective outcomes as well as cognitive ones see Rutter *et al* (1979); Mortimore *et al (*1988); Smyth (1999), Thomas et al (2001).

SER has provided a powerful critique of the publication of raw league tables of examination or assessment results to monitor school performance and encourage public accountability. The crucial importance of school intake is recognised. SER specifically seeks to control statistically for intake differences between schools before any comparisons of effectiveness are made.[15]

The major flaw in using raw test or examination results to make judgements about school performance is that they take no account of differences between schools in the talents and motivations of individual students, the nature of their families and communities. 'Natural justice demands that schools are held accountable only for those things they can influence (for good or ill) and not for all the existing differences between their intakes' [16] Exploring the impact of such intake factors is crucial to attempts to promote social inclusion and widen the social distribution of achievement. In value added studies of effectiveness the progress of all students 'counts' in evaluating school performance.

### Definitions of effectiveness

An effective school has been defined as *one in which students progress further than might be expected from consideration of its intake. An effective school thus **adds extra value** to its students' outcomes, in comparison with other schools serving similar intakes*. In order to assess value added, measures of individual student's prior attainment are needed to provide a baseline against which subsequent progress can be assessed. Other factors such as gender, socio-economic status, mobility and fluency in the majority language used at school have also been shown to affect progress. In addition to prior attainment, SER studies seek to include such factors in assessing the impact of schools. [17]

The promotion of social inclusion requires performance and monitoring systems that are fair to schools serving the most disadvantaged communities and receiving higher proportions of challenging students. Better ways of identifying and recognising the progress and achievements of these groups of students are required without lowering expectations. SER provides models for performance feedback, which can provide better estimates of school performance, and especially the potential to focus on effects for different student groups. In England after much initial policy distrust of the use of statistical methods to adjust for the influence of prior attainment and other student intake characteristics, study the value added by schools is now regarded as the fairest method of judging school performance and such measures are published annually for all schools.

### Size of school effects

A number of studies have sought to quantify the size of school effects. In a systematic meta-analysis it was concluded that net effects (after control for intake) are larger for mathematics than language, and largest for studies based on composite measures of achievement. Effect sizes are generally found to be greater in studies of developing countries. On average schools account for around 5-18% of the achievement differences between students after control for initial differences. This research also indicates that

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[15] A number of SE researchers have demonstrated the need to make adequate control for prior attainment and other intake characteristics in comparing school performance and, in particular, shown that making fine distinctions (rank order league tables) is statistically invalid ( Nuttall, 1990; Goldstein *et al* 1993; McPherson 1992; Scheerens, 1992; Mortimore 1991b; Mortimore, Sammons & Thomas 1994; Sammons, 1996).

[16] Nuttall (1990), p 25.

[17] Saunders (1999) provides a detailed analysis of the development of the value-added concept.

classroom level or teacher effects tend to be substantially larger than school effects.[18] Teacher effects emerge most strongly in studies conducted across one school year and in primary school studies. For example in Australia the percentage of variance in value added measures of achievement put the class contribution at 55% for mathematics and 45% in English at the primary level.[19] The combined school and teacher effect may be between 15-50% depending on the outcome and sample studied.

A number of critics have argued that these differences, especially school effects are relatively 'trivial' and thus assume school has little real impact compared with student background. This misses a crucial point, the school or class influence is calculated as a % of variance at the individual student level. Such criticisms fail to recognise that even low income or SES account for only a small proportion of I variance in student attainment (3-8% typically). Gender accounts for a lower percentage than these measures . Of course this does not mean that SES, income or gender are unimportant, just that there is greater variation within than between social groups in achievement, knowing a particular student' SES, income or gender is not a very good predictor of his or her attainment.

At the group level, of course, SES differences in average achievement are large and account for much of the difference between schools in aw attainment measures, but this does not mean that school effects are unimportant.

Using particularly detailed information about students' background characteristics, Sammons *et al* (1993) demonstrate that, taken together, background factors (age, gender, ethnicity, fluency in English, FSM, & parents' occupational status), accounted for 20.6% of total variance in primary students' reading scores in year 5 , and for mathematics the figure is lower at around 11%. In this study the school effect was found to account for 8-9% of the total variance in these outcomes. When progress is considered the school effect is much larger than the influence of background.[20]

As well as considering the school level variance in value added studies of relative progress (through intra-school correlations and % variance accounted for) interesting new approaches are seeking to xplore the absolute effect of schools through studies of the impact of different starting ages and influence of an extra year in school and through the assessment of impact via studying students progress in out of school learning (in the summer) compared with term time learning .[21]

**More and less effective outliers**
Another way of considering the size of school effects is to consider the difference between *outliers* (significantly more or less effective schools) in terms of their impact on average attainment in public examinations. A large longitudinal study of secondary schools in Lancashire showed that, for a student of average prior attainment at age 11 years, the difference in total GCSE points score was 14 points (equivalent to the difference between obtaining 7 grade B or 7 grade D GCSEs) between the most and least effective schools.[22] In the *Improving School Effectiveness* study in Scotland, the difference reported was equivalent to six Standard Grades at Grade 3 rather than six at Grade 4.[23] It should be noted that

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[18] See Scheerens & Bosker (1997)
[19] Hill (1997)
[20] Sammons et al 1993
[21] Luyten (2006), Downey, von Hippel & Hughes (2006)
[22] Thomas & Mortimore 1996
[23] MacBeath & Mortimore 2000

Grade C at GCSE and Grade 3 at Standard Grade are seen as necessary for HE or Advanced FE in the UK.

The need to interpret estimates of individual school's effects (as in 'outlier' studies of highly effective or ineffective schools) by reference to the confidence limits associated with such estimates is now widely recognised.[24] Multilevel analysis can distinguish between schools (or classes) where students' progress (or other outcomes) is significantly better or significantly poorer than predicted on the basis of their prior attainment and intake characteristics.

Studies suggest that the proportion of schools identified as significant outliers can vary between depending of the outcome can vary between 15% to 33% of those included in an analysis. For example, *Forging Links: Effective Departments and Effective Schools*, a three year study of academic effectiveness based on secondary schools' GCSE results (national public examinations taken at age 16 years) in London, showed that, on average, 30 per cent of schools could be identified as either as significant positive or significant negative outliers in a particular years, using value added methods. A small number showed internal variation some significant positive and some significant negative results for different subject departments, around 20 per cent[25] Only a minority of schools were identified as significant and stable outliers over several years (around 17% in the *Forging Links* study ).[26] For most h outlier schools the difference in attainment between the more and the least effective was equivalent to 10 or more GCSE points (the difference between 5 Grade B rather than Grade D points for a student with average prior attainment. Such differences are both educationally and statistically significant in enhancing or by contrast depressing future education and employment prospects.

While patterns in overall examination results may be fairly stable from one year to another, subject results can vary more from year to year. It is therefore important to monitor outcomes over several years (3 is the minimum to identify trends) to establish whether schools or departments are improving, declining or fairly stable in terms of effectiveness.

Table 1 shows results from the *Improving School Effectiveness Project* conducted in Scotland.[27] This is based on a value added analysis of reading and mathematics results for 44 primary schools. The results provide estimates of school effectiveness based on measures of pupil progress over two school years (from P4 to P6, age 8+ to 10+ years) taking account of prior attainment in reading and mathematics and pupil-level background characteristics (including age, gender, FSM, whether child receives Learning Support or has a Record of Need, whether English was a second language and the % pupils eligible for free meals). Schools were divided into four groups, significant positive outlier, positive effect but not an outlier, negative effect but not an outlier and significant negative outlier. More schools were identified as significant outliers (pupils' progress significantly better or worse than expected given their prior attainment and background) for mathematics.

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[24] See Goldstein *et al* (1993); Sammons *et al* (1994) Thomas & Mortimore (1996)., Gray et al, 1996.
[25] Sammons, Thomas & Mortimore (1997)
[26] Secondary school studies which explore trends in academic effectiveness are reported by Sammons, Thomas & Mortimore (1997); Gray et al (1999) , Smyth (1999).
[27] MacBeath & Mortimore (2001)

**Table 1: Example of differences in effectiveness from *Improving SchoolEffectiveness Project*: primary schools' AAP results**

| Value added effectiveness category | AAP Mathematics | | AAP Reading | |
|---|---|---|---|---|
| | N | % | n | % |
| Positive Outlier (p<0.05)  * | 10 | 23 | 5 | 11 |
| Positive (non-significant) | 7 | 16 | 17 | 39 |
| Negative (non-significant) | 15 | 35 | 19 | 43 |
| Negative Outlier (P<0.05) * | 11 | 26 | 3 | 7 |

N of schools= 44 for reading, 43 for mathematics, * p<0.05

Outlier schools are those where progress was significantly better or worse than predicted given pupils' prior attainments and characteristics (p<0.05). It can be seen that more schools were outliers in maths (49%) than in reading (18%). SER tends to find larger school or class in some subject areas such as maths or science that are primarily learnt at school.

In a project involving over 100 primary schools in Surrey it was found that, in three quarters of the primary schools, student progress over Key Stage 1 (from primary school entry at rising 5 years to  end of Year 2 at age 7 years plus) was significantly better or, by contrast, significantly below that predicted on the basis of prior attainment and intake characteristics in at least one of three curriculum areas assessed (English, mathematics and science). Most schools had an area of  strength or one of possible weakness, but few were highly effective (or at the opposite end highly ineffective) across the three   core curriculum areas English, maths and science. Nonetheless, the typical pattern was either a broadly positive, or a broadly negative profile.

**Choice of outcomes**
The concept of what constitutes a 'good' school is highly problematic. The questions of values in education, the purposes of schooling, the quality of students' educational experiences remain the subject of much argument.[28]  Rather than attempting to define 'good', and thus by implication 'bad' schools, SER research focuses deliberately on the narrower concept of effectiveness which concerns the achievement of educational goals using specific measures of   cognitive progress, social or affective outcomes.  It is argued that *effectiveness is a necessary but not sufficient condition for any acceptable definition of a 'good' school.* TA range of possible goals for effective schools has  been identified.[29]

- Literacy
- Numeracy
- Other academic goals (eg science  history)
- Behaviour
- Attendance

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[28] See OECD (1989); Mortimore & Stone (1990); Silver (1994); Gray & Wilcox (1995).
[29] Townsend (2002)

- Self concept
- Citizenship
- Employment
- Other educational goals (eg values, attitudes)
- Community goals

A broad range of outcomes cognitive, social and affective is needed to provide a satisfactory picture of school effects. Evidence indicates that social and affective measure such as attendance, attitudes, behaviour, motivation and self-esteem can act as intermediate outcomes which affect, and can themselves be influenced by students' attainment and progress. Thus the promotion of better cognitive outcomes should never be seen as an alternative or in some way a barrier to concern with social and affective outcomes or vice versa.[30] Relationships may be reciprocal. Improving a student's attainment and confidence as a learner can improve self-esteem, engagement and attitudes to school and vice versa. Young students with low attainment are more at risk of developing poor attendance, poor self esteem and behaviour as they grow older and move into secondary school, thus early intervention is vital. While the relationships between school effects on social affective and academic outcomes may not be strong (except for behaviour) correlations are in a significant positive direction or non-significant.[31] A recent discussion argues that 'schools which are among the most effective in cognitive outcomes were among the most effective in that other domains'.[32]

The importance of school for emotional well being is receiving attention. Students' perceptions or feelings of school 'connectedness' have been shown to account for 13-18% of the variation in adolescent emotional distress.[33] Other US research has drawn attention to the relationship between students' sense of their school as a community and lower involvement in 'problem behaviours' such as drug use and delinquent behaviour. Such studies have concluded that where schools are experienced as communities students' psychological resiliency may be enhanced.[34]

**Equity, complexity and effective schools**

There is growing awareness of the issue of complexity in the study of school effectiveness.[35] The question of whether schools are equally effective for different groups of students, girls or boys, those from different socio-economic or ethnic groups is vital to the concept of equity in education. The study of differential effectiveness addresses such concerns.[36] The question of internal variations in secondary schools' academic effectiveness has also been explored by measuring departmental variations in different subject results and variations in the progress of

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[30] Rutter et al (1979); Mortimore et al (1988); Louis & Miles (1992); Lee et al (1993; Smyth (1999), Opdenakker & Van Damm (2000).
[31] Sammons (1996)
[32] Kyriakides (2006) p 20
[33] Resnick et al (1997).
[34] Battistich & Hom (1997)
[35] As work by Sammons (1996, 1999), Scheerens & Bosker, (1997) Goldstein, (1998) and Gray (1998) has illustrated. Methodological considerations have been reviewed by Scheerens (1992) and Creemers (1994), Hill & Rowe (1996);Goldstein (1997; 1998); Creemers & Reezigt (1997) Teddlie & Reynolds (2000).
[36] Mortimore et al (1988); Tizard et al (1988); Smith & Tomlison (1989); Goldstein et al (1993).

different groups. It is concluded that effectiveness is best seen as **retrospective, relative concept** that is both outcome and time specific. For secondary schools the term needs to be qualified to incorporate both school and departmental effectiveness.[37] Results also point to the importance of examining trends in effectiveness over time.

Judgements about school effectiveness need to address three key questions essential to consideration of what is meant by an inclusive school and to the promotion of social justice:

- **Effective in promoting which outcomes?**    **the what of effectiveness**
- **Effective for which student groups?**    **the who of effectiveness**
- **Effective over what time period?**    **the when of effectiveness**

These questions provide a sound basis for monitoring a school's success in promoting equity and equal opportunities for all its students. They also provide a good focus for school improvement planning and evaluation.

The question of whether school effects differ between specific groups of students is of critical importance to the promotion of social inclusion. A systematic review concluded: *'Schools matter most for underprivileged and/or initially low achieving students. Effective or ineffective schools are especially effective or ineffective for these students'*.[38] This analysis highlights some key findings relevant to the promotion of equity in education and social inclusion.

- School effects for Black students were almost twice as large as for white students in the US
- Differences between public and private schools were almost twice as large for low SES students as for middle class ones, and the differences between schools for high SES students were small in the US
- School effects vary for students by 'race' and low prior attainment in England. Secondary school effects are larger for low SES and initial low attaining students. There is some evidence of differential effects by 'race' and gender.

It must be stressed that SER does not suggest schools can, by themselves, overcome the powerful impact of social disadvantage. Nonetheless, attending an effective school can have a significant positive impact. The *School Matters* research on primary school influences on children's progress over three school years illustrates that working class students attending the most effective schools made greater progress and had higher attainment at the end of the study than middle class students in the least effective schools. This has important implications for future educational prospect. Within the most effective schools, however, middle class children as a group continued to outperform their working class peers, reflecting their initial higher starting point.[39] A follow up of this research also pointed to a continuing primary school influence on secondary achievement levels, though the main influence is through promoting better attainment at entry to secondary school. [40]

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[37] See Sammons, Thomas & Mortimore (1997).
[38] Scheerens & Bosker (1997), p 96**.**
[39] Mortimore et al (1988)
[40] Sammons et al 1995

**Section 2: Effective School Processes**

To what extent can SER illuminate the black box of how school and classroom experiences combine to foster or inhibit progress and their social and affective development? An important question concerns the generalisability of SER findings. A number of reviewers have identified common features concerning the processes and characteristics of more effective schools. A synthesis of reviews distinguished the following set of general factors:

- productive climate & culture
- focus on central learning skills
- appropriate monitoring
- practice-oriented staff development
- professional leadership
- parental involvement
- effective instructional arrangements
    - high expectations[41]

The relationships between the correlates of effectiveness identified by researchers in the in the US and in the UK were mapped and distilled into nine process areas in the *International Handbook of School Effectiveness Research* (Table 2).[42] Recent case study research in Alberta and Quebec on 12 'High Achieving Low Income secondary schools has identified very similar features of successful practices.[43]

The probabilistic nature of SER findings has been highlighted . 'As a rule, schools which do the kinds of things the research suggests make a difference, tend to get better results (however these are measured or assessed)*.* The problem is these are tendencies not certainties. In betting terms the research would be right about seven out of ten times, especially if it could be supported by professional assessments' [44]

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[41] Scheerens & Bosker (1997) p 207.
[42] Teddlie & Reynolds (2000)
[43] Twelve Secondary Schools in Low Income Settings, Dunnigan et al (2001) Kelowna B C: Society for the Advancement of Excellence in Education.
[44] Gray (1990) p 214.

| Table 2  The Processes of Effective Schools | |
|---|---|
| **1. The processes of effective leadership** | Being firm  and purposeful<br>Involving others in the process<br>Exhibiting instructional leadership<br>Frequent personal monitoring<br>Selecting & replacing staff |
| **2. The processes of effective teaching** | Unity of purpose<br>Consistency of practice<br>Collegiality and collaboration |
| **3. Developing & maintaining a pervasive focus on learning** | Focussing on academics<br>Maximising school learning time |
| **4. Producing a positive school culture** | Creating a shared vision<br>Creating an orderly environment<br>Emphasising positive reinforcement |
| **5. Creating high & appropriate expectations for all** | For students<br>For staff |
| **6. Emphasising responsibilities & rights** | Responsibilities<br>Rights |
| **7. Monitoring progress at all levels** | At the school level<br>At the classroom level<br>At the  level |
| **8. Developing staff skills at the school site** | Site based<br>Integrated with ongoing professional development |
| **9. Involving parents in productive & appropriate ways** | Buffering negative influences<br>Encouraging productive<br>   interactions with parents |

**Features of Ineffective schools**
A review of studies concerning the characteristics of *ineffective* schools and highlights four aspects.
- Lack of vision
- Unfocussed leadership
- Dysfunctional staff relationships
- Ineffective classroom practices

Ineffective classroom practices were seen to be characterised by:
- inconsistent approaches to the curriculum and teaching;
- generally lower expectations for students of low SES;
- an emphasis on supervising and communicating about routines;
- low levels of teacher-student interaction;
- low levels of student involvement in their work;
- student perceptions of their teachers as people who did not care, praise, provide help, or consider learning as important; and
- more frequent use of criticism and negative feedback. [45]

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[45] Stoll & Fink (1996)

Research on under-performing schools in the Netherlands supports these conclusions. The wide ranging study indicated the main weaknesses of such schools included:

- Learning material offered at school insufficient to achieve core targets
- Insufficient time devoted to achieving the minimum objectives f the curriculum
- Poor instructional quality
- Insufficient insight into students' performance levels (no use of nationally standardised tests)
- Insufficient or inappropriate special measures for struggling learners
- Prolonged dysfunctional organisation of the school (lack of leadership, lack of cooperation amongst teachers, staff discord, conflict within or between school managers and governors).[46]

The importance of school culture is increasingly recognised. 'The ineffective school may also have inside itself multiple schools formed around cliques and friendship groups . . . there will be none of the organisation, social, cultural and symbolic tightness of the effective school'. [47] Such tightness appears to be a particular requirement for academic effectiveness in the context of the inner city.

**The centrality of teaching and learning**
A number of SER authors have drawn attention to the centrality of teaching and learning and of classroom processes in determining schools' overall academic effectiveness.[48] It has been argued that the quality of teaching and expectations have the most significant role to play in fostering students' learning and progress.[49] Given this, school processes, including leadership, remain influential because they provide the overall framework within which teachers and classrooms operate. In some schools (those that are more effective) the overall framework is more supportive for learning and classroom practice. Research on organisational learning, for example, has shown relationships between principals transformational leadership and organisational learning, which influence teachers' work and student outcomes.[50]

Reviews of teacher effectiveness literature have identified a number of characteristics of effective teachers :
- they teach the class as a whole;
- they present information or skills clearly and animatedly;
- they keep the teaching sessions task-oriented;
- they are non-evaluative and keep instruction relaxed;
- they have high expectations for achievement (give more homework, pace lessons faster and create alertness);
- they relate comfortably to students (reducing behaviour problems).[51]

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[46] van de Grift & Hootveen (2006)
[47] Reynolds (1995), p 61.
[48] See Creemers (1994); Scheerens & Bosker (1997); Hill & Rowe (1998).
[49] Sammons, Hillman & Mortimore (1995)
[50] Mulford & Silins (2001).
[51] For example, Joyce & Showers (1988).

An list of teacher behaviours which promote achievement stresses similar aspects.

- Emphasise academic goals
- Make goals explicit and expect students to be able to master the curriculum
- Organise and sequence the curriculum carefully
- Use clear explanations and illustrate what students are to learn
- Ask direct and specific questions to monitor students' progress and check their understanding
- Provide students with ample opportunities to practise
- Give prompts and feedback to ensure success
- Correct mistakes and allow students to use a skill until it is over-learned and automatic
- Review work regularly and hold students accountable for their work.[52]

The features of 'structured teaching' have been identified as particularly relevant to promoting cognitive attainment in the basic skill areas especially in schools serving higher proportions of socio-economically disadvantage groups.[53]

Curriculum coverage has also been shown to be important. In a study of ethnically diverse inner-city schools curriculum coverage was found to be an important predictor of young children's mathematics progress, after control for prior attainment and other characteristics. Mean curriculum coverage was lower in classrooms containing a substantial proportion of African-Caribbean students and it was concluded that African Caribbean boys in particular were falling behind because they covered less of the curriculum.[54] Such findings about differences in educational opportunities for specific student groups have implications for inclusive schooling and equity.

A number of effective teaching strategies for primary teachers have been identified. These stress teacher communication, assessment and feedback practices such as:

- Informing children through explaining, instructing and modelling
- Reinforcing knowledge through repeating and reminding
- Supporting learning through bringing different strands of knowledge together.

The importance of different assessment strategies are also outlined:

- Assessment through interaction with children, such as questioning and testing
- Assessment through closely observing children
- Considering the evidence to understand progress and the learning of individual children.

The role of feedback in the teaching process is also addressed. Feedback is defined as 'imparting directly a judgement of a child, a child's strategies and skills or child's attainment (often in relation to goals) and giving information about the judgement'.[55] Feedback can be evaluative and descriptive and both are important in the learning process. There is a conceptual progress from the teacher giving evaluative feedback to the child suggesting ways for improving his/her own outcomes. This latter aspect can be seen as *enabling the development of metacognition in the learner.*

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[52] Doyle (1987)
[53] Scheerens (1992); Muijs & Reynolds, (2005).
[54] Plewis (1998)
[55] Gipps et al (2000) p 91.

Research on teacher effectiveness in the UK has developed a model which links three factors (professional characteristics, teaching skills and classroom climate) to progress. The teacher's role in creating an 'excellent classroom climate' is stressed. In primary schools outstanding teachers scored more highly in terms of behaviours related to high expectations, time and resource management, assessment and homework. At the secondary level the biggest differences were in high expectations, planning and homework.

Three factors as identified as important in shaping learning opportunities in the classroom :
- Lack of disruption
- Encouragement to engage
- High expectations[56]

**School culture**

On the basis of empirical research it is concluded that models of secondary school effectiveness need to analyse the impact of the department explicitly. The concept of secondary school effectiveness needs to be qualified to the term school and departmental effectiveness. [57]

The key aspects of an effective school and departmental culture include:
- Order - behaviour, policy and practice
- Academic emphasis
- Student-focused approach [58]

An effective school manages to achieve an optimal balance between the social control task achievement and the expressive social cohesion domains.[59] Behaviour policy and practice, leading to a safe orderly working environment and an academic emphasis are necessary for task achievement (effective teaching and learning and thus students' academic progress), while the student-focused environment concerns social cohesion and creates a positive climate for learning.

A review of effective secondary schools in the US likewise finds evidence that schools with a common sense of purpose and a strong communal organisation (involving collegial relationships among staff and positive adult-student relationships) are effective in promoting a range of academic and social outcomes reflecting student engagement and commitment. This stressed the importance of students' and staffs' experience of the school as a social organisation and the quality of human relationships experienced within it.[60] In Hong Kong, research has also drawn attention to the benefits of a caring and supportive climate and a cohesive student-centred philosophy of teaching for the entire school.[61]

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[56] HayMcBer (2000)

[57] For examples of research examining the impact of the department see Ainley 1994; Luyten 1994; Harris, Jamieson & Russ 1995; Witziers 1994, Sammons, Thomas & Mortimore, 1997; Smyth, 1999.

[58] (Sammons, Thomas & Mortimore 1997).

[59] Hargreaves (1995).

[60] Lee et al (1993), p 228.

[61] Ming & Cheong's (1995).

**Effective and Improving Schools serving Disadvantaged communities**
Many SER studies have focused on schools in inner city areas or serving diverse and disadvantaged communities, thus the SER knowledge base probably reflects effectiveness conditions for such schools. Nonetheless, there is awareness of the importance of context, and some studies have explicitly sought to examine the features of effective or improving high poverty schools, often serving diverse communities.

A recent review of improving schools in disadvantaged settings suggests such schools focus on:
- Teaching & learning
- Enhancing leadership capacity
- Creating an information rich environment
- Creating a positive school culture
- Building a learning community
- Promoting continuous professional development
- Involving parents
- Engaging external support.

Studies of schools that make a difference generally indicate that while the challenges facing schools serving disadvantaged communities may be greater, the characteristics of successful schools in such contexts are not radically different from those that have ben reported in the SER as a whole although approaches to teaching may require greater use of structured approaches and direct instruction. One of the most influential long term studies was the 10 year Louisianna . School Effectiveness Study.[62] More

- The role of the secondary school is especially important for students from low income environments. The case studies confirm schools can reduce social inequalities by stressing clear expectations and supportive structures and services.
- Need for schools to tackle areas over which they have most control (culture, leadership & classroom practices)
- The importance of the role and person of the principal is greater in schools with low-income environments
- Three defining elements of climate: security, examinations and personal relationships. In their general approach to teaching ad learning these schools appear to be traditional.[63]

Discussion of this research on high achieving low income secondary schools in Canada concludes that these secondary schools reduced social inequalities by stressing clear expectations and supportive structures and services which motivated their students. Structured classroom instruction and 'traditional' standards of behaviour and a respectful, secure school climate and warm relationships are also noted. 'High expectations coupled with support and warm relationships are especially effective in schools serving at-risk populations.' [64] It was concluded the elements of success in these schools do not seem to differ significantly from those found in the research literature. Successful low-income schools are simply successful schools. They are 'no excuses' schools which have accepted the responsibility to create high achievement for all students, irrespective of their socio-economic backgrounds. The achievement of a positive and consistent school culture appears to be crucial for effectiveness at the secondary level and for schools serving socio-economically disadvantaged communities.

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[62] Teddlie & Stringfield (1993)
[63] Henchey (2001)
[64] Raham (2002) p9.

A recent set of 18 primary school qualitative case studies of high attainment Welsh primary schools in disadvantaged settings adopted a systems psychodynamics framework of analysis (institutional transformation perspective) to explore the factors that promote success.[65] The authors conclude that the findings generally supported the conclusions of *Key Characteristics of Effective Schools*[66] review.

In addition results pointed to important features of primary school culture including:
- Key role of headteachers who actively developed leadership capability throughout the school – leadership density & depth supported by team working & participation in decision making
- Important contribution by Governing bodies to support leadership
- Staff 'passionate' about their work, high levels of commitment & engagement
- Strong emphasis on parental participation to engender their engagement & commitment to work of the school
- 'Mindset of school – empowered & proactive optimism, highly reflective approach, an 'accept & improve' outlook, very high aspirations, ideals & expectations, a willingness to praise, a caring attitude & pride in the school.

School improvement has been defined as 'a strategy for educational change that enhances student outcomes as well as strengthening the school's capacity for managing change'[67] Others have described it as 'A collaborative, supportive and exciting process that involves all the stakeholders in learning how to make systematic progress in achieving the aims and accountabilities of the school.'[68]

School improvement efforts require a particular focus on the processes of change and understanding of the history and context of specific institutions, and depend upon the active support and engagement of practitioners[69] Nonetheless, as argued in earlier sections, SER provides the necessary knowledge base to inform and stimulate the development of policies and practical initiatives to improve schools and the quality of students' educational experiences.

The need to re-conceptualise both school effectiveness and improvement and to build better connections between the two has been highlighted by several writers in the field. In particular, an over-emphasis on 'managerialist' solutions to the problems of ineffective schools is seen to be less relevant than approaches derived from research and based on development work with schools. Critics have also commented on the tendency for many improvement projects to focus too closely on teachers' perspectives and concerns, while frequently *avoiding* the question of what impact is made on students' learning and outcomes.[70]

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[65] James et al (2005)
[66] .Sammons, Hillman & Mortimore (1995)
[67] Hopkins (1994) p 3.
[68] See discussions by Reid, Hopkins & Holly (1987); Mortimore *et al* (1988); Creemers (1994); Sammons (1999).
[69] See Louis & Miles (1991); Fullan (1993) Ainscow & West (1994); Stoll & Fink (1994), Gay et al, (1999); Joyce, Calhoun & Hopkins, (1999).
[70] West & Hopkins (1996)

The importance of school culture has been stressed in the review of SER presented earlier. Five 'doors' to school improvement which are seen to open a 'passageway' into promoting a positive school culture which fosters improvement have been described . The five doors are:

1. *Collegiality:* the development of cohesive and professional relationships between staff (and the community) to create a culture that embraces broad vision directed improvement as well as day-to-day operations.
2. *Research:* acquainting staff with the findings of SER or research into teaching methods, which can be used to define local problems and identify solutions.
3. *Site-specific information:* Encouraging staff to collect and analyse data about their students, schools and the effects of change efforts.
4. *Curriculum initiatives:* Introducing change within or across subject areas.
5. *Instructional initiatives:* Staff development in teaching skills and strategies, for example generic teaching skills, repertoires of teaching methods, specific approaches or styles.

Some of the processes of improvement identified in the literature include:
- Clear leadership
- Developing a shared vision & goals
- Staff development & teacher learning
- Involving pupils, parents & community
- Using an evolutionary development planning process
- Redefining structures, frameworks, roles & responsibilities
- Emphasis on teaching & learning
- Monitoring, problem-solving & evaluation
- Celebration of success
- External support, networking & partnership.

Case studies of schools in challenging circumstances which have succeeded in making rapid improvements again highlight the importance of school and classroom climate. An example is Robert Clack a secondary school in Barking and Dagenham a disadvantaged area of London. In 1996 it was judged one of 'worst' schools ever seen by inspectors. It had serious problems of low attainment & poor behaviour and some staff termed the school a *'zoo'* where students *'could do what they wanted, many kids were running riot'. Staff* morale was low and there were difficulties in recruitment and retention, teaching quality was poor, falling pupil rolls were in steep decline and there was a serious budget deficit. In terms of context the school served a highly disadvantaged  community surrounded by high rise council housing in which a Local Authority had tended to house 'problem families'. The borough had the highest proportion of council housing and one parent families in the country and the lowest proportion of  adults with educational qualifications in country. The school served a  high  proportion of income families and termed its intake as mainly white working class.

After an adverse inspection a new headteacher (formerly a head of a very successful department in this school that otherwise was seriously under-performing) was appointed. During the period 1996-2005 sustained improvement occurred and the school is now judged as one of the most improved schools in the country, has attainment  above the national average and significantly above that of schools serving similar intakes and is recognized as an excellent placement for students in initial teacher .training . By and large the change process occurred without much change in the composition of staff teaching in the school.  In terms of the influential indicator of public examination success at age 16 years the improvement has been striking.

%5A*-C  GCSE        1996 17%, 1998  23%, 2001 39%, 2004 58%
There is no significant  gender gap in attainment, in contrast to the national picture and boys do well in traditional 'female' subjects such as foreign languages. The school  now oversubscribed and highly regarded by local community,  it still serves highly disadvantaged intake (36% eligible for free school meals, more in the upper school)  with a growing proportion from ethnic  minority backgrounds and with English as an additional language. It has recently taken Science specialist status.

 establishing a controlled and cooperative working atmosphere that enabled teachers to teach and learners to learn, also to. increased cohesion and teamwork amongst staff . Specific features highlighted include .'[71]Excellent leadership & support from governors and LEA
- A culture of collaboration, high expectations of teachers and pupils, care invested in staff development, respect for students' right to learn and teachers' right to teach
 *'we still have difficult pupils but we don't have classes out of control'* (member of staff*)'*
- Creation of a relaxed, cooperative learning environment where learning is enjoyed and teachers find professional satisfaction
- Emphasis on rewards and support, using data and target setting.
- Inspectors commented 'The good quality of teaching has been responsible for the significant raising of standards since the last inspection' and noted the importance of improved teaching. The school adopted a standard lesson model the Robert Clack Good Lesson developed by staff and used consistently throughout the school.    The effective approach to behaviour management was highlighted. By inspectors   'Behaviour is good in classes, learners are attentive and work well together …. Behaviour problems are dealt with quickly, in fair, consistent and positive ways' (Ofsted Inspection Report 2004).

The school itself drew attention to the transformation of its culture.
*'In some parts of the community there is a violent, aggressive, anti-social culture. Within the school we have created an alternative community in which achievement is 'cool' and caring for others is the normal expectation'*
(Assistant headteacher)
*We teach students the meaning of responsibility. We have a responsibility to them, to provide them with a high quality education and ensure they achieve their potential. They also have a responsibility to themselves and to those around them to ensure that as a community we respect and support each other'*
(Headteacher)
§Inspectors noted the emphasis on celebrating achievement and a whole school approach, including literacy support across the curriculum with  provision of a very wide range of extra-curricular activities and strong emphasis on participation in sport.    Looked after children, SEN, EAL and gifted & talented were judged to receive good support and make good progress. The use of mentoring was praised as was the use of data to track performance and identify students needing extra support.  The inspection report concluded that team work is a strength and morale is high  It also stressed that leadership by the headteacher and senior management team was outstanding, with leadership good at all levels and communication within the school excellent . It concluded that the school shared a common commitment  to improving the quality of education and that this influenced its culture and climate.

**The Improving the Quality of Education for All   Development Project**

*Improving the Quality of Education for All*  (IQEA)  offers schools a developmental approach which blends school improvement and effectiveness methods in fostering positive change. This ongoing development and research informed project involves a large number of schools

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[71] Haydn (2001) .

in England and has been operating for over a decade.[72] The approach involves a Higher Education consultants working in collaboration with schools which have opted  to  participate in an improvement project.  It stresses that much more can be gained if development work is focused around the school's core business of teaching and learning and building a capacity for sustained improvement. Relatively few school improvement projects have been successful in combining both an organisational and a pedagogical focus.[73] IQEA is an example of such an approach.

Two case studies of schools in challenging circumstances which used involvement in IQEA as a basis for improvement  have been described and analysed to provide guidance on strategies relevant to other schools in similar contexts. While recognising that each school's circumstances are to some extent individual and unique, an approach that is relatively systematic and strategic has been outlined.   A framework which comprises six related elements is described.[74]

- The school sets itself a *clear and unifying focus for its improvement work*. A direct emphasis on the standard of student attainment and learning underpins all the school's development work and is used to marry together all the various initiatives that schools are engaged in.

- *The collection of data on its performance* is identified as a precursor to initiating an improvement strategy.

- *A School Improvement Group (SIG)* is identified at an early stage representing a cross section of staff views, experience and seniority to carry forward the school's development agenda. The SIG receive training in classroom practices most crucial to achieving the school's development goals. *The focus of training is on teaching strategies most appropriate to the learning needs of the students in the school.*

- There is considerable emphasis on *staff development and is likely to include:*
  - Whole staff in-service days on teaching and learning and school improvement planning as well as curriculum tours to share the work done in departments or groups
  - Inter-departmental meetings to discuss teaching strategies
  - Partnership teaching and peer coaching
  - The design and execution of collaborative enquiry activities, which, by their nature, are knowledge–generating.

It is argued that when these types of staff development are in place schools find their cultures become increasingly collaborative and the development of a professional learning community within the school is facilitated.. A whole school emphasis is required to promote  consistency of practice and high expectations.[75]

The development of *organisational capacity* is at the core of the IQEA model and is identified as especially relevant to schools facing challenging circumstances More successful schools set priorities that are:
- Few in number

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[72] Hopkins, Ainscow & West (1994), Hopkins (2002).

[73] Harris (2000)
[74] Hopkins (2001)
[75] Hopkins (2001) p 5.

- Central to the mission of the school
- Relate to national reform requirements
- Link to teaching and learning
- Lead to specific outcomes for students and staff

Many school improvement initiatives have been criticised for limited approaches to evaluation.[76] Evaluation requires the development of *adequate baseline measures* of student achievement and school and classroom processes *prior* the introduction of changes, as well as the collection of information during the course of a project in order to gauge likely impacts on a range of relevant outcomes. Several authors have highlighted the need for sustained interactivity between the school effectiveness and improvement fields, and for more rigorous evaluation of different school improvement strategies to test their impact. [77]

An example of an evaluation of a school improvement initiative that sought to build on the SER knowledge base is described to illustrate some important features that can either facilitate or hinder implementation and thus influence the chances of successful improvement.[78] This used a range of sources of evidence in evaluating the impacts of the three year *Making Belfast Work Raising School Standards* (MBW RSS) project which involved four secondary schools  and ten feeder primaries identified as having low attainment, poor attendance and serving highly disadvantaged communities in the city of Belfast.  The main aim of the project was to provide additional support and resources to schools with the overall objective of raising standards of attainment and behaviour. The MBW RSS project combined external advice and guidance in seeking to develop participating schools' capacity to improve. It thus tried to integrate both a 'top down' external approach to improvement with the encouragement of 'bottom up' strategies developed within individual schools.

The provision of significant additional resources (£3 million+ over 3 years, 1994-7) was widely welcomed and there was much evidence that the MBW RSS experience was beneficial in promoting curriculum and staff development in participating schools and that this had led to substantial improvements in the quality of teaching and learning. Better resources, improvements in facilities, greater staff collaboration, the development of networks of schools, the input of Local Authority Advisors, smaller classes  and more teacher time for planning were seen as particularly positive developments resulting from the initiative. Improvements in schools' capacities for Action Planning, and monitoring and evaluation were marked. All schools laid greater emphasis on monitoring student attainment after the three year initiative. These achievements indicated that in many cases schools had developed their organisational capacity, as well as developing  a range of pedagogical strategies to improve learning and teaching in the classroom.

The role of the Local Education Authority (BELB) particularly of its Advisors, and of a co-ordinator within each school were important in developing expertise in Action Planning, monitoring and evaluation. The provision of opportunities and resources for teacher development and collaboration between schools, particularly in the areas of reading and numeracy, provided catalysts for change. The role of the Principal in supporting and prioritising change was found to be crucial, where leadership and management remained weak improvements were less obvious.  A change of Principal was identified as an important stimulus for positive change in several institutions.

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[76] Barber & Dann (1996)
[77] Creemers & Reezigt (1997)
[78] Taggart & Sammons  (1999, 2000).

Barriers to improvement included the relatively short (3 year) time scale of funding, a hurried start leading to rushed plans in year one, over ambitious and unspecific Action Plans in year 1, lack of advice on collecting baseline measures at the start of the project, and the public naming of the four secondary schools as lowest achieving institutions in the press at the start of project leading to low staff morale. Lack of support by the Principal or a divided SMT had an adverse impact on the extent of change in some schools.

A number of specific factors helped school co-ordinators to implement their Action plans.

- Having the co-operation and support of other staff
- Allocation of time for the school's project co-ordinator to work on the improvement initiative
- The RSS improvement project receiving high priority from the Principal and SMT
- Linking the school's development programme to the Action plan
- A small number of clear and focused goals
- Developing methods of monitoring and target setting
- Keeping staff informed of developments and progress through regular meetings
- Work at the start which had an immediate and visible impact on the school (e.g. re-decorating and re-equipping rooms, the introduction of new books and resources etc)
- Providing high quality in-service courses for staff
- Sharing expertise with other schools and advisors through creating networks.

Some practical messages and implications for policy makers and practitioners were identified from the evaluation. Policy makers (in this context Local Education Authority Personnel) should consider their role in supporting, monitoring, evaluating any individual schools' specific 'successes' from the outset.

School Leaders (Principals and SMT) should be encouraged to develop Action Plans which are set within a realistic time span, with a small number of specific and measurable goals. Building on existing school developmental frameworks can often maximise success where an 'audit' of good practice has already been conducted. In MBW RSS using action planning as an effective management tool was seen to have enabled advisors to work with principals and co-ordinators in schools on monitoring and evaluation and 'how you tie in finances and resources to your objectives'.

Teachers (both primary and secondary) should be encouraged to focus on improving the quality of teaching and learning through collegiate planning, shared subject knowledge and development of a range of approaches to pedagogy. Opportunities for high quality staff development in specific areas of the curriculum and in different teaching practices are needed to improve the students' classroom experiences. A strong emphasis on gathering information on both students' baseline and outcomes measures is required in order to target resources effectively and to monitor progress. Developing literacy and numeracy skills were found to be successful in enhancing students' access to the wider curriculum in primary schools and the first year in secondary school.

The role of external evaluation in providing feedback to the LEA and to participating schools can assist organisational learning. The experience of the MBW RSS initiative illustrates the importance of working simultaneously on both organisational and pedagogical approaches to improvement, the need for adequate time scales and resources (staff and financial) and the role of planning and monitoring in achieving successful change.

**Specific Reform Strategies**

There is growing agreement that to promote improvement schools should address "proximal variables" like curriculum, instruction and assessment which emphasise student outcomes.[79] The introduction of the National Literacy (in 1997) and Numeracy (1998) strategies in primary schools provide two major examples of Government led reforms in England which focus explicitly on these proximal variables. Both these high profile strategies drew on school and teacher effectiveness research in developing their approaches. They have a strong classroom focus and involve a structured approach to teaching, with considerable in-service development, and have led to the introduction of a both a daily literacy lesson and a daily numeracy lesson in the vast majority of English primary schools.

A clear rising trends in students' performance in national assessments in literacy, numeracy and science at Key Stage 2 (age 11 years) have occurred) as is illustrated in Table 3.[80] Michael Fullan led the team that externally evaluated the NLNS strategies in England and has explored the policy lessons for Canada.[81]

**Table 3 National trends in Key Stage 2 Results over 10 years showing percentages for all students achieving Level 4 or above and Level 5 or above English primary schools)**

| Level 4 or above | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005** |
|---|---|---|---|---|---|---|---|---|---|---|
| English | 58 | 63 | 65 | 71 | 75 | 75 | 75 | 75 | 78 | 79 |
| Mathematics | 54 | 62 | 59 | 69 | 72 | 71 | 73 | 73 | 74 | 75 |
| Science | 62 | 69 | 69 | 78 | 85 | 87 | 86 | 87 | 86 | 86 |
| Level 5 or above* | | | | | | | | | | |
| English | - | - | 17 | 22 | 29 | 29 | 29 | 27 | 27 | ** |
| Mathematics | - | - | 17 | 24 | 25 | 25 | 28 | 29 | 31 | ** |
| Science | - | - | 16 | 27 | 34 | 34 | 38 | 41 | 43 | ** |

*percentages for level 5 or above are not available for years 1996 to 1997.
** provisional level 4, level 5 not yet published for 2005

For the enhancement of equity it is important to establish whether the attainment gap between schools is narrowing. There has been a significant upward trend in the national assessment results of primary schools at Key Stage 2 for primary schools from 1996 to 2004 in each FSM band (an indicator of level of disadvantage). The improvements in levels of pupil attainment has been greater for schools serving more socio-economically disadvantaged pupil intakes indicating some closing of the attainment gap (an increase of 29% for schools with above 50% students on FSM, compared with 14% for the most advantaged group of schools) as shown in Table 4.

**Table 4: Improvement in Key Stage 2 English results 1996-2004 by Level of Social Disadvantage of Pupil Intake measured by eligibility for free school meals (FSM)**

| School FSM Band | Key Stage 2 English % Pupils attaining Level 4 |
|---|---|
| | |

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[79] Muijs & Reynolds (2000)
[80] See the evaluation of the literacy and numeracy strategies Earl et al (2001) and The Chief Inspector's Annual Report Ofsted (2001).
[81] Fullan (2002) p 5.

| | 1996 | 2001 | 2004 |
|---|---|---|---|
| 8% or less | 74 | 87 | 88 |
| 8+ to 20% | 64 | 78 | 81 |
| 20+ to 35% | 51 | 69 | 73 |
| 35+ to 50% | 41 | 61 | 67 |
| Above 50% | 34 | 57 | 63 |
| Total | 60 | 78 | 81 |

The long term impact of the National Primary Strategy (as the NNS and NLS are now integrated) requires further investigation, particularly for disadvantaged and vulnerable groups of students, however the eight results over the last eight years are promising. In light of US evidence it might be expected that such approaches would be of particular benefit to disadvantaged groups.[82] Research on in mathematics teaching in England has shown that the benefits of interactive whole class teaching are greater in classes where there were higher proportions of low ability and disadvantaged students. It concludes that structured teaching methods are most effective for teaching basic skills and that more disadvantaged students benefit most from such approaches at the primary level. [83]

The improvement and relatively high attainment of English students at age 11 in reading (ranked third) in the PIRLS 2001 comparisons provides external indicators of improvement and supports conclusions concerning the positive impact of the national literacy strategy. For mathematics and science international comparisons in the TIMSS 2003 international survey suggest there has been significant improvements in attainment levels of primary pupils at Grade 4 in England, it is likely that this reflects the impact of the National Numeracy Strategy in primary schools, at least in part and accords with the improvement recoded in national assessment results at the end of Key Stage 2. Science attainment levels remain high at both Grade 4 and Grade 8 in comparison with other countries. Mathematics results at Grade 8 however show little sign of relative improvement and are below those of reference countries. It should be noted that the Grade 8 pupils in the 2003 survey would not have had much experience of the National Numeracy strategy in their primary education.

**TIMSS 2003 Maths & Science at Grade 4**
**Science**
- England average 540
- International average 489
- Comparison group average 530
- Primary science attainment amongst highest in survey

**Maths**
- England average 531
- International average 495
- Comparison group average 532
- From 1995 England's performance increase was much larger than the average change in comparison countries

Other relevant policy developments have sought to build on the potential benefits of providing schools with better performance data and have drawn on the SER knowledge base. The Autumn Package (sent to all schools in England annually from1998 onwards) and now available as an interactive web package called the Pupil Achievement Tracker (PAT) is

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[82] Ross, Smith & Casey (1999)
[83] Muijs & Reynolds (2000)

intended to form part of a five stage model of the improvement cycle, and relies heavily on the use of performance and other data to inform the improvement process.[84]

In contrast to performance tables the Autumn Package is not published at the individual school level but is sent to schools to facilitate school self-evaluation and development planning. The Package has a particular emphasis on promoting equity by encouraging schools to monitor the progress of different student sub-groups. It provides contextualised performance information related to schools with similar profiles in terms of prior attainment and social disadvantage of intakes. It also advocates student target setting and suggests questions for staff discussion.[85]

## Comprehensive School Reform

CSR models have received considerable attention and investment in the US. A recent authoritative meta analysis of CSR in US shows:

• Across the range of school poverty levels CSR was equally effective in relatively lower and higher poverty schools.

• CRS achievement effect sizes 0.17 in first year of implementation after 5th year of implementation achievement advantage double and at 7 years effect size 0.39.

• Strongest evidence of effectiveness for three models:
   *Direct Instruction, School Development Program, Success for All*

• The successful expansion of CSR shows that research based models of improvement can be brought to scale across many schools and varying contexts

• A long term commitment to high quality evaluation of is needed to increase understanding through the identification and study of research proven reform .[86]

**Improvement through Inspection**

While it is difficult to draw firm conclusions about the influence of different teaching approaches, the introduction of the National Curriculum and associated assessment, particularly teacher assessment was accompanied by considerable professional development in England during the 1990s. Changes to initial teacher education are also likely to have been important. The introduction of the Framework for Inspection, publications on effective literacy and numeracy teaching and the role of LEA Advisers and Inspectors in pre-Ofsted inspection preparation have influenced teaching approaches. [87]

The results of the recent evaluation of the impact of Ofsted paid particular attention to the topic of school improvement. It is argued that inspection played an important role in supporting and ensuring the implementation of the national curriculum and assisted the implementation of subsequent national strategies. Improvements in the observed quality of teaching have been striking, particularly at the primary level and closely match the trend in improved attainment in English and mathematics over 1996 to 2003.

Inspection judgements indicate that the quality of teaching in primary schools, has improved steadily from 1994. Inspection data, shows relatively little unsatisfactory teaching (4-5 per cent) in the three years 2000-2003, compared with the incidence in the first two inspection cycles. The proportion of 'good' or better (rather than satisfactory) teaching gives another indication of trends in the quality of teaching. Around three quarters of lessons inspected are now classed as 'good' or better, compared with only 45% in 1996/97.

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[84] http://www.standards.dfes.gov.uk/performance
[85] For further discussion see Elliot & Sammons (2000)
[86] Boreman et al 2003
[87] Sammons et al (2004)

The Impact evaluation supports the findings of earlier research that inspection played an important role as a catalyst for change and improvement during the period 1993-2003, particularly for weaker schools.[88] Over 1 million students were estimated to have benefited from improvements in the quality of education provided by schools which moved out of special measures and substantially larger numbers from improvements in schools in serious weaknesses.  Table 5 gives details of the numbers of schools identified as requiring special measures over a 10- year period. Overall more than 85 per cent improved, with improvement being more common for primary schools (nearly 90%) but less common for Pupil Referral Units (PRF).

**Table 5: Outcomes of 'Special Measures' (SM) over 10 years**

|  | Primary | | Special | | Secondary | | PRUs | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
|  | N | % | N | % | N | % | N | % | N | % |
| **Removed from SM** | 799 | 89.6 | 114 | 77.0 | 167 | 76.6 | 18 | 60.0 | 1098 | 85.3 |
| **Closed** | 93 | 10.4 | 34 | 23.0 | 51 | 23.4 | 12 | 40.0 | 190 | 14.6 |
| **Total** | 892 | | 148 | | 218 | | 30 | | 1288 | |

As noted earlier, inspection evidence also suggests that improvement is more evident for weaker schools. Further comparisons reveal  a marked reduction in the proportion of lessons judged to be unsatisfactory or poor in the vast majority of primary schools after coming out of special measures.  Figure 1 illustrates the improvement in teaching observed in SM primary schools.

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[88] Gray J (2000) Causing concern but improving: a review of schools' experiences, DfEE Research Report No 188.

**Figure 1: Percentage of unsatisfactory or poor teaching in lessons in primary schools going into special measures and from all that were inspected in 2002/03 two years after coming out**



Lessons from S10 inspections when schools went into special measures
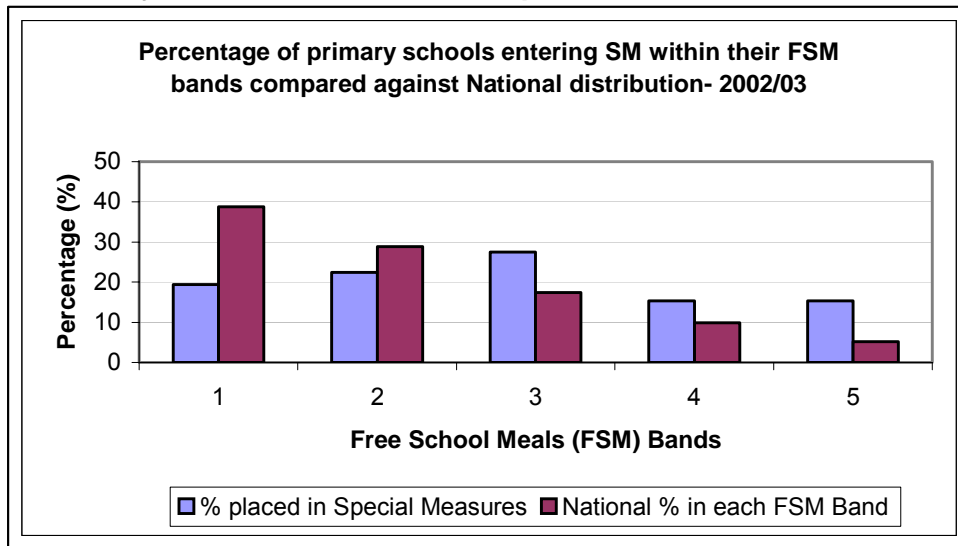Lessons from S10 inspections two years after coming out of special measures
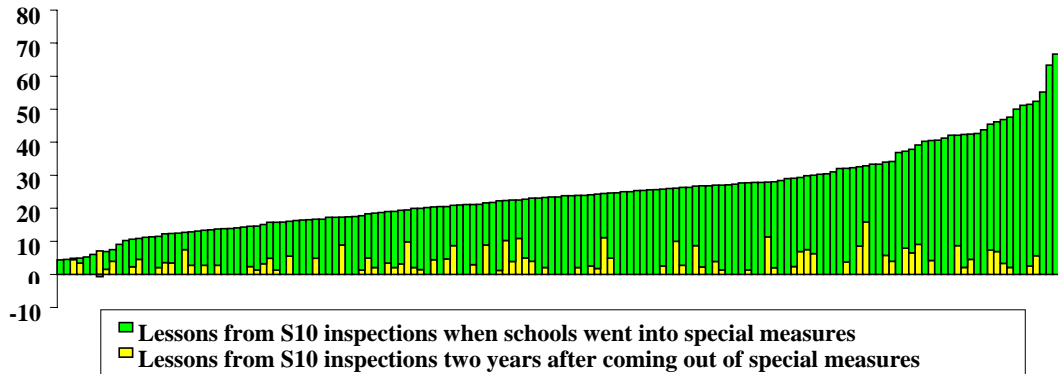
The pattern for secondary schools is very similar to that for primaries again showing significant reductions in the incidence of unsatisfactory or poor teaching (see Matthews & Sammons, 2004). Figure 2 shows the extent of improvement in standards in terms of public examination results at age 16 using the 5A*-C benchmark for secondary schools placed in special measures when they went into special measures and two years after coming out for 2000-2003. Of the 22 secondary schools concerned, only 3 failed to show an improvement in attainment levels, the extent of improvement in attainment which was substantial in over half the cases.

**Figure 2: Percentage of students achieving five or more A*-C grades in GCSE when the school went into special measures and when they were inspected in 2000/03, two years after coming out. (Some schools closed during this period.)**



Schools

GCSE %5A*-C when schools went into special measures
GCSE GCSE %5A*-C after coming out of special measures
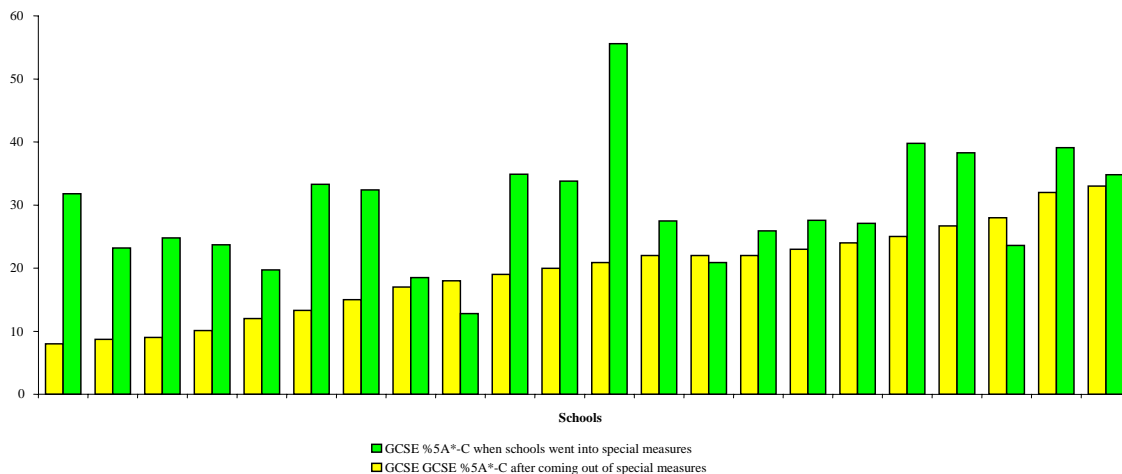
Proportionately more schools placed in special measures serve socio-economically disadvantaged intakes (Figure 3). Nearly 40% of schools are in the lowest (most advantaged) FSM band, but they represent only 20% of schools placed in special measures. By contrast, schools in the higher FSM bands (4 and 5) are over represented in the special measures group. Nonetheless, the majority of high FSM schools are not placed in special measures. .

**Figure 3: Primary schools' FSM band and Special Measures status**



Percentage of primary schools entering SM within their FSM bands compared against National distribution- 2002/03

It can be argued that, in combination with other system wide initiatives, particularly the combination of a national curriculum and assessment framework, and from 1998 the national strategies, inspection has played an important role as a lever for school improvement. At the primary level there is evidence of some closing of the attainment gap between schools serving the most disadvantaged pupil groups, at a time when pupil attainment levels have risen overall. At the secondary level there again have been improving trends across all types of school, irrespective of level of disadvantage of pupil intakes but as yet little sign of a closing gap. A paper discussing the improvement of weaker schools in England has also been published drawing on the Ofsted evaluation evidence. This draws attention to the importance of leadership for the improvement of schools in special measures[89] An example of the typical improvement trajectory of a school placed in special measures is shown in Figure 4.

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[89] Matthews & Sammons, 2005.

**Figure 4: Example of a typical improvement trajectory for a school in special measures (Matthews & Sammons, 2005)**
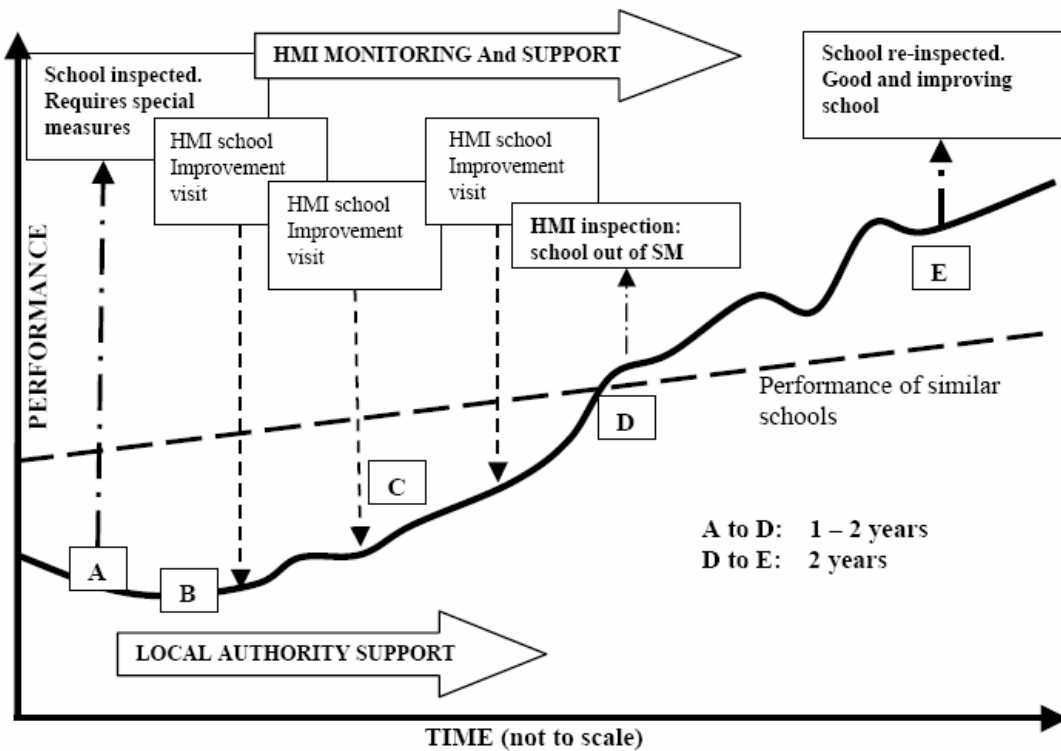


Figure 2.   A typical improvement path of a school in special measures

The public identification of weak or failing schools has proved highly controversial in England and elsewhere. It is argued by some that this is unhelpful adding to staff distress, making it harder to recruit new staff where shortages exist and demoralising parents and students adding to problems of falling rolls and budget deficits.[90]   Nonetheless, the identification appears to act as a much stronger catalyst for positive change in most instances (indeed special measures schools improve at a faster rate than those placed in the lesser  serious weaknesses category). Some schools indeed even claim that the identification was needed to bring staff together to recognise the problems and ,need for change..

**Summary and Conclusions**

This paper has explored the way SER can help to promote fairer comparisons of schools, and some of the issues involved in measuring effectiveness and identifying more effective, or, by contrast, less effective schools. Key features of SER and their implications for the promotion of greater equity in education and social inclusion have been noted.  School effectiveness is seen as a *relative* concept, which is both outcome and time dependent.  It does not seek to measure the impact of schooling as a whole, instead it examines differences in the impact of one institution in comparison with another, taking account of intake.   It is recognised that there can be internal variation in effectiveness at the

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[90] For example in Florida see research by  Touchton, & Acker-Hocevar (undated) Acker-Hocevar & Touchton (undated)

department or class level, and teacher effects tend to be substantially larger than school differences..

- Rather than attempting to define 'good' or by implication 'bad' schools, SER focuses on the narrower concept of effectiveness;
- Promoting  progress is seen as a fundamental purpose of all schools;
- Effectiveness is a necessary but not sufficient condition for any acceptable definition of a 'good' school;
- School effects are generally larger for disadvantaged and ethnic minority students;
- A focus on students' social and affective as well as cognitive outcomes is necessary to  obtain a rounded picture of effectiveness;
- A number of common features of effective schools and effective teaching   have been identified in research conducted in a range of countries;
- SER provides an important evidence-base on the correlates of effective schools and teachers and has stimulated school improvement initiatives at national and local level.
- The SER knowledge base is particularly relevant to schools serving socio-economically disadvantaged communities .
- Schools serving disadvantaged groups face additional challenges and require additional support for improvement. The development of leadership capacity and a focus on the core purposes of teaching and learning and creating a safe, supportive orderly school climate with high expectations are essential features
- Pre-school provides children with a better start to school and is particularly important in improving attainment for low SES pupils[91]For the most vulnerable groups of pupils intensive, high quality, structured and targetted interventions are needed at an early age.

Many school improvement initiatives are poorly conceptualised in the precise ways in which they might impact upon learning in the classroom.[92] Although examples of organisational and curriculum reform are common in many education systems few specify in detail how changes are intended to influence student learning at the classroom level.

In their comments on different approaches to educational reform Hopkins and Levin (2000) argued that education reform in many systems could learn much from the SER tradition and evaluations of school improvement. They argue that reform does require extra resources, but that these must be linked to clear plans for improvement based on the best available evidence and that policy alignment needs to be both vertical and horizontal, with a focus on supporting instructional goals and strategies.  The evidence summarised in this paper points to the need for careful and realistic planning, to focus on organisational and pedagogical change simultaneously in order to achieve positive effects, and to address school culture in particular

.In examining evidence of educational improvement in England,  as part of an international comparative project based on systems with high performance in international comparisons, my research leads to the conclusion that a  'cocktail effect' of national curriculum, national assessment, financial devolution, inspection, increased professional development & changes to teacher education, later supported by national strategies and development of curriculum and assessment resources and materials has promoted substantial school improvement and raised attainment levels in England over the last 15 years.[93]  The results of an evaluation of the impact of

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[91] Sylva et al (2004)
[92] Harris (2000)
[93] Sammons (2004)

Ofsted over the last decade indicates that it has played an important role in raising standards and promoting improvement. Identification and action triggered by the identification of special measures status has acted as a particular catalyst for the improvement of the weakest schools judged to be failing to provide an adequate education for their students and. this has benefited disadvantaged pupils especially, because they are over represented in such schools.[94] The provision of additional resources and special help for schools in challenging circumstances to recruit and retain experienced teachers is also required when national shortages of teachers are experienced. We must recognise that blaming teachers or schools is not the best way to motivate professionals to improve while accepting the need for public accountability.

The recent DIPF comparative research on *Features of Successful School Systems* (Dobert & Sroka 2004) studying six countries with high results in PISA 2000 adopted a framework for the review of education systems that was informed by the SER tradition. The results draw attention to the benefits of pre-set educational standards (partly linked to a national curriculum) increased responsibility for schools combined with regular evaluations or centrally determined tests. These features characterise 'standards based reforms'[95]

Research has shown that there are important connections at the student level between academic achievement, motivation, behaviour, attendance and self-esteem. These links are often reciprocal, poor attainment increasing the risk of subsequent poor behaviour and attendance and vice versa.[96] There are strong arguments for focusing on these links in improvement initiatives since programmes which address only one aspect in isolation (be it academic achievement, attendance, behaviour or self-esteem) are liable to have less impact in the long term. Focussing on students' experiences and views of school and increasing the involvement of students and parents are important foci for school improvement projects and initiatives designed to promote social inclusion.[97]

Action planning and monitoring are valuable tools for school improvement to help evaluate performance, set targets, assist in school development planning and provide evidence of any impact.[98] SER provides a basis for fairer comparisons of schools that seek to control for the impact of differences in student intake served. Developing robust measures of student progress and other educational outcomes can provide a valuable input into school improvement initiatives and assist in monitoring their success over time. Measurements and comparisons on their own cannot engender change, but taken together with information from professional judgements, provide a sound basis for self-evaluation and catalyst for action. The need to raise expectations and monitor the educational outcomes of different groups, especially those from socio-economically disadvantaged and ethnic minority backgrounds and those with low levels of initial attainment, is important, given the strong links between students' educational outcomes at age 16 years and their later life chances. In the US, it has been argued that schools need to evolve into 'High Reliability Organisations' (HROs), particularly in relation to the education of 'at risk' and disadvantaged students.[99]

School effectiveness and improvement literature highlights the importance of school (and in secondary schools, departmental) culture. The impact of key individuals, often the principal,

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[94] Matthews & Sammons, 2004, 2005

[95] Dobert & Sroka (2004)

[96] Rutter *et al (*1979); Reynolds (1982); Mortimore *et al* (1988); Smyth (1999).

[97] Riley *et al (* 2000).

[98] Fitz-Gibbon, (1996) Elliot, Smees & Thomas (1998).

[99] Stringfield (1994)

in promoting the change process is also evident. A clear focus on a limited set of aims shared by staff is associated with more successful improvement initiatives, in particular increasing the school's focus on the teaching and learning process. Linking whole school planning and specific classroom pedagogical approaches to improvement is likely to have a greater impact on student outcomes  than strategies which focus on just the school or on just the classroom level in isolation.

Messages from research, development projects and evaluations suggest that by focussing on school culture, addressing the quality of teaching and learning and by monitoring students' academic progress and their social and affective outcomes schools can work towards improvement. We need to recognise that successful school improvement cannot be externally mandated but must involve careful and realistic planning and the conscious commitment and involvement of teachers and managers in schools.

> 'A general lesson for all school reform is that teachers cannot operate effectively to change classroom behaviours without concrete supports to guide their efforts, and time to learn and assimilate new behaviours.  Schools cannot hope to accomplish the changes envisaged by the designs, unless the implementation strategy supports all the staff and enables them to work together toward reform. …Long-term commitment by teachers was developed over time in a working relationship where a team and a school staff interacted with each other towards common goals. Strong assistance toward change, concrete models, coaching, and time produced change and, therefore, more commitment'. [100]

Policy makers can assist if they provide a helpful external context and support, particularly for schools facing the greatest challenges. An emphasis on external accountability, and the identification of under-performing schools appears to act as a catalyst for change and may be necessary to promote public confidence in the quality of the education system. However, the development of institutional capacity and promotion of self-evaluation and review based on evidence from  school effectiveness and school improvement research findings coupled with the availability of performance data, contextualised information about student attainments in comparison with similar schools and value added approaches are needed to support improvement.

In his analysis of the positive effects of schooling my colleague Mortimore concluded: 'Although the differences in scholastic attainment achieved by the same students in contrasting schools is unlikely to be great, in many instances it represents the difference between success and failure and operates as a facilitating or inhibiting factor in higher education.  When coupled with the promotion of other pro-social attitudes and behaviours, and the inculcation of a positive self-image,  the potential of the school to improve the life chances of students is considerable'. [101]

Though schools certainly matter, health, housing, income and the home learning environment remain powerful influences and 'joined up' policies aimed at combating social exclusion are called for.  Multi-agency approaches are receiving increasing attention in a number of countries with the development of full service, extended and new community schools. schools,

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[100] Stringfield, Ross & Smith (1996), p 320.

[101] Mortimore (1998) p143.

Education cannot remedy social exclusion by itself but remains an important means of implementing policies intended to combat social disadvantage.  The social empowerment argument is a vital one, because over 25 years of SER research suggests that the life chances of students from socio-economically disadvantaged backgrounds in particular are enhanced by effective schools, those which foster both cognitive progress and promote social and affective outcomes including motivation, self-esteem and student involvement.

The demands on schools in the 21st century are increasing and coping with the rapid pace of change will remain a major challenge. Education is seen by Governments in many countries as the key change susceptible to policy influence and essential for both economic prosperity and social cohesion. Schools are thus subject to much greater pressures for accountability and improvement, especially in educating students from disadvantaged backgrounds. SER is seen almost as a threat by some because of the explicit focus on students' outcomes, but I believe that disseminating the knowledge base is an important means of empowering principals and teachers to reflect on their practice and stimulus for  improvement efforts. School improvement should be seen as a major focus for all schools, not just those in difficulties.   Widening educational opportunities and equity and improving students' attainment levels and social and effective outcomes is essential to promoting active citizens capable and motivated to participate in a democratic society.

ICSEI continues to have an important role to play in bringing together educators and researchers to link research, evaluation and development evidence in the co-construction of knowledge about the characteristics and processes that promote effective schools, the influence of context, the most promising strategies and approaches to promote and sustain improvement and the extent to which the  existing school effectiveness and improvement knowledge base travels internationally. SER 's early roots reveal a strong equity focus and moral concern to improve the quality of education for disadvantaged students. Systematic evaluations are needed to identify the best improvement programmes and ICSEI should do more to promote better evaluation and evidence based reviews.

The MORE network set up at ICSEI 2005 is developing an international instrument for teacher observation (ISTOF) that seeks theoretical and methodological advancement of the field through more rigorous and democratic comparative studies involving a wider range of countries.  The greater use of inspection evidence and joint research projects is likely to become a fruitful area for further development of SESI approaches. Other developments to watch during the coming years include the role and impact of different collaborative arrangements such as networking, school federations, consultant leaders, and specific programmes designed to enhance leadership capacity of senior management teams and middle managers.

I believe that, during the next decade, policy makers and practitioners will increasingly recognise the benefits of using research evidence to improve the focus on teaching and learning and to promote a supportive school culture for both staff and students. I see the growing links between school effectiveness and improvement research and development work, and the increasing emphasis given to their findings by policy makers and practitioners as a source for optimism for the future. The importance of comparative research in different countries and contexts is vital to improving the evidence base and increasing understanding of the most appropriate policy levers to promote improvement and increase equity in educational outcomes..

From my experience I believe we need to adopt policies and create schools systems that:

- Focus on learning and  promote the ongoing professional development of practitioners;

- Foster collaboration and create a positive culture for learning with high expectations;

- Match accountability pressure  by support for schools (professional, & in curriculum, financial and material resources);

- Recognise that schools serving disadvantaged communities need extra support to attract and retain good teachers and leaders

- Make the recruitment of disadvantaged students financially attractive to schools so promoting more balanced intakes,

- Ensure that planning for  improvement is seen as  the norm, encourage reflective practice and institutional self-evaluation;

- Monitor equity in outcomes and focus on reducing the achievement gap, with greater attention to early intervention

- Do not regard widespread failure for specific student groups as inevitable and ensure that disadvantage groups are offered the highest quality educational experiences;

- Celebrate, study and spread successful practice;

- Use research and inspection evidence to promote improvement;

- Recognise that schools do make a difference, that good teaching matters and that we already know much about strategies & practices which foster success for all students.

This paper is not intended to suggest that SER is a universal panacea which can be applied to eliminate all educational ills, but I hope that it provides an illustration on how this tradition of enquiry can inform, empower and challenge us to make our schools more successful for more of our students more of the time. The challenge for the future remains for countries to improve educational access and enhance the quality of education experienced by all students but particularly that of disadvantaged and minority student groups, to promote greater equity in outcomes, enhance life chances and encourage the development of informed, active citizens with the skills and capabilities to face the uncertain and rapidly changing future of societies  in a global world.

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