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Improving Schools in Socioeconomically Disadvantaged Areas – A Review of Research Evidence

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ABSTRACT

Schools in difficult and challenging circumstances have received increasing policy and to some extent research attention in recent years. Improving schools in these circumstances is likely to prove a difficult process. This literature review has attempted to collect research on improving schools in these areas. Themes emerging from the literature include: a focus on teaching and learning, leadership, creating an information-rich environment, creating a positive school culture, building a learning community, continuous professional development, involving parents, external support and resources. The crucial issue of sustaining improvement is also discussed.

INTRODUCTION

The educational reform agenda in many countries reflects a renewed interest in improving schools in difficult or challenging circumstances. Recently, researchers have turned their expertise and attention to “failing” or “ineffective” schools (Barth et al., 1999; Borman et al., 2000; Harris & Chapman, 2001; Leithwood & Steinbach, 2002; Stoll & Myers, 1998). Often, these schools are found in disadvantaged areas, although it has to be pointed out that there are many effective schools in these contexts, and in many cases schools perceived to be failing due to their performance on high-stakes tests are actually adding value to their disadvantaged intake. Nevertheless, as Gray (2000, p. 33) concedes, “we don’t really know how much more difficult it is for schools serving
disadvantaged communities to improve because much of the improvement research has ignored this dimension – that it is more difficult, however, seems unquestionable.” The reason for this lack of attention resides predominantly in the inherent sensitivity and complexity of the terrain. Schools that face multiple forms of disadvantage are least likely to be open to critical scrutiny or exposure because they are most often the schools where academic performance is below average. Some of the difficulties of improving the achievement of the most disadvantaged students are illustrated by a review of the effects of the ambitious Chapter I programme in the US (a large-scale programme for funding schoolwide reform in schools in disadvantaged areas). The analysis found that while the overall effect of the programme appeared to be positive, the positive effects were only found among the most advantaged students in these disadvantaged schools (Borman, D’Agostino, Wong, & Hedges, 1998).

While it cannot be denied that there is a strong negative correlation between most measures of social disadvantage and school achievement, this is not to suggest that it is impossible to “buck this trend.” Some schools facing difficult and challenging circumstances are able to add significant value to levels of student achievement and learning (Maden & Hillman, 1993). There is evidence to show that these schools can and do improve levels of student performance and achievement. However, in order to achieve and sustain improvement, such schools must exceed what might be termed as “normal efforts” (Maden, 2001). Recent research has shown that teachers in schools facing challenging circumstances have to work much harder and be more committed than their peers in more favourable socioeconomic circumstances. In addition, they have to maintain that effort in order to sustain improvement as success can be short-lived and fragile in difficult or challenging circumstances (Whitty, 2001; Whitty & Mortimore, 1997).

Schools located in disadvantaged areas suffer a myriad of socioeconomic problems, such as high levels of unemployment, physical and mental health issues, migration of the best qualified young people and, not least, low educational achievement (Gore & Smith, 2001). To compound this, schools in these areas often face other pressures such as challenging pupil behaviour, high levels of staff turnover, and a poor physical environment. For these reasons, schools in deprived areas have to work harder to improve and stay effective, find it harder to improve, and are more likely to suffer steep declines in pupil achievement levels if a successful equilibrium is disturbed, for example when succession problems occur following retirement of the head (Reynolds, Hopkins, Potter, & Chapman, 2001; Teddlie & Stringfield, 1993).
These specific contextual circumstances suggest that different improvement strategies are required for schools in difficult or challenging circumstances than for those in more advantaged circumstances. In this review of the literature, we have therefore attempted to look at the evidence concerning school effectiveness and improvement in areas suffering socioeconomic deprivation. While research on school improvement in schools in economically deprived areas is still limited, there is clearly a growing consensus around a number of key areas within the field. Many of the strategies found to be effective in schools in economically deprived areas are not exclusive to those schools as they focus, for example, on issues of teaching and learning and collaborative modes of leadership. The order of findings in this review does not reflect a recommended order in which schools should tackle school improvement. Rather, the order reflects the strength of evidence supporting particular approaches to school improvement in this context.

This review of the literature can be situated within the school improvement strand of the field of school effectiveness and school improvement, being largely concerned with what processes can lead to change in schools in socioeconomically deprived areas. This review also utilises elements from effective schools research, on which many school improvement efforts are based (Reynolds, Teddlie, Creemers, Scheerens, & Townsend, 2000).

THEORETICAL FRAMEWORK

Theoretically, a number of perspectives can help us make sense of school improvement in schools in disadvantaged areas.

Contingency theory is based on the premise that what makes an organisation effective is dependent on situational factors (contingency factors) that can be both internal and external to the organisation. These factors can be quite varied, and include, amongst other things, the complexity of the environment and the age of the organisation (Creemers, Scheerens, & Reynolds, 2000). Clearly, one of the factors that may be most crucial to schools is their socioeconomic context.

According to contingency theory, schools will have to find a best fit between their internal organisation and policies and the contingency factors they are confronted with. On the one hand, this would lead us to hypothesise that effective schools in socioeconomically disadvantaged areas would be characterised by a particular configuration, organisation, and policies that
would distinguish them from schools in other contexts, and that would be common across schools in these areas. On the other hand, some factors would be hypothesised to differ between effective and improving schools in disadvantaged areas, as other contingency factors that differ between them will impact (e.g., urban vs. rural, school size, education stage, etc.).

Another theoretical stance on improving schools in socioeconomically disadvantaged areas is the compensatory model. The compensatory model (Chrispeels, 1992; Teddlie, Stringfield, & Reynolds, 2000) states that because of the problems faced by pupils in disadvantaged areas the school needs to compensate for the lack of resources in the pupils’ homes. Schools need to go through two phases in order for improvement to occur. In the first phase, basic needs, such as an orderly environment and high expectations, need to be met, while in the second phase structural improvement focussed on more systemic and long-term processes can take place. The compensatory model also suggests that staff in schools in low SES areas will need to work harder to get the necessary results.

A potentially highly important theoretical perspective is provided by the hypothesis of additivity of school and background factor effects. This hypothesis is built on findings that after controlling for pupil background factors, schools in low-SES areas still do worse than those in middle- and high-SES contexts (Reynolds & Teddlie, 2000). Schools that face more difficult circumstances are more likely to be ineffective and therefore reinforce social disadvantage, according to the additivity hypothesis. Reasons for this are unclear, although Reynolds and Teddlie point to differences in quality of teachers recruited (teachers possibly being less willing to work in these challenging areas and schools) and the fact that flaws become more apparent in high stress and pressure situations as possible explanations.

These three theories are by no means mutually incompatible, and can be said to each throw a different light on the issues of effectiveness and improvement in schools in disadvantaged areas. We will try to assess the extent to which they are supported by this review at the end of this article.

**METHODOLOGY**

In this literature review, we will attempt to interrogate the international research evidence relating to improving schools in disadvantaged areas. A wide-ranging search was employed encompassing electronic databases such as
ERIC, BEI, and Psycit and a trawl of key journals such as School Effectiveness and School Improvement. Search terms used include “school improvement,” “school effectiveness,” “school reform,” “whole-school reform,” “improving schools,” “low SES,” “disadvantaged,” “urban,” “deprivation,” and “challenging circumstances.” Material was selected only if there was a clear focus on improving and/or effective schools in disadvantaged areas and clear evidence of an empirical base for any claims made. The focus on schools in disadvantaged areas does not mean that we only interrogated studies conducted specifically in these contexts. We found that there were many studies which, while not being solely concerned with or focussed on issues of schools in disadvantaged areas, nevertheless were conducted largely in these contexts. Findings from these studies were also included. We did not limit the material reviewed to studies using any particular research methodology, as we follow a pragmatic approach to methodology believing in the worth of different (and mixed) methodologies that allow us to explore both breadth and depth (Tashkkori & Teddie, 1998). Therefore, material from both a qualitative and quantitative perspective is included. The inclusion strategy was as follows:

1. clear empirical evidence of improvement or effectiveness;
2. study conducted wholly in disadvantaged areas;
3. study conducted partly in disadvantaged areas, or findings based on research conducted partly in disadvantaged schools.

While articles in peer-reviewed journals form a major part of reviewed materials, we felt that there was much of interest to be found in evaluations of extant school improvement projects in socially disadvantaged areas, and have included information from research reports for that reason. However, only those reports that provided clear evidence of valid and reliable research designs were included.

IMPROVING SCHOOLS IN DISADVANTAGED AREAS

A Focus on Teaching and Learning

A clear focus on a limited number of goals has been identified as a key characteristic of effective and improving schools (Hopkins, 2001; Reynolds et al., 2001). An academic orientation has long been identified as a vital component of effective schools in the UK (Reynolds et al., 2001), and studies in other countries that have looked specifically at schools in areas of high
deprivation report similar findings. One study of schools that had moved off the list of poorly performing schools in New York found that the common denominator for all of them was a focus on students’ academic achievement. All had developed new instructional strategies (Connell, 1996). Teddlie and Stringfield (1993) found that in ineffective schools in Louisiana heads focussed less on core instructional policies than in effective schools, while separate studies of effective and high-performing schools in low-income areas in Quebec and Texas produced similar findings (Henchey, 2001). In one large-scale review of reform programmes in the US, a strong instructional focus was common to all the most effective programmes, many of which have traditionally focussed on schools in low-SES areas (Herman, 1999). There is some evidence that an academic focus is actually more prevalent in effective low-SES than in effective high-SES schools, and, more generally, that effective low-SES schools have more limited and short-term goals than their high-SES counterparts (Teddlie, Stringfield, Wimpelberg, & Kirby, 1989). Other researchers have likewise stressed that a focus on teaching and learning can be encouraged by training staff in specific teaching methods at the start of the school’s improvement effort (Hopkins, 2001; Joyce, Calhoun, & Hopkins, 1999).

Research findings show that, compared to students from middle- and high-SES backgrounds, low-SES students need more structure and more positive reinforcement from the teacher, and need to receive the curriculum in smaller packages followed by rapid feedback (Ledoux & Overmaat, 2001). They will generally need more instruction, and be more responsive to external rewards (Teddlie & Stringfield, 1993; Teddlie et al., 1989). While mid- and high-ability students do not benefit from praise unrelated to the task, there is some evidence that low achievers do benefit from non-contingent praise, due to the low self-esteem of many of the students (Brophy, 1992). Pupils from lower SES backgrounds have been found to benefit from a more integrated curriculum across grades and subjects (Connell, 1996). Connecting learning to real-life experience and stressing practical applications have been found to be particularly important to low-SES pupils, as has making the curriculum relevant to their daily lives. This may diminish disaffection as well as promoting learning (Guthrie, Guthrie, Van Heusden, & Burns, 1989; Henchey, 2001; Hopkins & Reynolds, 2002; Montgomery et al., 1993). According to Mortimore (1991), effective teaching in this type of school should be teacher-led and practically focussed, but not low-level or undemanding. Creating consistency in teaching approach is important for pupils from low-SES
backgrounds, and has been found to be related to improved outcomes (Mortimore, 1991).

In their study of schools in high and low SES areas, Teddlie and Stringfield (1993) found that in effective low-SES schools there was more emphasis on basic skills, and less on extending the curriculum than in effective high-SES schools. Similar findings were reported in a study of effective schools in California (Hallinger & Murphy, 1986). A survey of 366 high-performing schools in high-poverty areas found that they had focussed more strongly on maths and English by extending teaching time and changing the curriculum so there was a stronger emphasis on basic skills (Barth et al., 1999). A Dutch study found that in effective schools with high numbers of underperforming ethnic minority students, there was a strong emphasis on basic skills, and a strongly structured curriculum (Ledoux & Overmaat, 2001), and one American study looking at the implementation of the New American Schools school reform reported that some (though by no means all) teachers in a poor urban district felt that some of the designs lacked the structure and basic skills emphasis needed in those contexts (Berends, Bodily, & Kirby, 2002).

Other authors, however, claim that pupils from low-SES backgrounds are more capable of higher order thinking than is often supposed, and should be exposed to a curriculum that is as rich as that of their advantaged counterparts, built around powerful ideas and focussing on metacognitive skills (Guthrie et al., 1989; Leithwood & Steinbach, 2002). Interestingly, one school improvement project that chose to narrow the curriculum by aligning it to a basic skills test used by the region (the Iowa Test of Basic skills) failed to result in improved performance after 2 years (Philips, 1996). Further evidence comes from an American project in which the curriculum of a highly selective private school was transplanted to two high-poverty schools in Baltimore (with a large amount of professional development and support through a school-based coordinator), leading to strong improvements in achievement in both schools, as well as improvements in attendance (McHugh & Stringfield, 1998). Programmes stressing an advanced skills curriculum were found to improve the achievement of high-poverty ethnic minority students in another US study (Borman, Stringfield, & Rachuba, 1998). A danger with focussing on basic skills in schools with a low-SES intake is that by offering them an impoverished curriculum social divides could be exacerbated rather than diminished. A study of 26 high-achieving impoverished schools in Texas showed that both direct instruction and constructivist teaching strategies were employed in these schools, neither seeming inherently more effective
(Lein, Johnson, & Ragland, 1996). A similar finding was reported by Ledoux and Overmaat (2001) in their Dutch study, effective schools using a mix of traditional and constructivist methods. Interestingly, in two well-executed studies in the US and UK, improving schools were found to have emphasised arts (Connell, 1996; Maden, 2001).

While a focus on teaching and learning is crucial, the conditions must first be in place in which effective teaching can occur. Maden and Hillman (1993) found that improving schools had all put clear discipline procedures in place and were focussed on creating an orderly environment. In particular in disadvantaged areas, it is crucial to have effective discipline in place. However, this does not mean that schools should be excessively disciplinarian. Valuing pupils and making them feel part of the school “family” are also characteristics of effective schools, as is pupil involvement in setting up the rules (Connell, 1996; Lein et al., 1996).

**Leadership**

It is well-known that leadership plays a key role in school improvement and school effectiveness. The evidence from the international literature demonstrates that effective leaders exercise an indirect but powerful influence on the effectiveness of the school and on the achievement of students in most countries (Harris & Muijs, 2003). The Netherlands has been an exception to this pattern (Ledoux & Overmaat, 2001; Van de Grift, 1990), although there is some evidence that leadership might be increasing in importance there as well (Scheerens, 1998). In a major review, Hallinger and Heck (1998) report that principal leadership has an indirect but highly measurable effect on pupils’ achievement, explaining up to a quarter of the school-level variance in pupil achievement. What form that leadership should take is less clear. Maden and Hillman (1993) did not find one particular leadership style in their improving schools in disadvantaged circumstances, but noted that in many there was shared decision-making and collegiality. Harris and Chapman (2001) reported that leaders adapt their style to particular circumstances and external pressures, with heads being able to adopt different styles to suit their circumstances.

Traditionally, leadership has been seen as the preserve of “great men,” inspirational heads who can “turn round” schools, especially those facing challenging circumstances (Harris & Chapman, 2001). Recently, however, there has been a move towards a realisation that the most effective means for true improvement lies in more distributed and democratic forms of leadership, involving teachers in leading their schools. The heroic view of leadership has
only on occasion been found to be the factor that has led to school improvement (Connell, 1996), while teacher leadership has been found to benefit improvement in a range of studies (Harris & Muijs, 2002). School improvement programmes that have attempted to increase teacher involvement in decision-making report positive effects (IESP, 2001), and heads of improving and effective inner-city schools frequently mentioned this as an important approach (e.g., Seeley, Niemeyer, & Greenspan, 1990). Piontek, Dwyer, Seager, and Orsburn (1998) found decentralised leadership, using small teams that made decisions on different aspects, to be typical of improving schools in their study of six high-poverty urban elementary schools. In Louis and Miles’ (1990) study of urban high schools, heads were found to be strongly instrumental in formulating a clear vision for the school and in monitoring performance, but likewise involved teachers and middle managers in school leadership. Involving teachers in developing or choosing a school improvement strategy has been found to be a crucial factor in sustaining improvement in a number of studies.

In a review of the Memphis Restructuring Initiative, it was found that both leadership of the head and teacher involvement were crucial to the success of the programme, the head being more influential on the speed that schools took to implement the reform programme, but teacher commitment being crucial to the quality of implementation (Ross, Sanders, Wright, Wang, & Alberg, 2001). Some experts advocate stronger participation of community members as well, involving them in a democratic structure focussed on inquiry and school improvement (IESP, 2001; Joyce et al., 1999). They suggest setting up a body specifically charged with school improvement, composed of management, teachers, local business leaders, and members of the community. In Maden and Hillman’s (1993) study, however, effective schools in disadvantaged areas differed in their extent of community involvement.

Open communication is obviously an important aspect of this collaborative, distributive leadership style, and has been found to characterise improving and effective schools in a number of studies (Harris & Chapman, 2001; Hughes, 1995). Clear communication of expectations by the head was correlated with pupil gains in achievement in a US study of an urban school district (Berends, 2000). Collaboration and trust have likewise been found to be related to effectiveness in schools in difficult circumstances, and are crucial to being able to deal with the emotional disruption change almost invariably causes (Lein et al., 1996; Stoll, 1999). Leadership in improving schools is often described as transformational, seeking to satisfy higher needs and engaging
the full person of the follower, as opposed to transactional leadership, which is characterised by exchange relationships (Harris & Chapman, 2001; Reynolds et al., 2001). Transformational leadership is seen as better able to cope with complex situations (such as those faced by schools in economically deprived areas), and was, along with instructional leadership (focus on teaching and learning), found to be a characteristic of effective leaders in one review (Hallinger & Heck, 1998).

Leadership in effective and improving schools has also been described as instructional, which means that effective heads focus on teaching and learning issues more than on other (administrative) aspects (Connell, 1996; Stoll, 1999; Teddlie & Stringfield, 1993). This also means being cognisant of current teaching and learning theories, and/or helping and encouraging staff to continually develop their expertise in these areas. Leaders must also be seen by staff to be learners themselves (Stoll, 2001). Communicating a strong vision of where the school is going, what the school’s expectations are, and what the school can achieve, has been found to be significant in improving schools in disadvantaged areas in a number of (US) studies (Castellano, Stringfield, & Stone, 2002; Datnow & Stringfield, 2000). One large-scale study in the US suggested an important difference between leadership in effective low- and middle-SES schools, in that leaders in low-SES schools were more likely to be initiators, making changes in the school, whereas effective middle-SES leaders were more likely to be managers (Teddlie & Stringfield, 1993). This may well have something to do with the additional difficulties encountered in low SES contexts.

Creating an Information-Rich Environment

Data-richness has long been found to be an important component of effective and improving schools in studies in the UK, the US, and Canada. The (forthcoming) study of HRS components by Reynolds, Stringfield, and Muijs, for example, found this factor to be strongly related to improvement. Being data-rich means that data can be turned into information used as a basis for school and classroom decision-making (Henchey, 2001; Hopkins, 2001; Joyce et al., 1999; Reynolds et al., 2001). Data-rich schools collect and centralise a wide variety of data, including exam results, standardised and teacher-made test results, questionnaires, and qualitative data, but this is of no use if it is not used to improve schooling.

Data-rich schools continuously interrogate existing test data to see whether initiatives are working, or whether there are problems with achievement in
particular areas or with particular populations. They have been described as “inquiry minded” (Barth et al., 1999; Earl & Lee, 1998). Schools can also decide to collect the views of pupils and/or teachers through the use of questionnaires on student and staff satisfaction, school conditions, and even teaching methods (Etheridge, Butler, & Scipio, 1994). Data have been successfully employed in looking at the effectiveness of new programmes, teaching styles, or mentoring methods (Connell, 1996). Collecting data on factors such as attendance may likewise be useful, as can disaggregating data according to such factors as gender and ethnicity. Target setting, which should always be based on data in order for it to be realistic and useful, has been found to be a spur to school improvement in many schools (Reynolds, Sammons, Stoll, Barber, & Hillman, 1996). Schools can also benefit from the use of information from audits and internal reviews, for example through the use of surveys on school conditions, such as the management conditions survey used in the “Improving the Quality of Education for All” (IQEA) school improvement project in the UK (Hopkins, West, & Ainscow, 1996).

Creating a Positive School Culture

School culture is one of the most widely cited elements in improving or effective schools, but also one of the most problematic. Some cultural elements that are amenable to intervention and that can aid school improvement have been identified. A blame-free culture is essential if the conflict that renewal efforts can cause is to be alleviated. Open communication and supportive leadership can help achieve this (Joyce et al., 1999).

Coherence is a key element to improving schools in economically deprived areas. Pupils need to know what to expect, and have the right to experience a high quality of teaching in all lessons. This continuity in approach should be extended to coherent assessment methods across subjects, and to interrelated courses within the school curriculum (Hopkins & Reynolds, 2002; Leithwood & Steinbach, 2002). Maden and Hillman (1993) found a coherent approach to be common to all the effective schools they studied, with the school development plan often lying at the heart of this approach.

High expectations are consistently cited as being important to pupil achievement, and this is likely to be the case to an even stronger extent in schools serving a low-SES population (Lein et al., 1996; Montgomery et al., 1993). Producing high expectations is, however, more easily said than done, be it among teachers, pupils, or members of the community. Producing success stories can help teachers divest themselves of negative beliefs about
pupils, as can the setting (and achieving) of ambitious targets for pupil achievement in the school. High expectations need to be transmitted to pupils. This can be facilitated through monitoring of pupil work, positive feedback, and the setting of demanding but realistic pupil targets (Maden & Hillman, 1993).

One problem for schools in economically deprived areas is the problem of high staff turnover, which can disrupt the school. In one study, for example, it was found that schools with similar demographic characteristics that were differentially effective differed in terms of staff turnover, the less effective schools experiencing higher turnover rates (Hughes, 1995). The causality here is unclear, however, as low turnover could both be a cause and a result of higher effectiveness. Obviously, levels of turnover can strongly affect school culture, with stable staffs having a positive effect in that a shared culture and vision can be maintained, but also in some cases leading to complacency and a resistance to change.

School improvement efforts have been found to be strongly influenced by teachers’ beliefs in the effectiveness of the intervention, which influences their work-rate and enthusiasm. In one study, teacher beliefs in these areas were found in part to be subjective, but mostly to be influenced by objective factors, and therefore by evidence of prior success of the improvement project and by the effect it was seen to have in their school and with their pupils (Borman et al., 2000).

Building a Learning Community
An increasing body of research has pointed to the need for schools to become learning communities, engaged in continuous improvement efforts and enquiring into both within-school conditions and out-of-school developments, rather than being merely reactive to inspection or government initiatives. Such schools are open to change and experiment, and engaged in continuous improvement through enquiry into existing practices and evidence-based adoption and adaptation of innovation (Joyce et al., 1999). In professional learning communities, the teachers in a school and its administrators continuously seek and share learning and then act on what they learn. The goal of their actions is to enhance their effectiveness as professionals so that students benefit. Learning schools are characterised by the presence of reflective dialogue, in which staff conduct conversations about students and teaching and learning, identifying related issues and problems (Louis & Kruse, 1995; Louis & Miles, 1990). Research on schools in disadvantaged
areas of Chicago has shown that schools that functioned as professional communities, where teachers worked collaboratively, took collective responsibility for student learning, and worked continuously to improve their teaching practices, were more effective in encouraging student achievement (Bryk, Easton, Kerbrow, Rollow, & Sebring, 1994). This emphasis on creating learning communities differs from approaches to school improvement that have focussed on specific short-term strategies (such as target setting), which may well work in the short term but will not create the conditions for continuous improvement (Hopkins, 2001). There is some evidence that becoming a learning community is linked to student outcomes, one review pointing to increased meaning and understanding of taught content by pupils, as well as teaching being more adapted to student needs (Hord, 1997).

Stoll (1999) sees continuous learning as dependent on the school’s capacity, which is in turn influenced by the school’s teachers, the school’s social and cultural learning context, and the school’s external context. The “teacher as learner” is central to school capacity, teachers’ practices being the key to school improvement and school effectiveness. Teachers are, however, not working in isolation, but are influenced by their interactions with others, their pupils, the school culture, its management, and so forth (Stoll, 1999). Finally, the external context (community, policy, global culture) of the school influences the school’s capacity. Louis and Kruse (1995) identified supportive (and often distributed) leadership from the head as a crucial factor in creating learning communities, along with a shared vision focussed on student learning, respect and trust among colleagues, and, not least, the existence of physical spaces were staff could meet to engage in reflective dialogue.

One problem with school-based improvement efforts can be that much time is expended on inventing solutions that already exist or that are inferior to existing solutions. That is why it is important for schools to study the existing knowledge base or connect to external agencies (such as LEA’s, HEI’s), and to pilot new ideas on a small scale before stringently analysing them (Joyce et al., 1999; Piontek et al., 1998). Learning organisations are by definition not overly conservative, however. Experimentation is encouraged, and different approaches are tried out and appraised for effectiveness. An example of this was found in a large-scale study of schools in economically deprived parts of Texas, where high performing schools were found to experiment with new approaches, but did so in a careful way attempting always to select approaches that were likely to lead to improved student outcomes, and monitoring success (Lein et al., 1996).
Joyce et al. (1999) suggest the building of small teams that engage in school improvement activities, which will increase teachers’ sense of belonging and minimise alienation. Teamwork is crucial to creating a learning community. One study found teamwork, along with strong teacher accountability, to be a factor that differentiated more from less effective schools in West Virginia (Hughes, 1995), while in their study of improving high-poverty schools in Massachusetts, Piontek et al. (1998) likewise found teamwork and positive communication to be distinguishing variables in all these schools. Teams will need to be fluid, impermanent, and oriented to achieving a particular goal (Lein et al., 1996). To be effective, collaboration needs to be purposeful and action focussed. Working together on a shared plan of action, for example, is likely to lead to positive outcomes and avoids the pitfalls of “contrived collegiality” (Connell, 1996; Piontek et al., 1998).

Schools need to ensure that time for common lesson planning and collective enquiry is available, for example by rescheduling the school timetable, and making sure that teachers can observe one another’s lessons, as many instances of good practice will be found in any given school (Connell, 1996; Guthrie et al., 1989; Seeley et al., 1990). In a learning community, staff will talk with each other about teaching and learning, creating an inquisitive and change-oriented environment in which one innovation leads to another (Piontek et al., 1998). Another way to help create learning communities in schools is to focus on the departmental as well as the school level. Due to its greater proximity to the pupil, as well as to the fact that in the large secondary school it is usually the forum within which teacher practice and discussion are actually framed, departments can have a greater effect on improvement and can be a practical way to start to create learning communities within the school (Harris, 2001).

**Continuous Professional Development**

Research shows that improving schools spend more time and effort on professional development than stable schools (Freeman, 1997). Many effective and improving schools therefore have policies in place that support staff professional development (Henchey, 2001; Reynolds et al., 2001). A strong Continuous Professional Development (CPD) element is common to the most effective school reform programmes in the US (Barth et al., 1999; Herman, 1999). Staff development was found to be one of the most important factors in Reynolds, Stringfield, and Muijs (forthcoming) analysis of the relationship between components of the High Reliability Schools school...
improvement programme and improvement in participating schools over a 5-year period.

Professional development does not just need to be present, however. To be effective, professional development needs to be linked to school and not just individual goals and needs to be embedded in the workplace (Joyce et al., 1999).

As well as these factors, Joyce and Showers (1995) suggest that the following elements should be present in effective staff development:

1. Practical, classroom relevant information. Teachers prefer training to be grounded in practical classroom concerns.
2. An element of theory, aimed at fostering deep understanding.
3. Incorporating some element of demonstration likewise increases the effectiveness of training substantively.
4. Combining these three makes an even bigger difference: Their combination makes more difference than one would expect from just adding the individual effect of these components.
5. Coaching and feedback, through the use of mentor programmes for example, makes even more difference, leading to further large positive effects on student outcomes.

In most cases, professional development in schools at present does not include all these elements, and where it does, it does not include a sufficient amount of time for teachers to attain mastery in the area studied (Joyce et al., 1999). In one study of the implementation of the New American Schools Design, for example, poor results in some schools resulted in part from a lack of concrete, hands-on training (Berends, 2000). Time needs to be made for professional development. One suggested way of doing this is to reserve all staff meetings for professional development, as done in at least one of the improving schools studied by Piontek et al. (1998). Working with other schools and other forms of networking, such as occurs through the Leading Edge seminars on leadership organised by the National College for School Leadership in the UK, are another promising development in CPD.

Involving Parents

Joyce et al. (1999) have stated that for true school improvement to occur, schools must become broader communities, involving parents and local businesses as well as teachers and heads. In one study using interviews with principals of effective inner-city schools, it was found that heads frequently
mentioned parental involvement as crucial to school improvement (Seeley et al., 1990). In another US study of improving schools in economically deprived areas, the most successful school was found to have a very strong community outreach programme, including links with local businesses and parents (Borman et al., 2000). In Barth et al.’s (1999) survey study, effective schools were found to specifically involve parents in raising standards through improving their knowledge of the curriculum and capacity to help their offspring, rather than use them largely as fundraisers. In their UK study, Maden and Hillman (1993) found that effective and improving schools attempted to involve parents, but often found this very hard to achieve, while Connell (1996) in his study of improving schools in inner-city New York found that parents were involved in some schools but by no means all. Henchey (2001) reports similar findings in Quebec. While these studies suggest mixed results, a large-scale study in Louisiana actually found that effective low-SES schools discouraged parental involvement in order to keep at bay negative home influences, while effective high-SES schools did have strong parental involvement programmes (Teddle & Stringfield, 1993). In another US study, it was found that in order to optimise effectiveness, school leadership teams needed to hear and take account of parent (and student) voices, but paradoxically that having parents on the team was detrimental to professional relations (Chrispeels, Castillo, & Brown, 2000). Coleman (1998) widens the discussion by seeing parental involvement as part of a triangular relationship between teachers, parents, and students, each able to reinforce positive attitudes in the other. Parents and students both need to participate fully in the school. Teachers who were able to improve student commitment and attitudes were characterised by positive attitudes towards parents (Coleman, 1998). Achieving parental involvement is one of the most difficult areas of school improvement in economically deprived areas, however.

One large-scale study found that children in low-SES homes were subject to only half as much parental talk as children in high-SES families, with talk aimed at them more likely to be negative than in high-SES families. This led to a widening vocabulary gap that meant that by age 3, high-SES children had a vocabulary three times as great as those in low-SES households (Hart & Risley, 1995). Family education programmes and integrated school and social services have therefore been suggested as necessary in this type of environment, and have been found to have positive effects (Leithwood & Steinbach, 2002; Montgomery et al., 1993; Mortimore, 1991). School community workers, members of the community who liaise between school and home, monitor
families’ health and welfare needs and give parents information on school programmes and helping their child learn have been employed successfully in some effective school districts, as has helping parents with limited English proficiency by providing English language classes (Borman et al., 2000). Some schools have successfully improved parental involvement by providing them with incentives to come to school, such as transport, childcare or even in one highly impoverished district laundry facilities (Guthrie et al., 1989; Leithwood & Steinbach, 2002). It is also important to note in this respect that Maden and Hillman (1993) found that it was easier to get parents involved at the stage of their children’s nursery education than later on.

**External Support**

External support is another factor that has been found to be important to school improvement in disadvantaged areas (Reynolds, 1998). One way of generating external support is through the creation of networks of schools that can support one another, by providing leadership at many levels, social and technical support, sharing and generating of ideas, disseminating good practice, providing a different perspective, and creating larger professional learning communities (Hopkins & Reynolds, 2002), a strategy taken on in the UK for example through the learning schools network.

Another form of external intervention can be external monitoring. In a study in Louisiana, improving schools were found to be subject to more district monitoring of school improvement than stable schools (Freeman, 1997). One form of external monitoring is school inspection with a clear school improvement remit. However, recent research has shown claims that inspections lead to school improvement to be somewhat dubious. Chapman (2002) conducted 10 case studies of schools facing challenging circumstances, finding that the closer staff were to the classroom the more negative they were about the inspection process. He also found that OFSTED (the English school inspection body) inspections led to a more autocratic leadership style and more short-termist leadership. Where respondents reported improvement following inspection most claimed these changes could have been made without OFSTED (Chapman, 2002). On the other hand, external pressure can clearly set school improvement processes in motion in some cases, and a mix of external pressure and support has been found to be a catalyst for change (Fullan, 1991). However, accountability and improvement are not the same thing, and attempting to combine the two in one process will inevitably cause tensions and contradictions (Earley, 1998).
Local Education Agencies (LEA’s) have also often been seen as providing support for school improvement by acting as a resource for professional development, helping schools with data analysis, and giving intensive early support to schools (Watling, Hopkins, Harris, & Beresford, 1998), a role that would correspond with the facilitative rather than commanding role seen as useful for LEA’s in Seeley et al.’s (1990) principal interviews. One issue, however, is the extent to which LEA’s themselves, especially those serving economically deprived areas, may be suffering from many of the same problems that their schools are, and therefore to what extent they are actually able to support their schools effectively.

**Resources**

If school improvement is to succeed, proper resourcing has been shown to be essential (Reynolds et al., 2001). An overview of research on the relationship between school resourcing and pupil outcomes in the US suggests that a modest increase in resources could lead to a substantial improvement in pupil achievement (Greenwald, Hedges, & Laine, 1996). A direct link between the success of school reform initiatives and the amount of funding has found support in some American studies (Borman et al., 2000), while strong financial support (from the Annenberg Foundation) is undoubtedly one reason for the success of school improvement initiatives in New York and Chicago (IESP, 2001). Lack of resources following cuts was found to be the most common reason for school reform programmes to fail in a study of the implementation of school improvement strategies in the US (Nesselrodt, Schaffer, & Stringfield, 1997).

Just providing resources is unlikely to automatically lead to improvement, however. Effective schools have in some studies been found to be more effective at deploying resources, acting as “wise consumers” (Piontek et al., 1998) and to be more proactive at finding resources (Connell, 1996).

A further problem can be that providing resources to ineffective schools may itself be an ineffective strategy as these schools do not have the management and leadership capacities to use these extra resources in a way that is likely to lead to improvement (Whatford, 1998). This means that management capacity may have to improve before resources are put into failing schools.

Finally, it is important to note that changes in school composition itself can influence rates of school improvement (Thrupp, 1999). This is not purely due to the long-established link between school achievement and social
background, but also due to context effects whereby an increasing number of pupils from higher SES backgrounds in school intakes can create a change in school culture once a certain “critical mass” has been reached (Van der Velden & Bosker, 1991).

SUSTAINING IMPROVEMENT

While many schools can make short-term improvements, sustaining improvement is a big challenge, particularly for schools in economically deprived areas. However, the amount of research on this issue is very limited. One study that has looked at sustaining school improvement has been undertaken by Maden (2001). Researchers visited schools that had managed to sustain improvement over time even though they were in difficult or challenging circumstances. Findings pointed towards the importance of changes in the wider context, such as the local economy and school intake. Some schools had experienced “gentrification,” leading to a more middle-class intake, while in other areas the situation had declined. In all cases, this influenced sustainability of improvement (Maden, 2001).

Staff changes were also found to be a key element in altering the effectiveness of the school. Recruiting high-quality teachers was an important strategy in schools where staff changed substantially. Staff stability was also a factor as many of the effective schools had not experienced large-scale staff turnover over the 5-year period studied (Maden, 2001). Other factors included shared values that were clearly articulated, involving other adults, targeting, coaching and mentoring, and an academic focus. Sustained improvement was related to schools with “value-added curricula,” with after-school programmes, study skills centres, and a strong ICT component. Again, no one leadership style was found to be present. Notably, schools where improvement was sustained had strong external networks and connections and tended to interpret rather than be run by national initiatives (Maden, 2001).

American studies have come to similar conclusions reporting the following factors to be instrumental in sustaining school improvement:

1. teachers see methods as effective;
2. heads manage and support change;
3. there is a culture of continuous professional development;
4. active recruitment of high-quality staff (Datnow & Stringfield, 2000).
Looking at long-term effective schools in poor areas, research has identified factors very similar to those mentioned as being linked to school improvement in poor areas, such as clear goals and data-richness, but also a valuing of reliability over efficiency or low costs. Ongoing monitoring of success appears to be essential (Stringfield, 1998).

Florian (2000) studied state reform efforts in four state districts implemented 10 years earlier, to see whether reform had been sustained. The following factors were found to influence whether this had been the case:

1. schools becoming learning organisations, with an ongoing disposition to learning;
2. new practices integrated into school routine;
3. district policies that support reform;
4. creating a structure in which professional development and collaboration are to the fore;
5. leadership that maintains a consistent vision;
6. consistency between school and district level policies and good relations between the two; and
7. a supportive political context (Florian, 2000).

COMMENTARY AND CONCLUSION

It remains the case that schools located in contexts of multiple disadvantage have levels of performance that, in most cases, fall short of national averages. This not only presents them with a range of practical difficulties but asks a great deal of those who lead the school to “buck” this particular trend. There is little doubt that it would be simpler to pass off responsibility to other sectors or to Governments and claim there is little schools can do. As Stoll and Myers (1998) note, there are no “quick fixes” for schools facing challenging circumstances but there is an emerging evidence base to suggest that there are certain strategies schools can adopt that are successful. In summary, these include a focus on teaching and learning, effective distributed leadership, creating an information-rich environment, creating a positive school culture, creating a learning environment and a strong emphasis on continuous professional development. These have all consistently been demonstrated to be important in improving schools in difficult or challenging circumstances. We undoubtedly need to know much more about improving schools in difficult
circumstances and particularly how such schools sustain improvement over time. Increasingly, the evidence base is pointing towards the possibilities and potential of learning communities in building the capacity for school improvement. This offers a powerful way of generating opportunities for teachers to work together.

As the long-term patterning of educational inequality looks set to remain, leaders in schools facing challenging circumstances must look for strategies and approaches that might assist their school, in their context with their students. The strategies outlined in this article offer schools in disadvantaged or difficult circumstances and those who research in this area, some guidance about enhancing improvement potential. While the limitations of the research base are acknowledged, the degree of consensus concerning the key elements of improving schools in disadvantaged areas are worth serious consideration.

What can this evidence tell us about the three theories outlined earlier? Contingency theory would appear to receive some support from these findings, in that there appears to be some evidence that effectiveness in low-SES schools is linked to particular factors that distinguish them from high-SES schools, particularly in the sphere of teaching and learning (different instructional strategies), relations with parents and need for external support. However, other factors are similar to those in high-SES schools. It is hard to reach any firm conclusions on the validity of contingency theory from these findings. Research designs that aim specifically to test the theory, by selecting schools based not just on effectiveness and socioeconomic status background but on other contingency variables as well, would be necessary to validate the theory.

The compensatory model likewise receives some support from this overview, but does not seem to tell the whole story. On the one hand, there does appear to be some evidence that schools in these areas need to focus more strongly on basic conditions (such as high expectations and basic skills), but, on the other hand, as the research evidence on teaching and learning styles, leadership and the creation of learning organisations illustrate, it is not accurate to say that all schools need to start from basics in their improvement efforts. The compensatory model suggests that schools in low-SES areas are without exception still at a phase where basic needs need to be met. This overview suggests that while that may be the case for some schools, there are highly effective and high-achieving schools in low-SES areas that do not need to go through step 1. Therefore, the compensatory model may be particularly fruitful for low-achieving or failing schools in low-SES areas.
The additivity hypothesis cannot be said to have received much support from the data (although it cannot be rejected on the basis of the data either). While it is clear that schools in low-SES areas face particular challenges, it is not clear from this review that there is an additive effect as hypothesised. One of the reasons for this is that most studies reviewed have focussed quite specifically on schools in low-SES areas, and therefore no comparisons with other schools are made. The qualitative nature of most of these studies also does not lend itself to finding this kind of effect. However, it may also be the case that the additive effect found is a statistical artefact, resulting from the use of poor measures of parental background. In many studies, including some of those said to underlie the additivity hypothesis (e.g., Mortimore & Byfield, 1981), measures used have typically focussed on factors such as free meal eligibility, which, while a proxy for poverty, do not capture the sources of differential performance of different SES groups well. It might well be the case that if we included measures of cultural capital and parental education levels, which are much stronger predictors of achievement, the additive effect may disappear (Muijs, 1997). In any case, more research is needed to clarify the existence or not of such effects.

Summarising both the theory and empirical literature, we can tentatively suggest the following model for improvement for schools in low-SES areas. In all cases, teaching and learning should be at the heart of the school, driving its daily efforts. Effective, instructional leadership, data richness, and having high expectations of achievement among staff, pupils, and parents, are likewise elements that would appear to characterise all improving and effective schools. Other elements may depend on the schools’ phase and existing strengths and weaknesses. For example, while strongly distributed leadership sees to characterise effective schools, it may be that those that are in an early phase of improvement may need more forceful top-down methods to set the basics in place, as suggested by both contingency theory (fit to circumstances) and the compensatory model. Likewise, other issues, such as the extent to which schools need to concentrate on basic skills teaching, the extent to which external programmes as opposed to self-generated improvement are needed, and the extent to which parents can be involved, may depend on the improvement phase and effectiveness of the school. Schools that are in an early phase of improvement, or who appear to be failing, may need a lot of external support, strong leadership, and a focus on the basics, and may not be in a position to get parents to be strongly involved in the school. Schools that are already (quite) effective, may be able to move forward further by adopting
more open-ended improvement strategies, distributed forms of leadership, and a focus on creating learning communities.

It is clear that future research will need to concentrate on developing and testing theories, which will need to be contextual. There is a need for more theorising in this area, without, however, attempting to produce one overarching "school improvement" model, which does not take into account school context and situation.

There is also a need for more research testing the relative strength of the various components. At present (not least because of the preponderance of case-study research), there is a tendency to suggest that all elements are equally important, or to duck the issue altogether. Quantitative research that tests the strength of all the elements and links this to a differential contextual model would strongly enhance our knowledge base in this area.

As well as increased and more sophisticated quantitative models, there is a need for further qualitative research that gets at context and meaning in a way that quantitative research cannot accomplish. Presently, however, there is a preponderance of short-term, small-scale case studies in the field. This is insufficient if we are to move the field on. Truly indepth understanding is more likely to result from long-term case studies using ethnographic methods as well as the traditional interview. In that way, researchers should gain a more thorough understanding of the schools and communities they are studying.

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