

Successful School Leadership What It Is and How It Influences Pupil Learning

Kenneth Leithwood, Christopher Day,
Pam Sammons, Alma Harris and David Hopkins



Research Report

No 800

Successful School Leadership
What It Is and How It Influences Pupil Learning

Kenneth Leithwood, Christopher Day,
Pam Sammons, Alma Harris and David Hopkins

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education and Skills.

© University of Nottingham 2006
ISBN 978 1 84478 822 4

Contents

Preface	4
RATIONALE	5
1. Introduction	7
THE STATE-OF-THE-CONFUSION.....	7
THE MEANING OF LEADERSHIP.....	11
THE SIGNIFICANCE OF SCHOOL LEADERSHIP.....	12
CONCLUSION.....	15
2. The Nature of Successful Leadership Practices	18
INTRODUCTION.....	18
JUSTIFYING THE CORE LEADERSHIP PRACTICES.....	19
CORE PRACTICES AND COMPARATORS BASED ON RESEARCH IN SCHOOL CONTEXTS.....	20
CORE PRACTICES AND COMPARATORS BASED ON RESEARCH IN NON-SCHOOL CONTEXTS.....	25
THE CORE PRACTICES DESCRIBED.....	32
<i>A Theoretical (But Practical) Perspective on the Core Practices</i>	32
<i>Setting Directions</i>	34
<i>Developing People</i>	36
<i>Redesigning the Organization</i>	38
<i>Managing the Instructional (Teaching and Learning) Programme</i>	42
CONCLUSION.....	43
3. Distribution of Successful Leadership	45
INTRODUCTION.....	45
THE EFFECTS OF DISTRIBUTED LEADERSHIP.....	48
FORMS AND PATTERNS OF DISTRIBUTED LEADERSHIP.....	57
CONCLUSION.....	64
4. Roots of Successful Leadership Practice	67
INTRODUCTION.....	67
COGNITIVE CHARACTERISTICS OF SUCCESSFUL LEADERS.....	69
<i>Intelligence and Other Intellectual Functions</i>	69
<i>Problem Solving</i>	69
<i>Knowledge</i>	71
AFFECTIVE CHARACTERISTICS OF SUCCESSFUL LEADERS.....	74
<i>Personality</i>	74
<i>Motivation</i>	79
<i>Social Appraisal Skills : emotional understanding</i>	79
<i>Values</i>	81
CONCLUSION.....	84
5. From Successful Leadership Practices To Pupil Learning	85
INTRODUCTION.....	85
HOW LEADERS INFLUENCE THEIR IMMEDIATE COLLEAGUES.....	86
<i>Followers' Perspectives</i>	87
<i>Leaders' Perspectives</i>	90
TEACHERS' INTERNAL STATES.....	92
<i>Classroom Conditions</i>	93
<i>School Conditions</i>	96
<i>Conditions in the Home</i>	102
CONCLUSION.....	108

6. Conclusion	111
References	115

Preface

We wish to acknowledge particularly the contributions on research on leadership in South East Asia by Professor Allan Walker, Chinese University of Hong Kong. They provide an important perspective to this international review.

Rationale

This is a wide - ranging review of theory and evidence about the nature, causes and consequences for schools and students of successful school leadership. We undertook the review for several purposes. One purpose was to provide a state-of-the-evidence description of what is already known about successful leadership. We anticipated that such a description would be of some immediate use and guidance to those already in leadership positions and those with responsibilities for the development of leaders. A second purpose for the review was to help frame the large-scale study of successful leadership now underway with the sponsorship of the *DfES* and the *National College for School Leadership*. The review helped us to clarify the most important questions for inquiry, offered conceptual lenses on key variables of interest to our study and was a source of information about promising research methods. Third, we believe that, given widespread dissemination, the review will help build a demand and audience for the results of our large-scale study as they become available. Finally, the review may spark an interest in leadership on the part of those who have not, to this point, given it much thought.

Evidence included in the review is of two types. One type of evidence was original empirical research undertaken using a wide variety of methods. While an extensive body of such evidence is included in the review, we did not attempt to be exhaustive; that would clearly have been unrealistic in a paper of this length. Rather we gave special weight to work reported in the past decade, as well as to work of higher quality judged by conventional standards. We also made use of recent comprehensive reviews of research published in peer-review sources. The use of this type of evidence allowed us to reflect work reported over a relatively long period of time and to be more comprehensive in our coverage than would have been possible had we limited ourselves to individual studies alone. Use of the reviews also allowed us to judge, more

accurately, emerging conclusions warranted by significant amounts of evidence. We provide more detail about our sources of evidence in the concluding section of Chapter One.

1. Introduction

The State-of-the-Confusion

Leadership is a high priority issue for many people concerned with education these days. Reformers depend on it. The public believes that it is what schools need more of. It is not surprising, then, that so many people are trying to make a living peddling their latest insights about effective educational leadership. Indeed leadership by adjective is a growth industry. We have instructional leadership, transformational leadership, moral leadership, constructivist leadership, servant leadership, cultural leadership, and primal leadership (Goleman, Boyatzis & McKee, 2002). A few of these qualify as leadership theories and several are actually tested leadership theories. But most are actually just slogans. Consider, for example, the terms, especially popular in North America, “instructional leadership” and, in England, “learning-centred leadership”: they typically serve as synonyms for whatever the speaker means by “good” leadership – with almost no reference to models of instructional or learning-centred leadership that have some conceptual coherence and a body of evidence testing their effects on organizations and pupils.

With all this confusion about the concept of leadership in our environment, we might be persuaded to think that hard evidence about what is good or successful or effective leadership in education organizations is lacking – or at least contradictory – but we would be wrong. We actually know a great deal about the leadership behaviours, practices, or actions that are helpful in improving the impact of schools on the pupil outcomes that we value. As one example, the review of educational leadership effects on pupil learning reported almost 10 years ago by Hallinger and Heck (1996) included about 40 studies. And many more have been reported since then.

One source of confusion in sorting out what we know about successful school leadership is that much of the educational leadership literature does not focus on actual leadership practices at all. It is about leaders' values, beliefs, skills or knowledge that someone thinks leaders need in order to act in an effective manner, which may be inferred from observation of leaders at work, or which, may be reputed as contributing to leader effectiveness by a range of people who experience leadership. A popular leadership literature has grown up around Goleman's (1994) idea of "emotional intelligence." But this is an internal state, rather than an overt behaviour. Other, small scale empirical research which focuses upon leaders' values in action and their emotional qualities which impact on effectiveness does, however, exist internationally (e.g. Day et al, 2000; Sugrue et al, 2004). While leaders' internal states are interesting and obviously important – what leaders do depends on what they think and feel – no one experiences or knows the internal states of others except as they manifest themselves in some kind of externally expressed attitude or act. The empirical evidence linking any leader's internal state to their use of effective leadership practice, something we review below, although growing, is not yet extensive; and, whilst we acknowledge its importance, it does not form part of this present review.

The most visible examples of unwarranted assumptions or links between internal states and overt leadership practices are leadership standards: the ISSLC standards in the United States (Council of State Chief Council of Chief State School Officers, 1996); the standards driving leadership development in England (Teacher Training Agency 1998) and which were revised in 2004 (NCSL 2004) and others developed in Queensland, Australia, and New Zealand, for example (see Ingvarson, Anderson, & Gronn, 2006, for a thorough review of these standards and many others). Almost all of these standards, in addition to identifying leadership practices, spell

out long lists of knowledge, skills, and dispositions that leaders should have or acquire on the assumption that they are needed for effective leadership practice. The accumulated body of research on successful educational leadership has much less to say about this matter than a reading of the standards would suggest.

In contrast, the accumulated empirical evidence has a great deal to say about effective leadership practices, and by far the largest amount of this evidence is about the leadership of school principals or headteachers. A much smaller but still significant proportion is about the leadership of senior district/LA administrators. In addition, there is a rapidly growing body of evidence about teacher leadership (e.g., Murphy, 2005) and distributed leadership (e.g., Spillane, 2006), sometimes considered closely related. But so far this evidence is mostly descriptive, primarily generated through small qualitative studies. And the results of these studies are actually quite disappointing. The most recent and comprehensive review of the teacher leadership literature (York-Barr & Duke, 2004; see also Murphy, 2005) was able to locate only five empirical studies of teacher leadership effects on pupils and none reported significant positive effects.

Moreover, both teacher leadership and distributed leadership qualify as movements driven much more by philosophy and democratic values than by evidence that pupils actually learn more if a larger proportion of school leadership comes from non-traditional sources. Some advocates claim that the more leadership the better, that the capacities of the organization are realized more fully as the sources of leadership expand and that we should, as Sergiovanni (1999) has recommended, aspire to “leaderful” organizations in which everyone should be a leader. However, this argument has three flaws.

First, it asserts an empirical claim – that more leadership is better. So far this claim has received no support from the small amount of relevant empirical research that has been reported, assuming “better” has some reference to pupil learning. One recent study, for example, examined the effects of many different sources of leadership on pupil engagement in school and found that “total leadership” – the sum of the leadership provided from all sources – was unrelated to such engagement, whereas the leadership of the principal was significantly related (Leithwood & Jantzi, 2000).

A second flaw in the “everyone is a leader” argument begs the question, what do we mean by leadership? Much of the teacher leadership literature either describes teacher leaders engaged in administrative tasks or engaged in what most professions would agree are the normal responsibilities expected of a collection of professionals. Shared decision making and collaboration, for example, are really quite important to the success of schools. But why do we need to call them “distributed leadership”? These are activities that most of us value highly, but they should not be confused with leadership. Otherwise, the concept loses all unique meaning and significance.

Finally, this argument also begs the question, “If everyone is a leader, who are the followers?” We have lionized the person of the leader but in so doing, we seem to imply that the person of the follower is secondary. In one of their most recent books on professional learning communities, DuFour, Eaker & DuFour (2005) call on principals to view themselves as “leaders of leaders”. What could this possibly mean? Leaders and followers must be viewed as equally important – as two sides of the same coin – since the concepts depend on one another for any meaning at all. And much recent leadership research takes followers as a central variable. Charismatic leadership theory, for example, most often views charisma as something bestowed

on leaders by followers who predict that the person will be able to meet some of their important needs. In sum, a followerless organization is the same as a leaderless organization.

We turn now to the meaning of leadership and the evidence about effective leadership practices.

The Meaning of Leadership

School reform efforts have been most successful in those schools that need them least (Elmore, 1995). These are schools with already well-established processes and capacities in place on which to build, in contrast to those schools most often of concern to reformers which have little of this essential infrastructure. This is relevant for our thinking about the meaning of leadership because leadership is all about organizational improvement; more specifically, it is all about establishing widely agreed upon and worthwhile directions for the organization and doing whatever it takes to prod and support people to move in those directions. Our generic definition of leadership – not just effective leadership – is very simple, then; it is about direction and influence. Stability is the goal of what is often called “management.” Improvement is the goal of leadership. It is clear that both are very important. Indeed, instability is one of the most powerful explanations for the failure of most school improvement initiatives and it takes many forms. One of the most obvious and arguably the most frequent is instability of leadership in the form of frequent head and deputy head turnover. This form of instability, at the school level, is often a failure of management at the LA level. And it has devastating effects on a school’s improvement efforts (Hargreaves & Fink, 2006), Leithwood, McElheron & Jantzi, in press).

Stability and change have a synergistic relationship. While stability is often associated with resistance and maintenance of the status quo, it is difficult to leap forward from an unstable foundation. To be more precise, it is stability and improvement that have this synergistic

relationship. Leaping forward from an unstable foundation does produce change, just not the kind most of us think of as good – falling flat on your face is the image that comes to mind. This is one plausible reason why the blizzard of changes that have been adopted by schools over the past half century have had so little effect on the success of our pupils (e.g., Cuban, L., 1990; Cohen, 1990).

The Significance of School Leadership

While most readers require little persuasion concerning the significance of school leadership, there are those who argue that our confidence in leadership as a pillar of organizational effectiveness is misplaced. Meindl (1995) has referred to this as the “romance of leadership.” Thus it is important to ask whether the value typically attributed to educational leadership is actually warranted by the evidence. Five types of empirical evidence speak to this question.

One type is primarily qualitative case study evidence. Studies providing this type of evidence typically are conducted in exceptional school settings (e.g., Gezi, 1990; Reitzug & Patterson, 1998). These are settings believed to be contributing to pupil learning significantly above or below normal expectations as, for example, effective schools research based on “outlier” designs. Studies of this type usually report very large leadership effects not only on pupil learning but on an array of school conditions, as well (e.g., Mortimore, 1993; Scheurich, 1998). What is lacking from this evidence, however, is “external validity” or generalizability.

The second type of research evidence about leadership effects is large-scale quantitative studies of overall leader effects. Evidence of this type reported between 1980 and 1998 (approximately four dozen studies across all types of schools) has been reviewed in several

different papers by Hallinger and Heck, as mentioned earlier (1996a, 1996b, 1998). These reviews conclude that the combined direct and indirect effects of school leadership on pupil outcomes are small but educationally significant. While leadership explains only 5 to 7 percent of the variation in pupil learning across schools (not to be confused with the very large within-school effects that are likely), this is actually about one-quarter of the total across-school variation (12 to 20 percent) explained by all school-level variables, after controlling for pupil intake or background factors (Creemers & Reezigt, 1996; Townsend, 1994). The quantitative school effectiveness studies providing much of these data indicate that classroom factors explain more than a third of the variation in pupil achievement.

A third type of research about leadership effects, like the second type, also is large-scale and quantitative in nature. Instead of examining overall leadership effects, it inquires about the effects of specific leadership practices. Evidence of this sort can be found sporadically in the research alluded to above. But a recent meta-analysis by Waters, Marzano and McNulty (Marzano, Waters, & McNulty, 2005; Waters, Marzano, & McNulty, 2003) has significantly extended this type of research. This study identifies 21 leadership “responsibilities” and calculates an average correlation between each and whatever measures of pupil achievement were used in the original studies. From these data, estimates are calculated of the effects on pupil test scores (e.g., the authors conclude that there would be a 10 percentile point increase in pupil test scores resulting from the work of an average principal who improved her “demonstrated abilities in all 21 responsibilities by one standard deviation” (2003, p. 3).

A fourth source of research on leadership effects has explored such effects on pupil engagement. In addition to being an important variable in its own right, some evidence suggests that school engagement is a strong predictor of pupil achievement (see Fredricks, Blumenfeld, &

Paris, 2004, for a review - especially p. 70). At least 10, mostly recent, large-scale, quantitative, similarly designed, studies in Australia and North America have assessed the effects of transformational school leadership on pupil engagement (Leithwood & Jantzi, 1999a, 1999b; Leithwood, Riedlinger, Bauer, & Jantzi, 2003; Silins & Mulford, 2002; Silins, Mulford, & Zarins, 2002); and all have reported these to be significantly positive.

Finally, as we have already mentioned, the leadership succession research provides an interesting source of evidence about school and district leadership effects. Unplanned principal succession is one of the most common sources of schools failing to progress, in spite of what teachers might do. Studies in Canada by Macmillan (2000) and more recently by Fink & Brayman (2006), for example, demonstrate the devastating effects of principal succession, especially on initiatives intended to increase pupil achievement. Frequent changes in headteachers is a common occurrence in many schools. One of us recently conducted a three-year study of school improvement processes in the province of Ontario. Among other things, this study involved tracking the progress of ten schools located in a comparable number of districts over that period. In the course of three years, seven of the original ten principals moved on, for one reason or another. And the school improvement initiatives they had underway, with one exception, withered and died (Leithwood, McElheron -Hopkins & Jantzi, in press). On the other hand, the appointment and retention of a new head is emerging from the evidence as one of the most important strategies for turning around struggling schools or schools in special measures (Matthews & Sammons, 2005; Murphy, in press).

Our conclusion from this evidence, as a whole, is that leadership has very significant effects on the quality of the school organization and on pupil learning. As far as we are aware, there is not a single documented case of a school successfully turning around its pupil

achievement trajectory in the absence of talented leadership. One explanation for this is that leadership serves as a catalyst for unleashing the potential capacities that already exist in the organization. Those in leadership roles have a tremendous responsibility to “get it right.” Fortunately, we know a great deal about what getting it right means. The purpose of this paper is to provide a synopsis of this knowledge.

Conclusion

The aim of this paper, as a whole, is to trace the path followed by research which provides evidence of productive, helpful or successful leadership practices as they eventually act to improve student achievement. This means describing what we know about those successful practices, as well as their relationship to the school organization and to those experiences of students that promote their learning. This is by no means a “straightforward” matter because it potentially encompasses the primary concerns of both school improvement and effective schools scholars, organizational theorists, instructional designers, curriculum theorists, cognitive scientists, developmental psychologists, brain researchers, measurement and evaluation specialists ... the list goes on.

So we should acknowledge, at the outset, that this paper cannot possibly be exhaustive. Our more modest goals are that what is reported here will be both useful and relatively comprehensive: We aim to be useful to those helping leaders get better at what they do and useful to those aiming to push the margins of our knowledge base about successful school leadership. We also aim to be comprehensive in our attention to the array of variables interacting in the complex chain of variables linking leadership to student learning.

The first reflection of these more modest goals can be seen in our review methods.

Our review aimed to capture the results of a very large body of quite diverse research in a manageable space. We did not restrict our review to just work carried out in the United Kingdom nor work carried out only in school contexts. Rather, we carefully weighed the relevance of all the studies we reviewed to leadership in English schools. Our review also aspired to be an authentic reflection of conclusions warranted by this research. To accomplish these goals we included in our review:

- *Original empirical research undertaken using a wide variety of methods*: we did not attempt to be exhaustive in our review of this literature. Rather we gave special weight to recent work (typically work reported in the past decade) and to work of higher quality judged by conventional standards. We did not aim to conduct a quantitative “meta-analysis” since the demands of this approach result in the omission of considerable amounts of valuable information, in particular, information generated through qualitative research methods. Efforts to understand and explain leadership, as in this case, depend critically on evidence generated through such methods.
- *Recent comprehensive reviews of research published in peer-review sources*: the use of this literature allowed us to be more comprehensive, to cover more ground than would be possible if we limited ourselves to individual studies alone. It also allowed us to judge, more accurately, emerging conclusions warranted by significant amounts of evidence.

Refereed journals were a major source of our original research evidence. Those journals publishing studies of educational leadership given greatest attention included: *Educational Management and Administration*, *School Leadership and Management*, *Journal of Educational Administration*, *Educational Administration Quarterly*, *Journal of School Leadership*, *International Journal of Educational Leadership*, *School Effectiveness and School Improvement*,

and *Leading and Managing*. Journals typically publishing original leadership research conducted in non-school contexts to which we were particularly attentive included: *The Leadership Quarterly*, *Organizational Science* and the *Administrative Science Quarterly*.

Major syntheses of education leadership research beyond these journals were also reviewed including, for example, those published in the first and second *International Handbook of Educational Leadership* (Leithwood & Hallinger, 1995; 2003), the *Handbook of Research on Educational Administration* (Murphy & Seashore Louis, 1999); and *A New Agenda for Research in Educational Leadership* (Firestone & Riehl, 2005) and many others of a more limited scope.

Subsequent sections of this review provide a synopsis of the evidence from these sources in response to four questions:

- What is it that successful school leaders do - their overt practices, behaviours or functions? (Section 2);
- How are those practices distributed across people in the organization? (Section 3);
- What do we know about the roots or antecedents of successful leadership practice (Section 4); and
- How does the influence generated by successful leadership practices actually work its way through the school organization eventually and result in more learning for students? What mediates and moderates leadership effects? (Section 5).

Our review concludes in Section 6 with a summary of the variables touched on in earlier sections. We offer some preliminary judgements concerning the robustness of the evidence about each of these variables and note those variables we have chosen to measure in the first (survey) stage of our empirical study.

2. The Nature of Successful Leadership Practices

Introduction

The bulk of this section is devoted to a description of practices common to successful leadership in many different situations and sectors, but especially schools. We begin by acknowledging the substantial diversity to be found within the academic literatures about the nature of successful leadership more generally. The plural, “literatures” is used, because there is only occasional acknowledgement of research and theory across school and non-school sectors; transformational leadership is the most obvious exception to this general claim, with significant numbers of adherents in both camps who do interact in print about their work.

For the most part, educational leadership researchers are exclusively concerned with leadership in school organizations. While they occasionally draw on evidence collected in other settings, they rarely show any interest in extending their own work to those other settings. In contrast, leadership researchers working in non-school contexts have typically worried quite a bit about how well their theories and evidence travel across organizational sectors (although schools have been a relatively minor focus of their attention).

A series of related research summaries over the past three years have described the central elements of what we describe, in this section, as the “core practices” or “basics” of successful school leadership (Leithwood & Jantzi, 2005; Leithwood & Riehl, 2005; Leithwood, Seashore-Louis, Anderson, & Wahlstrom, 2004). The four broad categories of practices identified in these research summaries include:

- Setting Directions;
- Developing People;
- Redesigning the Organization; and

- Managing the Instructional (teaching and learning) Programme.

Each of these categories, further refined for the purposes of this review, encompasses a small number of more specific leadership behaviours (14 in total). The bulk of available evidence indicates that these categories of practice are a significant part of the repertoire of successful school leaders, whether working in a primary (elementary) or secondary school, a school or a school district/LA, a school in England, the United States, Canada or Hong Kong.

Many of our core practices have their genesis in several different models of transformational leadership – the early work of Burns (1978) and the follow-up empirical work of both Podsakoff, MacKenzie, Moorman and Fetter (1990) and Bass (1985). Considerable work with this approach to leadership in LA and school contexts has led to the current formulation. We have recently counted in excess of 40 published studies and some 140 unpublished studies which have focused on many of these leadership practices in school and LA contexts since about 1990. The accumulated evidence now available tells us a good deal about their relative contribution to organizational improvement and student learning. Core practices are not all that people providing leadership in schools do. But they are especially critical practices known to have significant influence on organizational goals. Their value lies in the focus they bring to what leaders attend to.

Justifying the Core Leadership Practices

The main sources of evidence justifying our core practices can be found in the reports cited above. In this section, however, we compare the core practices with other formulations of leadership practices in order to further justify our claims about the validity and comprehensiveness of the core practices. The first set of comparisons is restricted to school-

related conceptions of effective leadership practice, while the second set looks more broadly across organizational sectors.

Core Practices and Comparators Based on Research in School Contexts

Although our core practices were developed from a broad array of empirical evidence collected in school contexts, we provide further justification of their validity and comprehensiveness by comparing them with behaviours included in the most fully tested model of instructional leadership available in the literature (Hallinger, 2003) and recent meta-analyses of empirical evidence about the practices of leaders which demonstrably contribute to student achievement (Marzano et al., 2005; Waters et al., 2003).

1. Hallinger's Model of Instructional (teaching and learning) Leadership

While the term “instructional leadership” has been mostly used as a slogan to focus headteachers on their students’ progress, there have been a small number of efforts to give the term a more precise and useful meaning. In North America, book-length descriptions of instructional leadership by Andrews and Soder (1987) and Duke (1987) are among such efforts, for example. However, Hallinger (2000), Hallinger and Murphy (1985), and Heck, Larson, and Marcoulides (1990) have provided the most fully specified model and by far the most empirical evidence concerning the nature and effects of that model in practice. By one estimate, this evidence now runs to 125 studies reported between 1980 and 2000 (Hallinger, 2003). Three categories of practices are included in the model, each of which encompasses a number of more specific practices (10 in total):

- *defining the school's mission* includes framing and then communicating the school's goals;
- *managing the instructional program* includes supervising and evaluating teaching, coordinating the curriculum, and monitoring student progress; and

- *promoting a positive school learning climate*: encompasses protecting teaching time, promoting professional development, maintaining high visibility, providing incentives for teachers, and providing incentives for learning.

Hallinger's recent (2003) review of evidence concerning instructional leadership found that mission-building activities on the part of principals are the most influential set of leadership practices.

2. Waters, Marzano and McNulty's Meta-analysis

A paper (2003) and subsequent book (2005) by these authors report the results of a meta-analysis of 70 empirical studies reported over a 30 year period which included objective measures of student achievement and teacher reports of leadership behaviours. The main product of the analysis is the identification of 21 leadership "responsibilities" which contribute significantly to student achievement. These are responsibilities that are exercised in degree; the more the better. We consider 17 of these to be "behaviours" while the remaining four are traits or dispositions (Knowledge of curriculum, ideals/beliefs, flexibility, situational awareness).

Table 1 summarizes the relationship between our core practices, the behaviours included in Hallinger's (2003) instructional leadership model, and Waters, Marzano and McNulty's (Waters et al., 2003; Marzano et al., 2005) meta-analysis. All behaviours included in the two comparators (i.e., Hallinger, Waters et al) are encompassed by our core leadership practices with the exception of a category called "Communication" (establishes strong lines of communication with teachers and among students) in the Waters et al. analysis. Communication is an undeniably important skill and behaviour for people in many walks of life – certainly for those in leadership roles – but we have chosen to focus on behaviours relatively unique to those in leadership roles.

Table 1

Core Practices of Successful School Leaders Compared with Successful Practices Reflected in Other School-related Sources

Core Leadership Practices	Hallinger’s Model of Instructional Leadership	Waters et al. Meta-analysis
SETTING DIRECTIONS		
Vision	Developing a clear mission focused on students’ academic progress	Inspires and leads new & challenging innovations
Goals	Framing the school’s goals Communicating the school’s goals	Establishes clear goals and keeps them in forefront of attention
High performance expectations		
DEVELOPING PEOPLE		
Individualized support/consideration Emotional understanding and support	Providing incentives for teachers	Recognizes & rewards individual accomplishment Demonstrates awareness of personal aspects of teachers and staff
Intellectual stimulation	Promoting professional development	Is willing to, and actively challenges, the status quo Ensures faculty & staff are well informed about best practice/fosters regular discussion of them
Modelling	Maintaining high visibility	Has quality contacts & interactions with teachers and students)
REDESIGNING THE ORGANIZATION		
Building a collaborative culture		Fosters shared beliefs, sense of community, cooperation Recognizes and celebrates school accomplishments & acknowledges failures Involves teachers in design and implementation of important decisions and policies
Structuring the organization to facilitate work	Providing incentives for learning	
Creating productive relations with families & communities		Is an advocate & spokesperson for school to all stakeholders

Core Leadership Practices	Hallinger's Model of Instructional Leadership	Waters et al. Meta-analysis
Connecting the school to its wider environment		
Managing the Teaching Programme		
Staffing		
Providing teaching support	Supervising & evaluating instruction Coordinating the curriculum	Establishes set of standard operating procedures & routines Provides materials necessary for job Directly involved in design & implementation of curriculum, instruction and assessment practices
Monitoring	Monitoring student progress	Monitors the effectiveness of school practices & their impact on student learning
Buffering staff from distractions to their core work	Protecting teaching time	Protects teachers from issues & influences that would detract them from their teaching time or focus

Table 1 indicates, in sum, that:

- within the Direction Setting category, both comparators touch on practices related to vision and goals but neither attends to creating high performance expectations;
- all core practices included in the broad category Developing People are reflected in practices associated with both comparators;
- of those specific practices included as part of Redesigning the Organization, the Hallinger model of instructional leadership does not identify culture-building practices or practices aimed at building productive relationships with families and communities. Waters et al identify all of these core practices.
- there are four core practices incorporated into the broad category Managing the Teaching Programme. Three of the four are also included in both comparators, the exception being staffing the teaching programme, an obviously important function for leaders.

So Table 1 demonstrates that the core practices are quite comprehensive, as compared with several other widely used conceptions of successful educational leadership – although we should remind ourselves that these meta-analyses do not provide evidence of what might be regarded by some as essential ‘ internal states’ necessary to sustain success: commitment and resilience, passion and understandings (Hargreaves and Fink, 2006; Day, 2005; Goleman, 1996) which underpin the abilities and capacities of headteachers to apply these core practices successfully. We focus upon these in Chapter 4 of this review.

Core Practices and Comparators Based on Research in Non-school Contexts

Substantial evidence demonstrates the value of our core leadership values and practices in both non-school and school contexts (e.g., business and military organizations), as well as in quite diverse national cultures. Whilst *Managing the Teaching Programme*, seems unique to schools, it is also applicable to other organizations slightly reworded as *Managing the Organization's Core Technology*.¹

In this section, we compare the core practices with two other sources of evidence about key leadership practices justified by evidence primarily collected in non-school organizational contexts – Yukl's taxonomy of managerial behaviours and a synopsis of a significant selection of alternative leadership “models” or theories.

1. Yukl's Taxonomy

This classification of important leader or manager behaviours was the outcome of synthesizing seven earlier behavioural taxonomies, each of which built on quite substantial empirical and/or theoretical foundations. Yukl (1994) found many points of agreement across these taxonomies and identified some 14 managerial behaviours reflecting these areas of agreement. Table 2 compares our four core practices of successful school leadership with Yukl's synthesis of what he called “managerial behaviours”. Described in some detail by Yukl (1989, 1994), these behaviours included planning and organizing, problem solving, clarifying roles and objectives, informing, monitoring, motivating and inspiring, consulting, delegating, supporting, developing and mentoring, managing conflict and team building, networking, recognizing, and rewarding.

¹ Evidence in support of this claim in school contexts can be found in Geijsel et al. (2003). See Bass (1997) for evidence of this claim in the business and military sectors.

2. Alternative Leadership Theories

A recent “state-of-the-science” review (Yammarino, Dionne, Chun, & Dansereau, 2005) of leadership theories, largely developed in non-school contexts, pointed to some 21 approaches or models that have been the object of considerable, though quite varying, amounts of theoretical and empirical development. Seventeen of these approaches have attracted an especially impressive amount of research attention. We provide a brief synopsis of the main theories as a prelude to comparing the behaviours they highlight with our core leadership practices.

Ohio State model. This highly durable two-dimensional conception of leadership includes two leadership “styles” - initiating structure (a task oriented and directive style) and consideration (a friendly, supportive style). Each style is considered to be differentially effective depending on such variables as the size of the organization, how clear people are about their roles and how mature people are in their jobs.

Contingency theory. Also a two-dimensional conception of leadership, this theory explains differences in leaders’ effectiveness in terms of a task or relationship style (as with the Ohio State model) and the situation in which the leaders finds herself. Task- oriented leaders are predicted to be more successful in high- and low-control settings, whereas relationships-oriented leaders are predicted to more successful in moderate- control settings. To be most effective, then, leader’s styles need to match the setting in which they find themselves.

Participative leadership model. This approach is concerned with how leaders select among three distinct approaches to their colleagues’ participation in organizational decisions: an autocratic approach which allows for almost no member participation; a consultative approach in which participation is restricted to providing information and; a more extensive and inclusive form of participation called “collaborative sharing”. The choice among these forms is to be based

on achieving such goals as improving decision quality, increasing the development of those to be involved and minimizing decision costs and time.

Situational leadership. Also oriented to the level of follower's development, this approach to leadership varies the extent to which the leader engages in task-oriented and relationship-oriented practices (Hersey & Blanchard, 1984). According to this theory, as follower maturity develops from low to moderate levels, the leader should engage in more relationship behaviours and fewer task behaviours. Decreased behaviours of both types are called for as followers move from moderate to maximum levels of maturity; leadership should be delegated with considerable autonomy for its performance, as, for example, in forms of distributed leadership (see Chapter 3 for a full discussion of this).

Path-goal theory. Yukl describes this approach to leadership as a motivational one consisting of "...increasing personal payoffs to subordinates for work-goal attainment and making the path to these payoffs easier to travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for satisfaction en- route." (1989, p. 99). Organizational members will make the effort to succeed only if they believe valued outcomes can be accomplished through serious effort. Depending on the situation, leadership may contribute to such beliefs by being supportive, directive, participative or achievement-oriented.

Vertical dyad linkage model, leader-member exchange (LMX) theory and individualized leadership theory. Beginning with vertical dyad concepts and developing into LMX, this approach recognizes that leaders treat members of the same group differently. Until its development, the common assumption was that all members of the organization experienced the same relationship with leaders. Leader-member exchanges can result in some members becoming part of an "in-group", enjoying the trust and confidence of leaders and, or an "out-

group”, experiencing a more distant and formal relationship with leaders. Leaders and their individual colleagues, more generally, develop unique one-to-one relationships as they influence each other and negotiate the role of the follower. This individual, rather than group, focus led to the development of individualized leader theory. Each leader/follower dyad involves investments by the leader in and returns from the follower as well as followers’ investments in and returns from the leader. Leaders secure followership, for example, by supporting a follower’s feelings of self-worth

Transformational and charismatic leadership. These closely related approaches to leadership are defined in terms of leaders’ influence over their colleagues and the nature of leader-follower relations. Typical of both forms of leadership are such behaviours as communicating a compelling vision, conveying high performance expectations, projecting self confidence, role modelling, expressing confidence in followers’ abilities to achieve goals, emphasizing collective purpose and identity. Charismatic leaders engender, among their colleagues, exceptionally high levels of trust, loyalty, respect, and commitment. But some of these outcomes depend on whether the charismatic leadership is socialized or personal. Socialized charismatic leaders are also transformational; that is, they help bring about desirable improvement in the organization. They acquire the commitment of their colleagues through the compelling nature of their vision and ideas, as well as their genuine concern for the welfare of their colleagues. Personalized charismatics are unlikely to be transformational. They are attributed charismatic stature by virtue of their attractive personal qualities, for example. But they are prone to exploiting others, serving their own self interests and have a very high need for power. Transformational leaders (e.g., Dum Dum, Lowe, & Avolio, 2002) need not be charismatic

(e.g. Kim, Dansereau, & Kim, 2002), although some argue that it is the key component of such leadership and the only quality that accounts for extraordinary or outstanding leadership.

Substitutes for leadership. This conception of leadership, introduced by Kerr and Jermier in 1978, has enjoyed a significant following in spite of difficulties in producing evidence confirming its central propositions. From this perspective, leadership can be a property of the organization as much as something engaged in by a person. Furthermore, features of the organizational setting either enhance or neutralize the influence of people attempting to function as leaders – engaging in either task or relationship-oriented functions. Routine and highly standardized tasks that provide their own outcome feedback, cohesive work groups, no control over rewards and spatial distance between leaders and followers are among the conditions hypothesized to neutralize task-oriented leadership. Relationship-oriented leadership, theorists argue, is neutralized by colleagues' need for independence, professional orientation and indifference to organizational rewards (Yammarino et al., 2005).

Romance of leadership. This is a follower-centric view of leadership (Meindl, 1998) premised on the claim that leadership is an overrated explanation for organizational events. Its attraction may be a function of the simple, if incorrect, explanation it provides for quite complex and difficult to understand organizational events. Furthermore, there is a social contagion associated with leadership attributions; people begin to persuade one another of the importance of leadership quite apart from any other evidence that it matters. As Yammarino and his coauthors explain “Heroic social identification, articulation of an appealing ideology, symbols, rituals and rites of passage all play a role in this process” (2005, p. 900).

Self leadership. The focus of this line of theory and research concerns the strategies that individuals and groups can use to improve their own leadership capacities (Markham &

Markham, 1998). To the extent that such strategies are available and have the desired effect, self management and self leadership has the potential to increase employee empowerment and reduce the resources devoted to traditional sources of leadership and supervision.

Multiple linkage. Developed by Yukl and his colleagues (e.g., Yukl, 1998), this approach includes the fourteen managerial behaviours identified in Table 2, along with a set of intervening and situational variables, along the lines of the framework used for our review. According to Yammarino, “The model proposes that leaders institute short-term actions to deal with deficiencies in the intervening variables and positively impact group performance in the long term” (2005, p. 901).

Table 2

Core Practices of Successful School Leaders Compared with Successful Practices Identified in Non-school Organizational Contexts

Core Leadership Practices	YUKL’S TAXONOMY OF MANAGERIAL BEHAVIOUR	ALTERNATIVE LEADERSHIP THEORIES
SETTING DIRECTIONS		
Vision	Motivating and inspiring	Charismatic and Transformational theory
Goals	Clarifying roles and objectives Planning and organizing	Substitutes theory
High performance expectations		Charismatic & Transformational theory
DEVELOPING PEOPLE		
Individualized support/consideration	Supporting Developing and mentoring	Ohio State, Contingency Model, Path-goal theory
Emotional understanding and support	Recognizing Rewarding	Transformational theory LMX, Individualized leadership
Intellectual stimulation		Transformational theory
Modelling		Charismatic and Transformational theory
REDESIGNING THE ORGANIZATION		

Core Leadership Practices	YUKL'S TAXONOMY OF MANAGERIAL BEHAVIOUR	ALTERNATIVE LEADERSHIP THEORIES
Building a collaborative culture	Managing conflict and team building Delegating Consulting	Participative Leadership,
Structuring the organization to facilitate work		Ohio State, Contingency Model, Participative Leadership, Path-goal theory
Creating productive relations with families & communities		
Connecting the school to its wider environment	Networking	
Managing the Teaching Programme		
Staffing		
Resources		
Monitoring	Monitoring	
Buffering staff from distractions to their core work		

Table 2 indicates considerable endorsement for our core practices from both Yukl's taxonomy and our selection of leadership theories. Only one practice or function identified in these two sources is not reflected in the core practices, Yukl's problem solving "behaviour". Expertise in problem solving makes a crucial contribution to a leader's success. In this review, however, we treat it not as a behaviour but as a cognitive activity leading to behaviour. Evidence about successful leaders' problem solving is reviewed as part of our treatment of the roots or antecedents of successful leadership practice.

Our selection of leadership theories includes much more about leadership than simply behaviours, it should be noted; for example, propositions about how behaviours and elements of the context interact to produce favorable outcomes. These additional features go beyond our purposes here, however.

The Core Practices Described

A Theoretical (But Practical) Perspective on the Core Practices

Lists of things - like leadership practices - can be pretty forgettable and not very meaningful unless there is some underlying idea holding them together. The great advantage of leadership theories, for example, as compared with the many lists of leadership standards now so popular in policy circles, is that the theories possess a conceptual glue almost entirely missing from the standards. This glue offers an explanation for how and why things work as they do and so builds understanding.

The glue that holds our core practices together might be drawn from many sources since the practices themselves reflect many elements of existing leadership theory. We limit ourselves here to a type of glue which aims to explain why each of the main categories of our core practices are important to exercise if leaders are to have a substantial and positive impact on their schools.

We begin by pointing out that the extent to which educational policies and other reform efforts improve what students learn finally depends on their consequences for what teachers do. And what teachers do, according to a particularly useful model for explaining workplace performance (O'Day, 1996; Rowan, 1996) is a function (f) of their motivations, abilities, and the situations in which they work. The relationship among these variables can be represented in this deceptively simple formula:

$$P_j = f(M_j, A_j, S_j)$$

in which

- P stands for a teacher's performance

- *M* stands for the teacher's motivation (in Yukl's, 1989, Multiple Linkage model of managerial effectiveness, *M* includes the effort to engage in a high level of performance as well as demonstrating a high degree of personal responsibility and commitment to the organization's goals).
- *A* stands for the teacher's abilities, professional knowledge, and skills (in Yukl's model, such performance also includes their understanding of their job responsibilities); and
- *S* represents their work settings – the features of their school, and classroom.

Relationships among the variables in this model are considered to be interdependent. This means two things. It means that each variable has an effect on the remaining two (for example, aspects of teachers' work environments are significant influences on their motivations). It also means that changes in all three variables need to happen in concert or performance will not change much. For example, neither high ability and low motivation, nor high motivation and low ability foster high levels of teacher performance; neither does high ability and high motivation in a dysfunctional work environment. Furthermore, structurally and culturally dysfunctional work settings will be likely to depress initially high levels of both ability and motivation.

The implications for leadership practice of this account of workplace performance are twofold. First, leaders will need to engage in practices with the potential to improve all elements in the formula – teachers' and other staff members' abilities, motivations and the settings in which they work. Second, leaders will need to engage in those practices more or less simultaneously. The overall function of successful leaders, according to this formulation is to improve the condition of all three variables. To be successful, therefore, requires leaders to be in possession of a range of cognitive and affective qualities, strategies and skills.

Setting Directions

This category of practices carries the bulk of the effort to motivate leaders' colleagues (Hallinger & Heck, 1998). It is about the establishment of "moral purpose" (Fullan, 2003; Hargreaves & Fink, 2006) as a basic stimulant for one's work. Most theories of motivation argue that people are motivated to accomplish personally important goals for themselves. For example, such goals are one of four sources of motivation in Bandura's theory of human motivation (1986).

Three more specific sets of practices are included in this category, all of which are aimed at bringing a focus to both the individual and collective work of staff in the school or LA. Carried out skillfully, these practices are one of the main sources of motivation and inspiration for the work of staff.

Building a shared vision. Building compelling visions of the organization's future is a fundamental task included in both transformational and charismatic leadership models. Bass's (1985) "inspirational motivation" is encompassed in this practice, a dimension that Podsakoff defines as leadership behaviour "aimed at identifying new opportunities for his or her unit....and developing, articulating, and inspiring others with his or her vision of the future" (1990, p. 112). Silins and Mulford (2002) found positive and significant effects of a shared and monitored mission. Harris and Chapman's small scale qualitative study of effective leadership in schools in England facing challenging circumstances reaffirmed previous research on successful schools, that:

Of central importance ... was the cooperation and alignment of others to [the leader's] set of values and vision ... Through a variety of symbolic gestures and actions, they were successful at realigning both staff and pupils to their particular vision (2002, p. 6).

Locke (2002) argues that formulating a vision for the organization is one of eight core tasks for senior leaders and a key mechanism for achieving integration or alignment of activities within the organization; that is, "...tying all the processes together so that they are not only consistent with one another but actively support one another. After Locke (2002), we include as part of vision building the establishment of core organizational values. Core values specify the means by which the vision is to be accomplished.

Fostering the acceptance of group goals. While visions can be inspiring, action typically requires some agreement on the more immediate goals to be accomplished in order to move toward fulfilling the vision. Building on such theory, this set of practices aims not only to identify important goals for the organization, but to do so in such a way that individual members come to include the organization's goals among their own. Unless this happens, the organization's goals have no motivational value. So leaders can productively spend a lot of time on this set of practices. This set of practices includes leader relationship behaviours "...aimed at promoting cooperation among [teachers] and getting them to work together toward a common goal" (Podsakoff et al., 1990, p. 112)". Giving short shrift to these misses the point entirely.

In LA and school settings, strategic and improvement planning processes are among the more explicit contexts in which these behaviours are manifest. One of the eleven effective managerial behaviours included in Yukl's Multiple Linkage model encompasses a portion of these practices. Planning and organizing include "Determining long-range objectives and strategies..., identifying necessary steps to carry out a project or activity..." (1989, p. 130). This apparently rational planning process cannot be affected without attention to fostering acceptance of group goals.

High performance expectations. This set of leadership practices is included as part of direction setting because it is closely aligned with goals. While high performance expectations do not define the substance of organizational goals, they demonstrate the leader's values and, as Podsakoff explains, "the leader's expectations of excellence, quality, and/or high performance"(Podsakoff et al., 1990, p. 112) in the achievement of those goals. Demonstrating such expectations is a central behaviour in virtually all conceptions of transformational and charismatic leadership.

Developing People

The three sets of practices in this category make a significant contribution to motivation. Their primary aim is capacity building, however, building not only the knowledge and skill staff need to accomplish organizational goals but also commitment and resilience (Day and Schmidt, 2006), the dispositions to persist in applying that knowledge and skill (Harris & Chapman, 2002). Individual teacher efficacy is arguably critical to these dispositions and it is a third source of motivation in Bandura's (1986) model. People are motivated by what they are good at. And *mastery experiences*, according to Bandura, are the most powerful sources of efficacy. So building capacity which leads to a sense of mastery is highly motivational, as well.

Providing individualized support/consideration. Bass and Avolio include, as part of this dimension, "knowing your followers' needs and raising them to more mature levels...[sometimes through] the use of delegation to provide opportunities for each follower to self-actualize and to attain higher standards of moral development" (1994, p.64). This set of behaviours, claims Podsakoff et al. (1990), should communicate the leader's respect for his or her colleagues and concerns about their personal feelings and needs (emotional understanding and support). This is a set of practices common to all of the two-dimensional models of

leadership (Ohio State, Contingency theory and Situational Leadership theory) which include task orientation and *consideration for people*. Encompassed by this set of practices are the “supporting”, and “recognizing and rewarding” managerial behaviours associated with Yukl’s (1989) Multiple Linkage model, as well as Hallinger’s (2003) model of instructional leadership and the Waters et al. (2003) meta-analysis. This set of leadership behaviours has likely attracted more leadership research outside of schools since the 1960s than any other.

Intellectual stimulation. Behaviours included in this dimension include encouraging colleagues to take intellectual risks, re-examine assumptions, look at their work from different perspectives, rethink how it can be performed (Avolio, 1994; Podsakoff et al., 1990), and otherwise “induc[e]...employees to appreciate, dissect, ponder and discover what they would not otherwise discern...” (Lowe, Kroeck, & Sivasubramaniam, 1996, p. 415-416). Waters, Marzano and McNulty (Waters et al., 2003; Marzano et al., 2005) include “challenging the status quo” among the practices contributing to leader effects on students.

This is where the leader’s role in professional development is found to be key, especially for leaders of schools in challenging circumstances (Day, 1999; Harris et al, 2002; Gray, 2000). However, it recognizes the many informal, as well as formal, ways in which such development occurs. It also reflects our current understandings of learning as constructed, social and situated. All models of transformational and charismatic leadership include this set of practices. A considerable amount of the educational literature assumes such practices on the part of school leaders, most notably the literature on instructional leadership which places school leaders at the centre of instructional improvement efforts in their schools (e.g. Day et al, 2000; Southworth, 2002; Hallinger, 2003; Stein & Spillane, 2005).

Providing an appropriate model. This category entails “leading by example,” a general set of practices associated with models of “authentic leadership” (Avolio & Gardner, 2005), demonstrating transparent decision making, confidence, optimism, hope, resilience and consistency between words and deeds. Locke (2002) claims that core values are established by modelling core values in one’s own practices. Both Hallinger (2003) and Waters et al. (2003) note the contribution to leader effects of maintaining high visibility in the school, a visibility associated with high quality interactions with both staff and students. Harris and Chapman found that their successful headteachers “modeled behaviour that they considered desirable to achieve the school goals” (2002, p.6).

Also encompassed by this dimension is Bass’s “idealized influence,” a partial replacement for his original “charisma” dimension. Avolio (1994) claims that leaders exercise idealized influence when they serve as role models with the appropriate behaviours and attitudes that are required to build trust and respect in followers. Such modeling on the part of leaders “...sets an example for employees to follow that is consistent with the values the leader espouses” (Podsakoff et al., 1990, p. 112).

Redesigning the Organization

This is the “S”, situation, or working conditions variable in our equation described earlier for predicting levels of performance. There is little to be gained by increasing peoples’ motivation and capacity if working conditions will not allow their effective application. In Bandura’s (1986) model, beliefs about the situation is a fourth source of motivation; people are motivated when they believe the circumstances in which they find themselves are conducive to accomplishing the goals they hold to be personally important. The three practices included in this

category are about establishing the conditions of work which will allow staff to make the most of their motivations and capacities.

Building Collaborative Cultures. A large body of evidence has accumulated since Little's (1982) early research which unambiguously supports the importance of collaborative cultures in schools as being central to school improvement, the development of professional learning communities and the improvement of student learning (e.g., Louis & Kruse, 1998; Rosenholtz, 1989). Additional evidence clearly indicates that leaders are able to build more collaborative cultures and suggests practices that accomplish this goal (e.g., Leithwood, Jantzi, & Dart, 1990; Waters et al., 2003). For leaders of schools in challenging circumstances, creating more positive collaborative and achievement-oriented cultures is a key task (Jacobson et al, 2005; West, Ainscow, & Stanford, 2005).

Connolly and James (2006) claim that the success of collaborative activity is determined by the capacities and motivations of collaborators together with opportunities for them to collaborate. Success also depends on prior conditions. For example, a history of working together successfully will sometimes build trust, thus making further collaboration easier; whereas a history of unsuccessful attempts to collaborate will reduce trust. Trust is increasingly recognized as a key element in encouraging collaboration and that individuals are more likely to trust those with whom they have established good relationships (Bryk & Schneider, 2002; Louis & Kruse, 1995). Participative leadership theory and Leader-member exchange theory are concerned with the nature and quality of collaboration in organizations and how to manage it productively. Productive management will demonstrate non-cognitive affective qualities of leaders.

Leaders contribute to productive collaborative activity in their schools by being skilled conveners of that work. They nurture mutual respect and trust among those involved in collaborating, by being trustworthy themselves, ensure the shared determination of group processes and outcomes, help develop clarity about goals and roles for collaboration, encourage a willingness to compromise among collaborators, foster open and fluent communication among collaborators, and provide adequate and consistent resources in support of collaborative work. (Connolly & James, 2006; Mattessich & Monsey, 1992).

Restructuring. This is a function or behaviour common to virtually all conceptions of management and leadership practice. Organizational culture and structure are two sides of the same coin. Developing and sustaining collaborative cultures depends on putting in place complementary structures, typically something requiring leadership initiative. Practices associated with such initiatives include creating common planning times for teachers and establishing team and group structures for problem solving (e.g., Hadfield, 2003). Hallinger and Heck (1998) identify this variable as a key mediator of leaders' effects on students. Restructuring also includes distributing leadership for selected tasks and increasing teacher involvement in decision making (Reeves, 2000).

Building productive relationships with families and communities. Shifting the attention of school staffs from an exclusively inside-the-school focus to one which embraces a meaningful role for parents and a close relationship with the larger community was identified during the 1990s as the biggest change in expectations for those in formal school leadership roles (e.g., Goldring & Rallis, 1993). More recently, Muijs, Harris, Chapman, Stoll and Russ (2004) have identified this core practice as important for improving schools in challenging circumstances. Attention to this focus has been encouraged by evidence of the contribution of family

educational cultures to student achievement in schools (e.g., Coleman, 1966; Finn, 1989), the increase in public accountability of schools to their communities through the widespread implementation of school-based management (Murphy & Beck, 1995), and the growing need for schools to actively manage public perceptions of their legitimacy (e.g., Mintrop, 2004).

Connecting the school to its' wider environment. School leaders spend significant amounts of time in contact with people outside of their schools seeking information and advice, staying in tune with policy changes, anticipating new pressures and trends likely to have an influence on their schools and the like. Meetings, informal conversations, phone calls, email exchanges and internet searches are examples of opportunities for accomplishing these purposes. The extensive number of Network Learning projects facilitated by the National College of School Leadership in England provide especially powerful opportunities for connecting one's school to its wider educational environment (Jackson, 2002) as do those in other countries (Vemglers and O'Hair, 2005). Bringing in external support may also be a productive response to schools engaged in significant school improvement projects (Reynolds et al., 2001).

In spite of the considerable time spent by school leaders on this function, it is only recently that research in England has inquired about its contribution to improving pupil learning and/or the quality of the school organization (Earl et al, 2006). However, research has been conducted about the effects of this practice in non-school organizations. Referring to it as "networking", Yukl includes it in his Multiple Linkage model of leadership as one of eleven critical managerial practices. He describes this practice as "Socializing informally, developing contacts with people who are a source of information and support, and maintaining contacts through periodic interaction, including visits, telephone calls, correspondence, and attendance at meetings and social events" (1994, p. 69).

Managing the Instructional (Teaching and Learning) Programme

There is some potential confusion about the effects of this set of practices. Surprisingly, Hallinger's (2003) recent review suggested that those management practices which involve close association with the classroom and supervision of what happens in the classroom appear to have the least effect on students. On the other hand, when managerial behaviours have been included in other recent research on school leadership effects, they have explained almost as much as did leadership behaviours (e.g., Leithwood & Jantzi, 1999). So they are important, as a class, especially those that create stability and strengthen the infrastructure. But those of a more supervisory nature seem not to be important, in most cases.

Staffing the programme. Although not touched on by Hallinger (2003) or Waters et al. (2003), this has proved to be a key function of leaders engaged in school improvement. Finding teachers with the interest and capacity to further the school's efforts is the goal of this activity. Recruiting and retaining staff is a primary task leading schools in challenging circumstances (Gray, 1999).

Providing instructional (teaching and learning) support. This set of practices, included in both Hallinger's (2003) and Waters' et al. (2003) research on effective leadership includes "supervising and evaluating instruction", "coordinating the curriculum" and providing resources in support of curriculum, instruction and assessment activity. West et al. (2005) indicate that, for leaders of schools in challenging contexts, focusing on teaching and learning is essential. This includes controlling behaviour, boosting self esteem and talking and listening to pupils. It also may include urging pupils and teachers to place a strong emphasis on pupil achievement. Such an "academic climate" makes significant contributions to achievement (De Maeyer, Rymenans, Van Petegem, van der Bergh, & Rijlaarsdam, 2006)

Monitoring school activity. Waters et al. analyses associated leadership effects on students with leader monitoring and evaluating functions, especially those focused on student progress. The purposeful use of data is reported by West et al. (2005) to be a central explanation for effective leadership in failing schools (see also Reynolds, Stringfield, & Muijs, forthcoming). Hallinger's (2003) model includes a set of practices labelled "monitoring student progress". Monitoring operations and environment is one of Yukl's (1989) eleven effective managerial practices. And Gray (1999) reports that tracking student progress is a key task for leaders of schools in challenging circumstances.

Buffering staff from distractions to their work. A long line of research has reported the value to organizational effectiveness of leaders who prevent staff from being pulled in directions incompatible with agreed on goals. This buffering function acknowledges the open nature of schools and the constant bombardment of staff with expectations from parents, the media, special interest groups and the government. Internal buffering is also helpful, especially buffering teachers from excessive pupil disciplinary activity.

The four sets of leadership practices in this category provide the coordination for initiatives stimulated by the other core leadership practices. They help provide the stability which is so necessary for improvement to occur.

Conclusion

Four broad categories of leadership practices – and fourteen more specific categories – capture our review of the evidence about what effective leaders do. They do not do all of these things all of the time, of course; you don't have to create a shared vision everyday. And the way you go about each set of practices will certainly vary by context. If your school has been labelled

as “failing” you are more likely to have to sell your vision to staff than developing it collaboratively – so you can get on with your turnaround mission. So what is contingent about leadership is not the basic or core practices but the way they are enacted. It is the enactment that must be sensitive to values and context, not the core practices themselves. This view is supported by Hallinger (2003). Drawing on research evidence from Thailand (e.g., Hallinger and Kantamara, 2000a, 2000b), Hong Kong (Dimmock and Walker, 1998), Malaysia (Bajunid, 1995, 1996) and Singapore (Gopinathan and Kam, 2000), Hallinger (2003) suggests that principals in East Asia achieve successful results through similar avenues (i.e., goals, school structures, people and culture) as principals in the West. However, the ways principals enact leadership through these variables differ in response to the cultural and institutional contexts. For example, the cultural and institutional norms in East Asia tend to shape ‘[principals’] behaviour as administrators whose role is to implement orders rather more than as leaders of programmes or change at the school level’ (p.1004).

The core practices provide a powerful source of guidance for practising leaders, as well as a framework for their initial and continuing development.

3. Distribution of Successful Leadership

Introduction

Distributed leadership is a concept which is very much “in vogue” with researchers, policy makers, educational reformers and leadership practitioners alike (Hammersley-Fletcher & Brundrett, 2005; Storey, 2004), and there is a growing confidence that this contributes to the effectiveness of the organization. However, as yet there seems to be little, if any, empirical data which links this to improved influence on pupil outcomes. Moreover, while there seems to be widespread interest in the idea of “distributing leadership”, there are competing and sometimes conflicting interpretations of what distributed leadership actually means. The definitions and understandings vary from the normative to the theoretical and, by implication, the literature supporting the concept of distributed leadership remains diverse and broad based (Bennett, Harvey, Wise, & Woods, 2003). Therefore, prior to an examination of the literature relating to distributed leadership, its meaning and definition will be explored.

In terms of origin, the idea of distributed leadership has been derived from cognitive and social psychology, drawing particularly upon distributed cognition and activity theory. Hutchins (1995) suggested that cognition is better understood as a *distributed* phenomenon across individuals, artifacts and internal and external representations. A contemporary distributed perspective on leadership, therefore, implies that the social context, and the inter-relationships therein, is an integral part of the leadership activity (Spillane, Halverson, & Drummond, 2001). Earlier theorizing conceptualized distributed leadership in a variety of different ways. For example, Shelley (1960) and Melnick (1982) used the term to describe a difference of opinion among team members about the role of the leader; here the term served as a contrast to “focused leadership” in which there is clear consensus regarding the leadership hierarchy. From this

perspective, it could be posited that distributed leadership is something to be avoided in organizations because it leads to a lack of stability, predictability and security among members. However the evidence to support this position is rather limited.

In the field of organizational dynamics the term has been used as a synonym for a “bossless team” or a “self-managed team” (Barry, 1991). This use of the term resonates, in part, with current conceptualizations of distributed leadership, particularly in its recognition of leadership as an emergent property. However, current conceptions of distributed leadership do not imply that the formal leadership structures within organizations are removed or redundant. Instead, it is assumed that there is a relationship between vertical and lateral leadership processes and that attention is paid to the leadership as interaction rather than leadership as action. In his work Gronn (2000) sees distributed leadership as an *emergent property of a group or a network of interacting individuals*. Here leadership is a form of *concerted action* which is about the additional dynamic that occurs when people work together or that is the product of conjoint agency. The implication, largely supported by the teacher development and school improvement literature, is that organizational change and development are enhanced when leadership is broad based and where teachers have opportunities to collaborate and to actively engage in change and innovation (Hopkins, 2001; Little, 1990; MacBeath, 1998; Murphy & Datnow, 2003).

It was not until the late 1990s and early 2000s that the contemporary concept of distributed leadership emerged i.e. as being a web of leadership activities and interactions stretched across people and situations (e.g., Camburn, Rowan, & Taylor, 2003; Copeland, 2003; Heller & Firestone, 1995; Smylie & Denny, 1990; Spillane, Halverson, & Diamond, 2004). The work by Spillane et al. (2001; 2004) provides the most recent empirical study of distributed leadership practice. This work suggests that distributed leadership is best understood as “practice

distributed over leaders, followers and their situation and incorporates the activities of multiple groups of individuals” (2001, p. 20). It implies a social distribution of leadership where the leadership function is “stretched over the work of a number of individuals and the task is accomplished through the interaction of multiple leaders” (p. 20). The evidence from this study highlights linkages between distributed leadership practice in elementary schools and improvements in the quality of teaching and learning in particular subject areas. However, it was intended primarily to illuminate distributed leadership practice rather than to look for direct relationships with student learning outcomes.

Links have also been made between distributed leadership and democratic leadership (Woods, 2004) and, most recently, connections have been made to the literature on teacher leadership (Harris, 2004b). Bennett et al. (2003) write about “distributed or devolved leadership” while Kets de Vries (1990) defines distributed leadership as “team-working”, linking it to social activity theory. Distributed leadership assumes a set of direction-setting and influence practices potentially “enacted by people at all levels rather than a set of personal characteristics and attributes located in people at the top” (Fletcher & Kaufer, 2003, p. 22). Non-person sources of influence also may be included in this concept as, for example, Jermier and Kerr’s (1997) “substitutes for leadership”, moving us toward a view of leadership as an organization-wide phenomenon (Pounder, Ogawa, & Adams, 1995).

Within the existing literature it is clear that the idea of distributed leadership overlaps substantially with shared (Pearce & Conger, 2003), collaborative (Wallace, 2002), democratic (Gastil, 1997) and participative (Vroom & Yago, 1998) leadership concepts. This accumulation of allied concepts means that distributed leadership has sometimes been used as a shorthand way to describe any form of devolved, shared or dispersed leadership practice in schools. It is this

catch all use of the term that has resulted in both the misrepresentation of the idea and the common misunderstanding that distributed leadership means that everyone leads (Bennett et al., 2003).

While distributed leadership is a powerful concept that cannot be ignored it remains the case that empirical studies of distributed leadership are limited. Part of the reason resides in the fact that it is a fairly new addition to the leadership field and although studies are underway the current evidential base is far from extensive. Also, there remains an adherence to understanding leadership as role or function within the leadership field in spite of a recognition that as schools become more complex organizations more extended models of leadership will be required (Gronn, 2003). Consequently, our goal in this section cannot be to summarize a significant body of empirical evidence about the nature and effects of distributed leadership, as we do in other sections of our review, because this literature is emerging. Rather, our goal is to clarify concepts and to offer some implications for practice from the existing theory and evidential base that is available.

The Effects of Distributed Leadership

While it is acknowledged that we have very little systematic evidence about the relative contribution to the achievement of organizational goals of different patterns of distributed leadership, there is empirical evidence to support a strong relationship between distributed patterns of leadership and organizational performance. Work by Graetz (2000) offers a view of distributed leadership as a positive channel for change. He notes that “organisations most successful in managing the dynamics of loose –tight working relationships meld strong personalized leadership at the top with distributed leadership”. Similarly Gold et al. (2002), in

their study of ten “outstanding” school leaders, point towards the development of leadership capacity within the school as a key lever of success. While they do not use the term distributed leadership there are strong indications that the form of leadership practice they are describing is widely distributed.

It is worth noting that things may be different in Asian cultures. The GLOBE (Global Leadership and Organisational Behaviour Effectiveness) research project conducted in 61 nations in the world found that Anglo cultures (Australia, Canada, Ireland, New Zealand, white South Africa, UK, and USA) views participative leadership more positively than Confucian Asian cultures (mainland China, Japan, Singapore, South Korea, and Taiwan) (quoted in Pittinsky and Zhu, 2005). In Confucian cultures which value power distance and practice relatively high levels of societal collectivism, a leader is trusted to get on with the job on behalf of his subordinates (ibid.). In East Asia, persons of lower status ‘naturally defer to those of higher status, accepting differences in power as a normal feature of social relations’ (Hallinger and Kantamara, 2000b: 49).

Influenced by this societal culture, principals there are often expected to take a strong, personal stand while teachers and parents tend to be more reluctant to engage in shared decision-making (Walker, 2003). For example, every school in Mainland China must establish a ‘Teacher-Staff Representative Meeting’. This is intended to give teachers a channel to voice their opinions and to vote on school plans and policy changes. However, in reality, the meeting normally serves to provide legitimacy for the principal to make changes by approving top-down change plans (Wong, 2006). As teachers often consciously view the school as a hierarchy, teacher participation in schools is hierarchical (Cheng and Wong, 1996). This means that teachers ‘in

different levels of the administrative ladder hold different expectations of participation' and teachers 'at the rank-and-file often see participation as a privilege granted from above' (p. 44).

In terms of building professional learning communities in schools it would appear that distributed leadership also plays an important part. Research by Morrissey (2000) concludes that extending leadership responsibility beyond the principal is an important lever for developing effective professional learning communities in schools. A range of other studies (Blase & Blase, 1999; Hallinger & Kantamara, 2000; Portin, 1998) also point towards a positive relationship between organizational change and distributed forms of distributed leadership practice.

The school improvement literature contains similar messages about the types of leadership that accompany positive change in schools. This has consistently underlined the importance of teacher involvement in decision making processes and the contribution of strong collegial relationships to positive school improvement and change. Little (1990) suggests that collegial interaction at least lays the groundwork for developing shared ideas and for generating forms of leadership that promote improvement. While Little's (1990) work does not refer to distributed leadership explicitly, it does point towards shared forms of leadership activity as a means of consolidating collaborative processes among teachers. In her research work, Rosenholtz (1989) argues even more forcibly for teacher collegiality and collaboration as means of generating positive change in schools. Her research concludes that effective schools *have tighter congruence between values, norms and behaviours of principals and teachers* and that this is more likely to result in positive school performance. The work of Nias and her colleagues in English schools (Nias et al, 1989) provided similar conclusions. The implication from these empirical studies is that improvement is more likely to occur when there are opportunities for teachers to work together to lead development and change.

There is an increasing body of evidence that points towards the importance of capacity building as a means of sustaining school improvement (e.g., Fullan, 2001; Newmann & Wehlage, 1995; Sergiovanni, 2001). At the core of the capacity-building model, it has been argued, is distributed leadership along with social cohesion and trust. Leadership, from this perspective, resides in the human potential available to be released within an organization. It is what Gronn (2000) terms *an emergent property of a group or network of individuals in which group members pool their expertise*.

In their review of successful school improvement efforts, Glickman et al. construct a composite list of the characteristics of what they term the “improving school” (2001, p.49); a school that continues to improve student learning outcomes for all students over time. At the top of this list appears varied sources of leadership, including distributed leadership. Similarly, studies in England (Harris and Chapman - 2002), Norway (Moller et al,2005) and Australia (Gurr et al, 2005) conclude that improvements in the schools’ performance were achieved through the headteachers working through teams and involving a wide array of stakeholders in decision making. While the connections between distributed leadership and student outcomes were not explored in the study, the leadership approaches adopted by the headteachers in these successful schools could be characterized as distributed.

Recent interest in the idea of distributed leadership therefore, to some degree, has been fuelled by its association with certain organizational benefits (e.g., Burke, Fiore, & Salas, 2003; Gronn, 2002; Manz & Sims Jr., 1993). Distributed leadership also is assumed to enhance opportunities for the organization to benefit from the capacities of more of its members, to permit members to capitalize on the range of their individual strengths, and to develop among

organizational members a fuller appreciation of interdependence and how one's behaviour effects the organization as a whole.

Interest has also accumulated because of the expansion of different forms of collaboration between and across schools. In some regions of the Netherlands, schools are grouped together under one headteacher and in the current educational landscape in England different forms of distributed leadership are already emerging in schools in the form of executive head, co-headship, assistant headteachers and leadership teams that traverse two or three schools in federation or partnership. Within the growing context of school to school networks, it has been argued that distributed leadership may provide greater opportunities for members to learn from one another. A recent systematic review of the literature on the impact of networks on pupils, practitioners and the communities they serve concludes that networks offer opportunities for teachers to share, initiate and embed new practices (Bell et al., 2006). While the direct link between networking and achievement was not forthcoming from this review of the research evidence, the data that does exist highlights a positive relationship between increased teacher collaboration both within and across schools and organizational development.

Distributed leadership, some have asserted, has the potential to increase on-the-job leadership development experiences; and increased self-determination on the part of those to whom leadership is distributed is thought to improve their experience of work, a form of "job enrichment". Distributed leadership, it is claimed, also may allow members to better anticipate and respond to the demands of the organization's environment. Solutions to organizational challenges may develop through distributed leadership which would be unlikely to emerge from individual sources. Finally, overlapping actions that occur in some patterns of distributed

leadership may further reinforce and extend leaders' influence. As yet, however, no direct empirical connection has been established with improved pupil outcomes.

These claims for distributed leadership are not insubstantial or insignificant. One might reasonably expect that if even just a few were to materialize the effects on a school's contribution to student learning for example, would be significant. However, it is important to note that it is not simply assumed that distributed leadership is automatically a good thing. As Hargreaves and Fink point out " ... distributed patterns of leadership don't always serve the greater good. Distributed leadership is sometimes bad leadership" (2006, p. 102). They note that overall patterns of distributed leadership and its effects in large scale samples may hide significant variations and discrepancies in which distributed leadership is less useful. Some have suggested that informal leadership "dispersion" can affect team outcomes negatively by contributing to inefficiencies within the team. Those holding this more skeptical perspective actually argued – with some evidence to support their claims – that having *fewer* leaders rather than more was better. For example, Heinicke and Bales (1953) found that agreement among group members about who were the informal leaders among them was positively related to task efficiency – exhibiting more productive behaviours in less time.

Early theorists also claimed that having fewer informal leaders resulted in more centralized communication, better coordination and fewer conflicts (Bales & Slater, 1955; Heinicke & Bales, 1953). In addition to facilitating the accomplishment of tasks, it was suggested that having fewer informal leaders seemed to enhance peoples' feelings of being socially validated for their work when there was substantial agreement among team members about roles within the team (Festinger, Schacter, & Back, 1950). In contrast, the research on status consensus, agreement by group members about informal leadership in the group were found to

be associated with group cohesion (Shelley, 1960) and group member satisfaction (Heinicke & Bales, 1953).

Melnick (1982) identified distributed leadership as one of six “obstacles” to effective team performance in sports; he used the term to describe differences of opinion among team members as to who the leader is or should be. Distributed leadership was contrasted with “focused leadership” in which there is agreement on the leadership hierarchy. As he wrote,

the clear differentiation of role responsibilities and the assignment of those responsibilities to particular team members provides a measure of stability and predictability that is otherwise lacking in a team where role assignments are poorly defined... An individual's security derives largely from his being able to count upon a stable social environment. (1982, p.)

Another obvious problem with distributing leadership is that those to whom leadership is distributed may have different agendas from the “official” or positional leaders. This may threaten the coherence that is so crucial for the success of school improvement initiatives.

These less favourable perspectives on distributed leadership tend to polarize distributed forms of leadership against more conventional “focused” forms of leadership, so they reflect a particular positioning on leadership instead of empirical fact. However, the more contemporary literature does point to some of the difficulties associated with actively distributing leadership in schools. It highlights that there are certain barriers to overcome and that achieving distributed leadership in practice is far from straightforward. For example, Timperley (2005) has pointed to possible drawbacks and caveats associated with a normative position on distributed leadership (also see Colwell & Hammersley-Fletcher, 2004). For example:

While distributed leadership among teachers may be desirable, some caution needs to be sounded about the potential difficulties involved. Although formally appointed leaders do not automatically command respect and authority, teacher leaders may be particularly vulnerable to being openly disrespected and disregarded because they do not carry formal authority. On the other hand, nomination of teacher leaders by colleagues may not realize potential expertise

within the group because colleagues may select their leaders using other criteria (2005, p. 412).

Similarly, Harris suggests that: “it would be naïve to ignore the major structural, cultural, and micropolitical barriers operating in schools that make distributed forms of leadership difficult to implement” (2004a, p. 19). Her work offers three major barriers to distributing leadership. First, Harris argues that distributed leadership can be considered threatening to those in formal power positions, not only in terms of ego and perceived authority, but also because it places leaders in a vulnerable position by relinquishing direct control over certain activities. Second, Harris argues that current school structures, such as department divisions or rigid top-down hierarchies which demarcate role and responsibility prevent teachers from attaining autonomy and taking on leadership roles. Finally, Harris suggests that top-down approaches to distributed leadership, when not executed properly, can be interpreted as misguided delegation. Some of these same themes are echoed in Goldstein’s (2004) study of the distribution of leadership to teachers for teacher appraisal conducted in a large urban district in the United States. Hierarchical norms, district leaders’ expectations and attitudes, difficulties associated with evaluation and ambiguities surrounding the evaluation process all emerged as challenges to leadership distribution in this study.

Despite such difficulties in the implementation process associated with distributing leadership, the large scale studies of leadership effects on student learning point to significant benefits. Two of the most thorough examinations of the relationship between leadership and student learning outcomes have been conducted by Leithwood and Jantzi (2000) in Canada and Silins and Mulford (2002a) in Tasmania. Leithwood and his colleagues conclude that distributing a larger proportion of leadership activity to teachers has a positive influence on teacher effectiveness and student engagement. They also note that teacher leadership has a significant

effect on student engagement that far outweighs principal leadership effects after taking into account home family background.

In Australia, Silins and Mulford's (2002b) comprehensive study of leadership effects on student learning has provided some cumulative confirmation of the key processes through which more distributed kinds of leadership influence student learning outcomes. Their work collected survey data from over 2,500 teachers and their principals and concluded that *student outcomes are more likely to improve when leadership sources are distributed throughout the school community and when teachers are empowered in areas of importance to them*. Similarly, a study of teacher leadership conducted in England found positive relationships between the degree of teachers' involvement in decision making and student motivation and self efficacy (Harris & Muijs, 2004). This study explored the relationship between teacher involvement in decision making within the school and a range of student outcomes. It was clear from the study that a relationship between more distributed forms of leadership and certain positive student outcomes existed. Both teacher and student morale levels improved where teachers felt more included and involved in decision making related to the school development and change.

Spillane et al.'s (2001; 2004) *Distributed leadership study* remains the largest contemporary study of distributed leadership practice in schools. This four year longitudinal study, funded by the National Science Foundation and the Spencer Foundation, was designed to make the "black box" of leadership practice more transparent through an in depth analysis of leadership practice. The central argument underpinning the study is that distributed leadership is best understood as distributed practice, *stretched over* the school's social and situational contexts. The research, which focused on 13 elementary schools in Chicago, found that the task of instructional improvement engaged multiple leaders and that understanding the interplay

between different leaders is crucial to understanding leadership practice. Their study concluded that the school rather than the individual leader is the most appropriate unit for thinking about the development of leadership expertise. It also concluded that intervening to improve school leadership may not be most optimally achieved by focusing on the individual formal leader and may not offer the best use of resources.

Another recent study by Copland (2003) looked at the improvement of in eighty six schools that were engaged in data-driven, whole school reform. All of the schools had a strong commitment to introducing and implementing participatory leadership. The study found extensive staff involvement in the leadership of the schools and involvement at all levels in decision making. While the data remains too limited to confirm any significant impact on student achievement, the study found that the early evidence from the third year of data collection is revealing positive trends in performance that, it is suggested, have resulted from the large scale move towards more participatory and distributed leadership approaches.

Forms and Patterns of Distributed Leadership

Distributed leadership, like any new theoretical perspective, urgently requires further empirical testing, not only to establish whether any link with student learning outcomes exists but also to generate sharper operational images of effective practice. Undoubtedly, the effects and impact of distributed leadership on school and student outcomes will depend upon the forms and patterns distribution takes and how those forms and patterns are determined. The current research base has not explored this in any depth even though the patterns of distribution may inevitably affect the outcomes (Harris, 2004a; 2004b, 2005). Within a school, for example, encouraging administrators, teachers, support staff and students to exercise leadership over those

decisions about which they have the most information would seem an obvious way of extending leadership responsibilities. On the other hand, assigning a group of teachers without the knowledge and skills to make appropriate decisions would seem unlikely to generate leadership capacity and would more likely result in potential chaos for the school, as a whole.

These brief examples highlight two key features necessary, in our view, for *successful* leadership distribution. First, leadership needs to be distributed to those who have, or can develop, the knowledge or expertise required to carry out the leadership tasks expected of them. Second, the initiatives of those to whom leadership is distributed need to be coordinated, preferably in some planned way. These conditions for successful leadership distribution are the starting points for Locke's (2003) "integrated model" of leadership. This model acknowledges both the reality and the virtues, in most organizations, of distributed leadership based on multiple forms of lateral (e.g., teacher to teacher) influence.

Also acknowledged by the Locke (2003) model is what Jaques (1989) claims to be "inevitable" sources of vertical or hierarchical leadership in virtually any successful organization, schools included. Relationships involved in vertical leadership entail a two-way flow of influence that assists with the coordination problem left unresolved in conceptions of distributed leadership which usually imply only the lateral forms of leadership in Locke's model.

Locke (2003) argues that, among the range of functions and tasks associated with leadership, several should not be distributed or shared while the remainder should - at least in part. From the perspective of the core leadership practices described in an earlier section of this review, Locke would assign those he refers to as "top leaders" (e.g., headteacher/principal) the job of deciding on the organization's vision and its core values, determining an overall strategy for realizing the vision, and making sure the organizational structure supports its strategy. While

top leaders are likely to engage many people in processes leading up to such decisions, these leaders have the final responsibility for them. At least partly shareable leadership tasks, according to Locke, are those core leadership practices of goal-setting in relation to the vision, intellectual stimulation, individualized support and building a collaborative culture. These are tasks which need to be carried out at all “levels” if the organization is to succeed in moving toward its vision.

Gronn (2003) distinguishes between two distinct forms of distributed leadership that help further clarify areas of concern within Locke’s model. Gronn labels these forms “additive” and “holistic”. Additive forms of distribution describe an uncoordinated pattern of leadership in which many different people may engage in leadership functions but without much, or any, effort to take account of the leadership efforts of others in their organization. Spillane, (2006) calls this “parallel leadership” and it implies an un-coordinated pattern of distribution (e.g., Manz & Sims, 1980). Locke’s model suggests that such unplanned patterns of distributed leadership would do little to help the organization achieve whatever it intends however the empirical evidence to support or refute this position is not forthcoming.

Concertive or person-plus leadership (Spillane, 2006) refers to consciously-managed and synergistic relationships among some, many, or all sources of leadership in the organization. These forms of distributed leadership assume, after Locke’s integrated leadership model, that the sum of leaders’ work adds up to more than the parts. It is also assumed that there are high levels of interdependence among those providing leadership and that the influence attributed to their activities emerges from dynamic, multidirectional, social processes which, at their best, lead to learning for the individuals involved, as well as for their organizations (Pearce & Conger, 2003).

Gronn has suggested that concertive forms of distributed leadership may take three forms

- *Spontaneous collaboration*: “From time to time groupings of individuals with differing skills and knowledge capacities, and from across different organizational levels, coalesce to pool their expertise and regularize their conduct for duration of the task, and then disband” (2002, p. 657).
- *Intuitive working relations*: This form of concertive distributed leadership emerges over time “...as two or more organizational members come to rely on one another and develop close working relations” and, as Gronn argues, “leadership is manifest in the shared role space encompassed by their relationship” (2002, p. 657).
- *Institutionalized practice*: Citing committees and teams as their most obvious embodiment, Gronn describes such formalized structural as arising from design or through less systematic adaptation.

The extent and nature of coordination in the exercise of influence across members of the organization is a critical challenge from a holistic perspective. Interdependence between two or more school staff members may be based on overlapping roles and responsibilities: for example, all teachers in a school may assume responsibility for student discipline in spaces outside the classroom. Interdependence also may be based on complementarity of skills and knowledge: for example, Katrina, with extensive expertise in student assessment, joins Gerald, the school’s most knowledgeable math instructor, to develop for the junior grade teachers performance-based measures of students’ problem-solving skills

When role overlap occurs in a coordinated fashion there can be mutual reinforcement of influence and less likelihood of making errors in decisions. When the use of complementary knowledge and skills is the form of interdependence, those providing leadership have

opportunities to do what they know best as well as increase their own capacities by observing their colleagues doing the same, a “huddle effect” according to Gronn (2002, p. 671).

Our own observations suggest some elaboration and refinement of Gronn’s holistic forms of distributed leadership. Influenced by Locke (1993), we focus on the extent to which the performance of leadership functions is aligned across the sources of leadership. In addition, we hypothesize a set of beliefs and values which would support each of these different forms of alignment. The outcome of our elaboration is four patterns of distributed leadership with considerable face validity in schools and with potentially quite different effects on schools.

Planful alignment. ‘Planful’ is a North American term used to describe a process of thoughtful consideration (planning) by leadership to the management of the organization. This configuration, illustrated later in the chapter, is comparable to Gronn’s “institutionalized practice”. The tasks or functions of those providing leadership have been given prior thoughtful consideration by organizational members. Agreements have been worked out among the sources of leadership (headteachers, heads of department and teachers, for example) about which leadership practices or functions are best carried out by which source.

Although alignment is generally considered a good thing for organizations, positive contributions of this configuration to productivity cannot be automatically assumed for several reasons. The patterns of leadership distribution determined through planning may turn out to be less than effective in some manner, for example: support staff asked to carry out a task – say, student discipline – which others believe they have no right to perform. Even if the distribution seems effective and appropriate in theory, one or more leaders may enact their agreed-on functions in an unskilled manner. Nevertheless, the “pre-thinking”, reflective, or planning

processes associated with this configuration increases the chances of a productive pattern of leadership distribution.

Shared values and beliefs associated with planful alignment include:

- Reflection and dialogue as the basis for good decision making;
- Trust in the motives of one's leadership colleagues (see Gabarro, 1978 cited in Gronn, 2002);
- Well-grounded beliefs about the capacities of one's leadership colleagues;
- Commitment to shared whole-organization goals; and
- Cooperation rather than competition as the best way to promote productivity within the organization.

Spontaneous alignment. In this configuration, essentially Gronn's "spontaneous collaboration" and Spillane's "parallel performance", leadership tasks and functions are distributed with little or no planning, for example: the head assumes she will be responsible for modelling values important to the school and everyone else makes the same assumption. Nevertheless, tacit and intuitive decisions about who should perform which leadership functions results in a fortuitous alignment of functions across leadership sources. There is no significant difference in the contribution to short-term organizational productivity of this "method" of alignment, as compared with planful alignment. However, the tacit nature of decisions this method entails seems likely to reduce the flexibility and adaptability of the organization's responses to future leadership challenges. Spontaneity offers few guarantees of fortuitous alignment.

Shared values and beliefs associated with spontaneous alignment include:

- "Gut feelings" as the basis for good decision making;
- Trust in the motives of one's leadership colleagues;

- Idealistic beliefs about the capacities of one's leadership colleagues;
- Commitment to shared organizational goals; and
- Cooperation rather than competition as the best way to promote productivity within the organization.

Spontaneous misalignment. This configuration mirrors spontaneous alignment in the manner of leadership distribution, as well as its underlying values, beliefs and norms. However the outcome is different or less fortuitous – misalignment (which may vary from marginal to extensive). Both short- and long-term organizational productivity suffer from this form of (mis) alignment. However, organizational members are not opposed, in principle, to either planful or spontaneous alignment thus leaving open reasonable prospects for future productive alignment of one sort or another.

Anarchic misalignment. This configuration is characterized by active rejection, on the part of some or many organizational leaders, of influence from others about what they should be doing in their own sphere of influence. As a result, those leaders' units behave highly independently, competing with other units on such matters as organizational goals and access to resources. Active rejection of influence by others, however, stimulates considerable reflection about one's own position on most matters of concern. Large secondary schools offer many examples of this form of (mis) alignment with considerable agreement on "who does what" within departments but mostly uncooperative and competitive behaviour in response to other departments. Storey's (2004) case study of a headteacher and head of science department in a large secondary school in England illustrate how a form of spontaneous misalignment grew to become anarchic and competitive as the two leaders involved gradually came to realize that they held quite different visions for their school and for the science department.

Shared values and beliefs associated with anarchic misalignment include:

- Reflection and dialogue as the basis for good decision making about one's own work and sphere of influence;
- Mistrust in the motives and capacities of one's leadership colleagues;
- Commitment to individual or unit, but not whole organization, goals; and
- Competition rather than cooperation as the best way to promote productivity across units within the organization.

It would appear that planful and spontaneous patterns of alignment have the greatest potential for short-term organizational productivity and more than either spontaneous misalignment or anarchic alignment. Furthermore, planful alignment seems more likely to contribute significantly more than other patterns of alignment to long-term organizational productivity. Both spontaneous misalignment and anarchic alignment are likely to have negative effects on short- and long-term organizational productivity.

Finally, because of significant differences in their beliefs and values, organizational members associated with both spontaneous alignment and misalignment are more likely to be attracted to planful alignment than are organizational members associated with anarchic alignment.

Conclusion

Distributed leadership is gaining more prominence in the contemporary leadership literature. As noted earlier, the empirical evidence of its benefits remains limited. Bennett et al. note in their review of the literature on distributed leadership "there were almost no empirical studies of distributed leadership in action" (2003, p.4) which in part reflects the fact that this

theoretical perspective on leadership is still in its infancy. The existing evidence upon which that we can draw, including empirical studies of organizational change, school improvement and teacher leadership, offers some encouragement that further empirical work is worth pursuing. It is clear that the field urgently needs research aimed at better understanding patterns of distribution, their relative consequences, how they develop and the challenges to their development (see Spillane, 2006). It would seem a feasible proposition that some patterns of distribution will inevitably be more productive than others but at this point we simply do not know.

In their recent review of the research evidence concerning school leadership and leadership programme effects on pupil learning, Leithwood and Levin recommend that future research work needs to “measure a more comprehensive set of leadership practices than has been include in most research to date” (2005, p. 45). They suggest that these measures should explicitly be based on *coherent images of desirable leadership practice* and that *such research is likely to produce larger estimates of leadership effects on pupil outcomes than has been provided to date*. Such coherent images of practice will necessitate a broader notion of what constitutes leadership practice and a more sophisticated set of analytical and conceptual tools to assess its impact.

Distributed leadership offers one way of pushing and testing the boundaries of leadership practice. As the work by Spillane et al. (2001) has shown, it provides a powerful lens to look at the relationship between leadership, organizational development and learning outcomes. The distributed perspective also suggests ways of thinking about intervening to change leadership practice. It offers a frame to help researchers in the leadership field build evocative cases that can be used to assist practitioners in thinking about their ongoing leadership practice. It also provides

a basis for investigating a more comprehensive and complex set of leadership practices that go beyond the checklists of characteristics, skills and strategies that remain prevalent in the leadership field. Adopting a distributed perspective suggests, for example, the need to refocus at least some leadership standards from individual leaders to groups who share leadership responsibilities.

4. Roots of Successful Leadership Practice

Introduction

Knowing what it is that successful school leaders actually do (as we described in Section 2) is extraordinarily valuable for all kinds of reasons. It can inform leadership development initiatives and serve as one yardstick by which to assess leaders' performance, for example. But knowing what successful leaders do begs questions about how and why. Lacking well justified answers to these questions inevitably places quite superficial boundaries around leadership selection, development and assessment efforts. We need to know what actually makes successful leaders "tick" if their practices are to serve, for example, as models for others. We need to know, as another example, whether there are key, difficult-to-change traits and contexts which 'drive' successful leadership practice so we can take them into consideration when we select leaders for new positions.

Educational leadership research has paid very little attention to these questions. Indeed, the democratic and egalitarian ethic currently driving much of the professional rhetoric about distributed and teacher leadership seems implicitly premised on the assumption that everyone can be a good leader, that effective leadership is an entirely learnable function, perhaps even that everyone already is a good leader - without any specific preparation! This is an empirical claim almost entirely lacking any supporting evidence. While most people are capable of becoming more skilled in most leadership functions, some develop these capacities much more readily than others and some to a much higher level. And, to be realistic, some people seem predisposed to function at a pretty basic level as leaders indefinitely. But if school leadership is to deliver on even a small portion of the great expectations now held for it, we can't settle for mediocrity. We

need to become more sophisticated in identifying and developing people with the potential to perform at very high levels of leadership.

A great many factors in a leaders' environment shape his or her actual practices - educational policies, on-the-job leadership opportunities, mentoring experiences and professional development initiatives, for example. But the actual effects of all these external experiences on leaders' practices are mediated by their inner lives - their thoughts, feelings, educational histories, professional identities, values and dispositions. These capacities and traits act as interpretive screens for leaders, as they do for all people, in making sense of the world "out there". They are the springboards for the practices leaders choose to enact, as well as the skill with which they enact them. For that reason, our attention in this part of our review will be limited to the *internal* cognitive and affective antecedents of successful leadership.

Evidence gathered over many decades in non-school contexts makes a strong case for attending more broadly to leaders' internal lives even though this focus had been actively discouraged many years earlier (e.g., Stogdill, 1948); Antonakis and House now claim that there is a "...compelling case for incorporating dispositional arguments and evidence into theories of behaviour in organizations" (2002, p. 23). Leadership research in school contexts has been concerned primarily with leaders' cognitive processes (e.g., Leithwood & Steinbach, 1995), and values (e.g., Begley & Johansson, 2003) but not other dimensions considered promising in the wider literature, including leaders' personality, motivations (Popper & Maysless, 2002), emotional understandings and self-efficacy beliefs. Our review, therefore, includes evidence from both school and non-school contexts.

Cognitive Characteristics of Successful Leaders

Evidence reviewed in this section makes a plausible case for the contribution of general intelligence and other aspects of intellectual functioning, problem-solving skills and knowledge about subject matter, teaching and learning to the emergence of successful leadership in schools.

Intelligence and Other Intellectual Functions

Most evidence regarding the role of general intelligence has been collected in non-school contexts. A recent review of this evidence by Zaccaro, Kemp and Bader (2004) associated leadership success with above average general intelligence. The Zaccaro et al. review also associated leader effectiveness with creative and divergent thinking, along with metacognitive skill.

A modest amount of evidence from a coordinated series of recent international studies reported in Day and Leithwood (in press) associates cognitive flexibility, as well as creative and lateral thinking capacities, with successful principals. Both of these capacities have been identified by evidence from research on leaders in non-school contexts. Bennis argues, for example, that “When we speak of exemplary leadership, we are often talking about exemplary, creative problem solving – the discovery of new solutions to unprecedented problems” (2004, p. 334).

Problem Solving

The Zaccaro et al. results resonate with evidence about the problem-solving processes of expert vs. non-expert school leaders (e.g., Allison, 1996; Wagner & Carter, 1996). Cognitive science orientations to problem solving devote considerable attention to the concept of “expertise” and the patterns of thought that distinguish between leaders who possess expertise and those who do not (of course, it is not actually a dichotomous quality). Expertise is associated

with both effective and efficient problem solving within a particular domain of activity, like exercising leadership in school. Research across many domains suggests, for example, that experts: excel mainly in their own domains; perceive large meaningful patterns in their domains; solve problems quickly with few errors; and have superior short- and long-term memories about matters within their own domains. Experts also represent problems at deeper, more principled levels than novices; they spend more time than novices interpreting (as distinct from solving) problems. Experts are much more able to monitor their own thinking than are novices or non-experts (Glaser & Chi, 1988). The amount of domain-specific knowledge possessed by experts and the way it is organized is offered as the primary explanation for these attributes (Van Lehn 1990). General problem-solving processes or heuristics, in the absence of such knowledge, are not considered powerful tools for problem solving. Rather, such processes help people to gain access to useful knowledge and beliefs that they otherwise may overlook.

Well structured problems, usually those repeatedly encountered by expert leaders, are solved with little conscious thought. The problem is recognized as an instance of a category of problems about which the leader already knows a great deal. As Simon argues, “any expert can recognize the symptoms, the clues, to the bulk of the situations that are encountered in his or her everyday experience. The day would simply not be long enough to accomplish anything if cues didn’t do a large part of the work for the expert” (1993: p. 403). Such recognition permits the leader to access all of the knowledge he or she has stored in long-term memory about how to solve that category of problem. However, because no comparable store of knowledge is available for ill structured problems, the leader needs to respond in a more deliberate, thoughtful manner. As those providing leadership face a greater proportion of ill structured problems, better understanding of these deliberate, thoughtful processes becomes increasingly important

(Schwenk 1988; Day & Lord 1992), as does enhancing the expertise with which they are carried out. Furthermore, the degree of discretion and the cognitive demands placed on leaders appear to increase, the higher their position in the organization (Mumford & Connelly, 1991), in part because of the extended time horizons over which solutions to their problems must be planned and the accompanying abstractness of the thinking that may necessitate (Jaques 1986).

One important outcome of research on successful school leaders is a multi-component model of their problem solving processes (e.g., Leithwood & Steinbach, 1995). This model, in brief, indicates that, as compared with their average or typical counterparts, expert school leaders solve ill structured problems by: devoting considerable up front attention to interpreting the exact nature of the problem; anticipating most of the constraints likely to be encountered in solving the problem and planning ways of dealing with them before they were encountered; and setting clear, short term goals for problem solving that served to simplify by decomposing into simpler parts an otherwise excessively complex challenge. Expert school leader problem solvers also use an explicit, well developed set of personal values as substitutes for the inevitable lack of detailed information about appropriate solutions to ill structured problems. They develop quite detailed solution processes based on considerable amounts of relevant data. And they remain calm and emotionally stable even in face of problems others viewed as “crises”. These leaders are more self-confident about their ability to solve ill-structured problems and they treat staff with consistent and genuine respect and courtesy during their interactions.

Knowledge

Research on school leader problem-solving processes acknowledges, as we have noted, the importance of domain-specific knowledge in explanations of problem-solving expertise. A quite recent line of theory and research has begun to uncover the specific nature of the domain

knowledge most useful for school leaders in today's educational reform environments (Stein & Spillane, 2005). This research begins from the premise that current reform efforts are often focused on developing more sophisticated and complex capacities among pupils such as higher order thinking skills and an the understanding of complex concepts. This reform agenda implies mastery of such knowledge on the part of teachers if they are to facilitate their pupils' learning. Furthermore, recent conceptions of how both teachers and pupils learn complex skills and concepts suggests that is constructed, social and situated (Bransford, Brown, Cocking, Donovan, & Pellegrino, 2000). So the demand these reforms place on teacher learning includes understandings of new curriculum content as well how their pupils learn that content. These are understandings that may well differ considerably from a more familiar behaviouristic view of learning and often a more superficial understanding of subject matter.

Those in leadership roles responsible for moving this reform agenda forward would seem to require two types of domain knowledge if they are to be successful. Assuming that an important role for reform-minded leaders is to help both their teachers and pupils acquire this new complex content knowledge, one type of knowledge is about the content of new curriculum or subject matter, "...knowledge of academic subjects that is used by administrators when they function as instructional leaders..." (Stein & Nelson, 2003, p. 423). As Stein and Spillane explain, "...administrators (headteachers) should know strong instruction (teaching) when they see it, know how to encourage it when they do not and know how to set conditions for continuous academic learning among their teaching staff". (2005, p. 44). Prestine and Nelson (2005) argue further, that successful leadership content knowledge also should encompass knowledge of "first principles" or "theory-based" understandings about whatever might be the instructional innovation. This claim receives support from evidence provided by McLaughlin and

Mitra's (2001) research. Such knowledge would vary depending on the nature of the innovation or reform. Stein and Nelson report case study evidence in support of their claim that the subject matter content knowledge of headteachers who aspire to provide teaching and learning leadership should consist of:

...solid mastery of at least one subject (and the learning and teaching of it) along with expertise in other subjects by 'postholing', that is, conducting in-depth explorations of an important but bounded slice of the subject, how it is learned and how it is taught (2003, p. 423).

In the present educational reform context, leaders also require knowledge of learning processes as they are presently understood. Stein and Spillane (2005) claim that most headteachers at least *act* as though they hold a behaviouristic view of learning when it comes to encouraging their teachers' learning. But contemporary understandings of learning, as constructed social and situated, lead us to expect such learning processes to have: "...more in-depth focus on the opportunities that are arranged for teacher learning in school, as well as more attention to principals' goals for teacher learning. Conditions that facilitate meaningful and deep teacher learning include the opportunities to address, and perhaps challenge, teachers' existing knowledge and beliefs, to experience the learning of subject matter in new ways, and to ground their learning in classroom practice." (from Borko & Putnam, 1996).

In sum, we can conclude from the evidence reviewed so far in this section that the cognitive capacities of leaders are quite important to their success. These capacities include general intelligence. Being intelligent almost always helps, especially with complex tasks in messy environments like schools. Successful leadership is also fostered by expertise in the solving of ill – structured problems, pedagogical content knowledge related to any curriculum reforms to be implemented in their schools and a rich understanding of how to help teachers acquire such pedagogical content knowledge themselves.

Affective Characteristics of Successful Leaders

Much more evidence about leaders' affective characteristics is available from research in non-school than school organizations. This section, like the previous one, is informed by Zaccaro, Kemp and Bader's (2004) narrative review of evidence primarily collected in non-school settings and reported between 1990 and 2003. Their review was organized around a three-fold classification of leaders' affective characteristics, which we adopt here, including personality, motivation and social appraisal skills. We compare the results of research reviewed by Zaccaro and his colleagues with the relatively small amount of evidence available about these characteristics in school contexts. One source of such school-based evidence which we consistently refer to is a coordinated series of ongoing qualitative studies of successful principals in eight countries. This evidence has been reported in a special issue of the *Journal of Educational Administration* (Jacobson, Day & Leithwood, 2005) and an edited text (Day & Leithwood, in press).

Personality

In the case of personality, we have extended the evidence reported by Zaccaro and his colleagues back in time by drawing on a meta-analysis of empirical research reported between 1952 and 1991 (Barrick & Mount, 1991). Both of these reviews indicate that the vast majority of evidence about leaders' personalities has been conducted about what have been called, for many years, "the big five" leader personality factors. These include:

- Emotional stability (anxious, depressed, angry, embarrassed, emotional, worried, insecure): maintaining emotional stability was significantly related to managerial effectiveness in Barrick and Mount's (1991) meta-analysis. The only school-based evidence we located about this trait came from the supportive results about the role of mood in expert leaders' problem

solving capabilities; leaders able to control their own moods – remain emotionally stable – engaged in more successful problem solving, all other things being equal.

- Extraversion (sociableness, gregarious, assertive, talkative, active): Research on non-school contexts, as captured in our two literature reviews, typically finds a significant association between extraversion and those holding formal leadership positions.
- Agreeableness (courteous, flexible, trusting, good natured, cooperative, soft hearted, tolerant): Barrick and Mount found no evidence that being agreeable had much to do with leaders' success. Nonetheless, Zaccaro and his colleagues (2004) found significant relationships between successful leadership and a preference for social engagement (vs. introspection). This preference, however, could as easily be interpreted as a sign of extraversion as agreeableness .
- Conscientiousness (hardworking, achievement oriented, persevering): Both Zaccaro et al. (2004) and Barrick and Mount found relatively strong associations between this trait and leader success. Almost all of the five dozen principals included in the studies of successful leaders reported in Day and Leithwood (in press) demonstrated extreme versions of this trait. Even straightforward evidence about the typical length of current principals' work week (60 to 80 hours) makes an indirect but quite compelling case that hard work is a minimum requirement for survival (success aside) as a school administrator
- Openness to experience (imaginative, cultured, curious, original, broad minded, intelligent): Barrick and Mount (1991) found openness associated most strongly with the likelihood that a leaders would learn from educational experiences – be open to such learning – rather than beginning from a skeptical position on the value of the learning opportunity. The successful principals described in Day and Leithwood (in press) were considered by teachers, parents

and students to be open and frank. The contribution of openness to leader success, while not unambiguous, was found to be generally positive in Zaccaro, Kemp and Bader's (2004) review and Day and Leithwood's (in press); it is often associated with a participatory leadership style. Finally, the extent to which leaders are willing to share both school-related and personal information with their colleagues also has been identified as a key factor in determining the extent to which teachers are willing to trust those in leadership positions (Tschannen-Moran & Hoy, 2000). Zaccaro and his colleagues conclude that:

Taken together, these studies find robust associations between most of, if not all, the Big Five personality factors and leadership. Indeed Judge et al. (2002) report a multiple correlation of .48 with leadership" (2004, p. 112).

Additional evidence reviewed by Zaccaro et al. (2004) and reinforced by the evidence reported in Day and Leithwood (in press), links successful leadership to several internal states beyond the "big five", notably optimism, proactivity (perhaps one manifestation of extraversion), internal locus of control and nurturance. But there is relatively little evidence, at this point, linking most of these states or traits to successful school leadership. Concerned with transformational leaders, in particular, Popper and Mayseless summarize evidence indicating that leaders adopting this approach have: "...a disposition for social dominance; a belief in the ability to influence others [self-efficacy beliefs]; a motivation and a capacity to treat others in a positive and encouraging way, while serving as role models; optimistic orientation toward the self, and others; and intellectual openness, curiosity and flexibility" (2002, p. 215).

Leader self-efficacy was identified as an important antecedent to effective or transformational leadership in both the Zaccaro et al. and Popper and Mayseless reviews. Leadership research in school contexts has produced similar results. "Self-efficacy" is a belief about one's individual ability, or the ability of one's colleagues collectively, to perform a task or achieve a goal. It may be relatively general, as in a teacher's belief about he and his colleagues'

collective teaching capacities with all children and all curricula, or more specific, as in a headteacher's belief about her ability to generate enthusiasm among staff in a shared vision for the school. It is, to be clear, a "belief" about ability or capacity, not actual ability or capacity.

Studies specifically about leaders' self-efficacy (LSE) are still modest in number (Dimmock & Hattie, 1996; Gareis & Tschannen-Moran, 2004), although it seems to have been studied over a longer period of time in school than in non-school contexts (Chemers, Watson, & May, 2000; McCormick, 2000). For this review, we were able to find 14 empirical studies², of which 11 had been conducted in school contexts. The earliest of these studies (DeMoulin) was published in 1992. Results of these studies generally support the claims for self-efficacy associated with Bandura's socio-psychological theory of self-efficacy (e.g., 1982, 1986, 1993, 1997a, 1997b). This body of work identifies the effects of self-efficacy feelings on a leader's own behaviour and the consequences of that behaviour for others. This line of theory also specifies the sources of leaders' self-efficacy beliefs and the mechanisms through which such beliefs develop.

Self-efficacy beliefs, according to Bandura, steer one's choice of activities and settings and can effect coping efforts once those activities are begun. Such beliefs determine how much effort people will expend and how long they will persist in the face of failure or difficulty. The stronger the self-efficacy the longer the persistence. People who persist at subjectively threatening activities that are not actually threatening gain corrective experiences that further enhance their sense of efficacy. In sum, "Given appropriate skills and adequate incentives ... efficacy expectations are a major determinant of peoples' choice of activities, how much

² Those conducted in education contexts included Williams et al. (1996), Gareis and Tschannen-Morin (2004), Smith et al. (2003), Modlin (1996), Imants and DeBrabander (1996), Painter (2000), DeMoulin (1992), Lucas (2003), Lyons and Murphy (1994), Dimmock and Hatti (1994). Studies carried out in other contexts were Chemers, Watson and May (2000) and Paglis and Green (2002).

effort they will expend and how long they will sustain effort in dealing with stressful situations” (1997, p.77)

Bandura (1977) has argued that self-efficacy has three dimensions – complexity, generality and strength. When tasks are ordered from simple to difficult, peoples’ efficacy may be limited to relatively simple tasks or extend to the most difficult. Self-efficacy may be focused on very specific tasks (“school improvement” in our study, for example) or be more broadly conceived. One also may hold efficacy beliefs weakly or strongly, weakly held beliefs being easily extinguished in the face of difficulty.

Bandura (1986; 1993) points to three sources of efficacy beliefs which we consider relevant for school leaders: mastery experiences, vicarious experiences and verbal persuasion. Since we have limited research on which to draw concerning Leadership Self Efficacy (LSE), we cannot predict with much certainty which conditions in the school or LA, if any, might foster these antecedents. We speculate, however, that school leaders might have *mastery experiences*, as a result of, for example, participating in some form of LA or NCSL professional development, opportunities to solve manageable problems in their schools and working with a mentor. Examples of *vicarious experiences* stimulating positive leader efficacy beliefs might include opportunities to shadow other leaders, see models of other leaders learning how to master an important task or skill and hearing about how other leaders have solved relevant organizational problems.

Performance appraisal feedback might serve as a form of *verbal persuasion* influencing school leader’s efficacy beliefs. Bandura argues, more specifically, that performance feedback “...focused on achieved progress underscores personal capabilities whereas feedback that focuses on shortfalls highlights personal shortcomings” (1997 p. 77). Accentuating achievement

gains enhances self-efficacy, aspirations, efficient analytic thinking, self satisfaction and performance accomplishments. Inspirational presentations at a conference is another plausible example of verbal persuasion leading to higher levels of leader self-efficacy

Motivation

Zaccaro et al. (2004) claim that the motive state examined most in non-school leadership contexts has been the need for dominance or power, achievement, affiliation and responsibility. While respondents described in two of the studies in our qualitative international project (Gurr & Drysdale, in press; Moller et al., in press) were reported to have strong achievement needs, there was no evidence among any of them of a need for dominance, power or affiliation. There was considerable evidence to suggest that they were passionate about their work, highly committed emotionally and highly motivated. Many of them were perceived to have high energy levels likely to be motivational to others (Day, in press; Gurr & Drysdale, in press), as well as being determined, persistent, industrious (e.g., Moos et al., in press) and resilient (Day and Schmidt, in press).

These motivational states of successful school principals have no literal counterparts in the motive states identified by Zaccaro et al. (2004), although need for responsibility might be viewed as related to passion and commitment.

Social Appraisal Skills : emotional understanding

The final category of affective leadership characteristics is social appraisal skills which Marlow defines as “the ability to understand the feelings, thoughts, and behaviours of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding” (1986, p. 52). Capacities included in this broad category refer to leaders’ abilities to appreciate

the emotional states of colleagues, to discern those states in complex social circumstances, to respond in ways that are considered helpful and to understand and manage one's own emotions.

Zaccaro et al. (2004) link variation in these skills with significant differences in leadership success. Five of the nine qualitative studies included in our international project (Day & Leithwood, in press) report evidence of successful principals being good listeners; one mentioned principals having a good sense of humour (Day et al, 2000; Moos et al., in press), which could be a sign of good social appraisal skills in some circumstances (e.g., a strategy for defusing conflict or reducing tension).

Social appraisal skills included in non-school leadership research includes self-monitoring skills, as well as both social and emotional intelligence. These social intelligence or social appraisal skills of leaders have been the object of considerable research, according to the Zaccaro review. It seems reasonable, in addition, to assume that emotional intelligence, a concept popularized by Goleman (e.g., 1998), is part of this broad category of traits. Research specifically about the emotional intelligence of leaders is relatively new, however.

Overall, the evidence we reviewed indicates that social intelligence and emotional understanding have a moderate to strong relationship with leadership success. This relationship may vary in strength depending on type of job. Wong and Law suggest, for example, "that emotional management skills would be more strongly related to performance in a highly emotionally laborious jobs that in those involving less emotional labor" (quoted in Zaccaro et al., 2004, p. 116). School leadership undoubtedly qualifies as emotionally labourious.

This evidence, our own and the much larger body of evidence reviewed by Zaccaro and his colleagues, suggest two conclusions. One conclusion is that some personal, affective, dispositions and qualities incline leaders to engage in practices widely considered to be

successful. Just as warranted, however, would be the conclusion that when a leader's colleague judges her traits and dispositions to be attractive or desirable, they have a strong inclination to interpret her leadership practices as successful. Either way, this evidence indicates quite strongly that leaders' affective characteristics, whatever they may be, figure prominently in the attributions people make about the leadership of their colleagues. It is important, therefore, to include the development of the affective dimension of leadership in Training programmes and, as with distributed leadership, to develop further research into its nature and effects.

Values

Recent evidence about the values of successful school leaders, in particular, is available from a large-scale English study (Day, Harris, Hadfield, Tolley, & Beresford, 2000) and a recent international study carried out in seven countries (Day & Leithwood, in press). Earlier empirical research about successful leaders' values also was the focus of a series of related studies by Begley (1988), Leithwood and Raun (1993) and Campbell-Evans (1988), extended and summarized by Leithwood and Steinbach (1995).

Results of the older set of studies described four categories of values; *Basic Human Values* (e.g., freedom, happiness, survival); *General Moral Values* (fairness, care, courage); *Professional Values* (e.g., role responsibilities, consequences for students) and; *Social and Political values* (participation, sharing, loyalty). This evidence indicated that school leaders' basic human values and professional values dominate their decision making (see also, Campbell, Gold, & Lunt, 2003). It also suggests, as we mentioned earlier, that expert or successful leaders, as compared with their less successful or non-expert counterparts, are guided by most of the same values but make greater use of their values to solve complex problems in their schools,

give greater weight to the consequences of their decisions for students and are guided more by their role responsibilities

We summarize the results of the two more recent studies (Day et al., 2000; Day & Leithwood, in press) using categories from the earlier research. Successful headteachers in both these studies appeared to have high levels of respect and concern for others and value their happiness, specifically the need for teachers to be happy, a set of *basic human values*. Among *general moral values and beliefs*, the two studies found modest amounts of evidence to suggest that successful leaders were empathetic and cared strongly about their students and staff. Their actions were also interpreted by their staffs as evidence of valuing equity and social justice. Day et al. (2000) found that their successful headteachers were perceived to have high levels of integrity and high moral standards. Although no explicit mention was made of courage, a value reported in earlier research, it would be plausible to attribute courage to the successful principals included in both studies; they worked in highly accountable policy contexts but continued to buffer their staffs from external demands which they believed would not be helpful to act on in their schools.

With respect to *professional values and beliefs*, evidence from the two recent studies closely approximates the findings of earlier research (Leithwood & Steinbach, 1995). *Role responsibility* values were evident among some of the successful principals, along with concerns for the consequences of their work, especially for students. These principals believed that a schools' focus should be on the best interests of students, that all children can learn and should succeed, and that all children have potential that should be realized.

A substantial amount of evidence in our international study indicated that successful principals' values and beliefs are *social and political* in nature, as reported in earlier studies. For

example, Ling, Chia and Fang's (2000; quoted in Pittinsky and Zhu, 2005) research indicates that Chinese leaders who exhibit collectivist values tend to be favoured. The researchers found that four dimensions are usually adopted to describe the conceptualization of [successful] leadership: personal morality, goal efficiency, interpersonal competence, and versatility. Among the four dimensions, most leaders tend to give the highest ratings to interpersonal competence; this is 'consistent with Chinese collectivist values' (pp. 735-738). Successful principals were concerned about community involvement in the school, especially in its vision, had high levels of commitment to that vision, and believed that capacities possessed by people throughout the school should be used for the good of the students. Many of the successful principals in our international study also valued the participation of all stakeholders in school decisions.

Previous research in non-school contexts has suggested that the influence of leaders' values on their actions typically increases as leaders are faced with fewer organizational and policy constraints on those actions (Hambrick & Brandon, 1988). In practice, this has usually meant that the actions of senior-level leaders are more consistent with their own values than is the case with middle-level leaders. According to the evidence about our (mid-level) successful headteachers, however, there was a very strong relationship between their actions and the values they espoused and were perceived to hold by staff, parents and others. This willingness to work toward such value-action consistency may be one of the more significant characteristics distinguishing their work from the work of their less successful peers, an intriguing hypothesis for subsequent inquiry. It is also a hallmark of what is now being called "authentic" leadership (Avolio & Gardner, 2005).

Conclusion

The majority of the evidence available about the internal antecedents of successful leadership has been collected in non-school contexts. Evidence about leaders' problem solving skills and values are the main exceptions to this claim; there is enough evidence about these internal state to draw moderately robust conclusions.

Despite limited research about other cognitive and affective antecedents of school leaders, in particular, there seems little reason to doubt the validity, for school organizations, of evidence collected in non-school contexts. It is the best evidence we have and well worth taking into account when making decisions about the selection of potential future leaders, for example. Moving this research agenda forward in school contexts seems well worth encouraging, as well.

5. From Successful Leadership Practices To Pupil Learning³

Introduction

It is commonly claimed that the effects of leadership on pupil learning are largely indirect (e.g., Hallinger & Heck, 1996). This is most obviously the case for sources of leadership outside the classroom – headteachers, inspectors, governors, secretaries, parents and school improvement partners of different kinds. In order for these sources of leadership to effect student outcomes they must exercise some form of positive influence on the work of other colleagues, especially teachers, as well as on the status of key conditions or characteristics of the organization (school culture, for example) that have a direct influence on pupils. These people and conditions are the intervening moderating and mediating influences, or variables, about which we are concerned in this section of our review. Leaders potentially have a direct relationship or influence on these variables, which, in turn, have a direct influence on pupil learning, as well as on leadership itself.

How we think about the variables intervening between leaders and students depends, in some measure, on the size of the school organization. In a small primary school, for example, many headteachers typically also have significant teaching roles and hence many contacts with students in one role or another. In large secondary schools, most headteachers' influence on pupils' academic learning will almost always be through other adults, although many headteachers of large schools do have direct contact with pupils outside the classroom and often know them quite well.

For the purposes of this review, the bulk of our explanation of how pupil learning is indirectly influenced by successful leadership follows a backward mapping logic. This logic suggests that the most immediate influences on pupil learning are the teaching and learning

³ Some portions of this section are based on earlier reviews including Leithwood and Steinbach (2003) and Leithwood, Seashore-Louis, Anderson and Wahlstrom (2004).

practices of teachers. These practices, in turn are a function of the internal states of teachers (histories, beliefs, identities, qualities, knowledge and skills) which are themselves shaped by external conditions: actions and features of the pupils, classrooms, school, LA, government and wider society. Teachers practices will improve to the extent that these conditions, actions and features, in aggregate, allow teachers to use their existing capacities well and to further enhance those capacities, while at the same time having positive or at least neutral effects on their existing commitments, motivations and conditions of service. As one policy maker in America has claimed recently, “teachers’ working conditions are students’ learning conditions”.⁴

Before beginning our backward mapping analysis, however, we examine how leaders influence their immediate colleagues. Then we turn to the immediate influences on student learning, working back through the chain linking pupil learning and successful leadership.

How Leaders Influence Their Immediate Colleagues

Leadership, we have argued, entails influencing one’s colleagues to act in ways likely to help accomplish the short-term goals and long-term directions considered desirable for the school. Although the effects of school leadership on pupils are mostly indirect, its effects on the actions of other organizational members are both direct and indirect. In this section, we review evidence about how leaders directly influence their colleagues.

Our starting point is to acknowledge that leaders can only be influential if their colleagues allow them to be. This is the case particularly in teaching, since for much of the time teachers’ work is still carried out in the privacy of their classrooms. People *volunteer* to be followers in relationships with others to whom they *attribute* leadership; this voluntary act may

⁴ This claim is attributed to North Carolina’s Governor Easley (Hirsch, 2004, p. 8).

be for only short periods of time or for particular tasks. The key question to be answered is what causes people to attribute leadership status to others and allow themselves to be influenced in some fashion? Both “followers” and “leaders” perspectives on this question are important to understand.

Followers’ Perspectives

Arguably the most sophisticated attempt to understand the direct effects of leaders on their colleagues can be found in Lord and Maher’s (1993) leader prototype theory. According to this account, attributions of leadership emerge from two distinctly different mechanisms – resemblance to individual leader prototypes (recognition-based attributions) and direct experiences with the potential leader (inference-based attributions).

The first of these mechanisms, recognition-based attributions, dominates people’s leadership attributions when they are forced to make judgements about a person’s leadership potential with very little direct evidence of the potential leader’s competence or track record. This is most often the case when potential leaders are at a substantial physical, social or organizational distance from the potential follower, as in the case of a newly appointed head from outside the school or a new political candidate. Under these circumstances, people form their judgements about their own followership by matching the observed traits and behaviours of the potential leaders with their existing leader “prototypes” – mental models or schemata, developed over many prior experiences (often from earlier childhood) containing a person’s understanding of what leaders should look like, how they should behave, what traits they should have and so on. In the absence of opportunities for direct experience with the potential leader’s abilities and contributions, people compare whatever limited sense data they have about the potential leader to their prototypes in order to judge whether or not the person deserves to be

followed. Of necessity, such judgements are commonly made. But they risk being based on quite superficial qualities (e.g., rhetorical skill, gender, attractive appearance, association with desirable causes) because these may be the only qualities to which potential followers have access. Again, the extent to which this applies will vary. The smaller the school, the more likely it will be that judgements which initially may have been based on superficial qualities will give way to those based upon close-up experience. It is interesting to note that one of the most cited qualities of successful leaders in all schools is that they ‘walk the talk’, placing great importance on interaction with staff.

The second mechanism giving rise to leadership attributions (inference-based attributions) entails extended direct experience with the potential leader in efforts to solve organization problems, contribute to school improvement, engage parents more fully in the school’s work and the like. This mechanism enables judgements about potential leaders to be made on evidence of demonstrable competence and contribution to organizational goals. A person’s appearance, gender and other superficial qualities diminish in salience in the face of this mechanism.

Very little evidence has been reported about leadership prototypes or influences on leadership attributions in school contexts. Many qualitative studies however, suggest that teachers were more influenced by inference-based than recognition-based processes. Two of these, focusing upon transformational leadership qualities on the part of their principals (Jantzi & Leithwood, 1996; Leithwood & Jantzi), 1997 found that such perceptions were significantly influenced by conditions in the school open to influence by the leader (e.g., culture, vision, decision-making processes) but not by such demographic variables as teacher and headteacher age, gender, length of experience or school size and level (elementary, secondary).

Although not guided by leader prototype theory, recent evidence reported by Spillane (2006), in his studies of how leadership is distributed in schools, also is quite relevant. This evidence suggests that teachers perceive others, whether administrators or teacher-peers, to have a significant influence on their practices depending on the extent to which they are perceived to be in possession of four forms of “capital”:

- *Human capital*: job related capacities, expertise or knowledge and skills. These perceived traits are a source of expert power which can lead to legitimate power for leaders especially when they occupy “...a central position in the workflow of the organization and [have] unique abilities that cannot be replaced or routinized” (Yukl, 1989. p. 270).
- *Cultural capital*: an engaging, interactive, style of communicating, relating and working with others (likely to be dependent in some degree on the potential leader’s social intelligence and emotional understandings (Zaccaro, Kemp & Bader, 2004). Pointing to evidence reported by Blase and Blase (1998) and Blase and Kirby (1992), Spillane indicates that “principals who engage in practices such as soliciting advice and opinions while also praising teachers better motivate teachers to improve instruction” (2006, p. 49);
- *Social capital*: social networks or connections, along with the prevalence of norms of trust, collaboration and a sense of obligation among individuals in the organization. This incorporates and extends beyond Yukl’s (1994) “networking” managerial function.
- *Economic capital*: access to money and other resources which may then be available to the organization. The extent to which organizational members have access to money and other resources needed to do their work is one of six intervening (or mediating) variables in Yukl’s (1989) Multiple Linkage model of effective managerial behaviour.

In Mainland China, teachers are ranked under five hierarchical titles: Third grade teachers, Second grade teachers, First grade teachers, Senior teachers and Special (model) teachers. One can obtain the first grade or senior teacher title in about 15-20 years, after passing through the second and third grade levels (Wong, 2006). Almost all Chinese school principals are hand-picked by the local/district government from the first grade, Senior or Special teachers (ibid.). Thus, principals in China are supposed to be role models for teachers, just as teachers are seen as role models for students (Cheng and Wong, 1996). In the Chinese context, teachers are not only expected to know more than students, but also to act as models across in all the moral aspects (ibid.). Similarly, principals are expected to achieve the same or preferably outperform teachers in all areas.

Leaders' Perspectives

The direct influence of leaders on followers also has been investigated from the leaders' perspective, largely through research on leader *influence tactics*. Most of these tactics can be subsumed within the four categories of core leadership practices described in Section 2 but they are at a more specific level than the Section 2 description of those practices. Based on their review of evidence collected in non-school contexts, Yukl and Chavez (2002) offer a taxonomy of such tactics and provide a summary of the conclusions that can be drawn about the effects of each category. The taxonomy includes:

- rational persuasion - the use of logical arguments and factual evidence;
- apprising - explaining how carrying out a request will be beneficial to the target personally or will help to advance the target's career;

- inspirational appeals - appeals to persons' values and ideals or the arousal of a person's emotions;
- consultation - inviting feedback or advice about a proposed course of action;
- ingratiation - the use of praise and flattery;
- personal appeals - appealing to personal friendship or favors;
- exchange - offering something with the expectation or reciprocity at a later time;
- coalition building - enlisting the aid or support of others as a means of influence;
- legitimating tactics - efforts to establish the legitimacy of a course of action or to verify the authority to carry out the action; and
- pressure – the use of demands, threats, persistent checking etc.

According to the Yukl and Chavez (2002) evidence, the most influential tactics are rational persuasion, consultation, collaboration, and inspirational appeal; these are tactics embedded in most conceptions of transformational leadership. Ingratiation, exchange, and appraising are moderately effective and, in the case of the second and third tactics (but not ingratiation), commonly associated with transactional approaches to leadership. Pressure and legitimating tactics, commonly associated with autocratic and hierarchical forms of leadership, have proven to be least effective.

Chinese school principals tend to rely more on the exchange and appraising tactics. As Wong (2006) observes, teachers' incomes come from two sources: Government funds (based on teachers' qualification, experience, responsibility and actual teaching load); and the school's own funds (based on teachers' individual performance). All teachers receive a basic bonus, but those who have succeeded in raising the performance of students on public tests or examinations, or in non-academic activities, are given an additional, and sometimes generous, bonus (*ibid.*).

Moreover, the number of demonstration lessons conducted by a teacher is often counted towards their merit and professional standing (Cheng and Wong, 1996). Thus, teachers usually take student public examinations and demonstration lessons seriously. Through these measures, the 'effectiveness' of individual teachers becomes public knowledge, which establishes how 'good' or 'poor' each individual teacher is at their job (ibid.).

An influence attempt, according to the Yukl and Chavez's (2002) evidence, is more likely to be successful if two or more tactics are combined. But some tactics do not work well together. Contrary to prescriptions commonly found in the educational change literature, for example, pressure and support appear not to work well together. Rational persuasion is a very flexible tactic, however, one that usually works well with other tactics; and tactics themselves are likely to have only short term gains unless they are based upon or contribute to growth of trust.

Teachers' Internal States

The majority of this section builds on the results of a recent, substantially larger review of literature about teachers' internal states and the working conditions which influence them (Leithwood, 2005). This review synthesized the results of some 91 original empirical studies and 26 systematic reviews of relevant evidence published in reputable referred journals. By far the largest proportion of this evidence was collected in primary or secondary school contexts. However, a sample of comparable evidence collected in non-school contexts also was examined in order to estimate how unique to teachers they are (at least with respect to the general types of working conditions which have been found to shape their internal states and inhibit, enable or enhance their work). A comparison of evidence from these two sources indicates, quite unambiguously, that teachers are similar to many other employee groups in their responses to

many of the conditions in which they work. Finally, the results of a recent, large-scale study in England concerning the relationships between the personal and professional identities of teachers and their effectiveness, and the influence of leadership and school organization on those identities are also reflected in this section (Day, Kington, Stobart & Sammons, 2006).

This evidence, as a whole, points to the direct influence on teachers' classroom work and student learning of at least eight specific emotions:⁵ individual sense of professional efficacy, collective sense of professional efficacy, organizational commitment, job satisfaction, stress and burnout, morale, trust in leaders and mutual trust among faculty, parents and students, and engagement or disengagement from the school and/or profession. Teachers' pedagogical content knowledge is also an obviously important internal cognitive state.

The most direct implication of this body of research for our review is its identification of working conditions in the classroom and school which significantly influence teachers' internal lives. If teachers' emotions and cognitions shape their instructional practices and impact on students, then modifying and refining those conditions is clearly an important source of leaders' indirect influence on pupil learning. We outline, in the remainder of this section, those conditions which contribute positively to the internal lives of teachers.

Classroom Conditions

Conditions in the classroom warranting the explicit attention of school leaders include workload complexity, student grouping practices, and curriculum and instruction.

Workload Complexity. Teachers' feelings of stress, morale and commitment to their school are significantly influenced by the perceived complexity of their work. These feelings, in turn, demonstrably influence teachers' classroom performance and the learning of their students

⁵ Emotions have been defined as "intense affective states tied to particular events or circumstances that interrupt ongoing cognitive states and behaviors" (Tschannen-Moran & Hoy, 2000, p. 559).

(e.g., Kushman, 1992; Ostroff, 1992). From teachers' perspectives, complexity increases when they are required to teach in areas for which they are not qualified or otherwise not well prepared and when their students are uncooperative and achieve relatively poorly. Complexity is perceived to be increasingly manageable, however, when teachers are given a significant degree of autonomy over classroom decisions. This allows them to do the job the best way they know how. Manageability also is increased, in their view, by an atmosphere throughout the school which encourages learning, sometimes called "academic press" (Ma & Willms, 2004) and when appropriate teaching and learning resources are readily available.

Student Grouping. At any point over at least the last fifty years, a synthesis of available empirical evidence would have suggested, quite unambiguously, that students having difficulty at school, especially those disadvantaged by their socioeconomic backgrounds, learn more when they are working in heterogeneous rather than in homogeneous ability groups (e.g., Yonezawa, Wells, & Serna, 2002). Relatively high expectations for learning, a faster pace of instruction, peer models of effective learning, and a more challenging curricula are among the reasons offered for this advantage. In spite of this evidence, over this same period the bulk of teachers and administrators have enacted practices that separate students by ability. Their argument is that homogeneous grouping produces greater learning by allowing for the concentration of teaching and learning resources on the same set of learning problems. Implementing heterogeneous grouping practices in classrooms has been regarded by many teachers as very difficult. Nevertheless, this is one of the rare examples of professional "common sense" being just plain wrong.

Curriculum. A considerable amount evidence suggests that the best curriculum for socially, economically or culturally disadvantaged children will often be the "rich curriculum"

typically experienced by relatively advantaged students. But this rarely happens. Rather, many struggling children experience a curriculum focused on basic skills and knowledge, one lacking much meaning for any group of students. In a comprehensive synthesis of empirical evidence, Brophy (n.d.) touches on the main features of a “rich” curriculum, one in which the teaching strategies, learning activities, and assessment practices are clearly aligned and aimed at accomplishing the full array of knowledge, skills, attitudes, and dispositions valued by society. For some students and some purposes, the most useful forms of teaching will be direct, while for other students and purposes more student-directed (constructivist) approaches will be most helpful. Teachers need to be skilled in a large repertoire of teaching and learning strategies and be able to determine when each element of that repertoire is likely to be most helpful if they are to accomplish a wide array of purposes with a diverse group of students.

Without neglecting attention to the “basics”, the content of such a rich curriculum is organized around a set of powerful ideas. These ideas are “internally coherent, well connected to other meaningful learning, and accessible for application” (n.d., p. 7). Skills are taught with a view to their application in particular settings and for particular purposes. In addition, these skills include general learning and study skills, as well as skills specific to subject domains. Such metacognitive skills are especially beneficial for less able students who might otherwise have difficulty monitoring and self-regulating their own learning. “Deep understanding” is the goal for all students (Leithwood et al., in press).

Brophy’s synthesis of research also suggests that effective teaching is conducted in a highly supportive classroom environment, one embedded in a caring learning community. In this environment, most of the class time is spent on curriculum-related activities and the class is managed to maintain students’ engagement in those activities. Effective instruction also includes

questions “planned to engage students in sustained discourse structured around powerful ideas”, and teachers provide the assistance students need “to enable them to engage in learning activities productively” (n.d., p. 8-9).

Children from diverse cultures also may require “culturally responsive” teaching (Jagers & Carroll, 2002; Riehl, 2000). Such teaching is based on the premise that students’ diverse cultures pose opportunities instead of problems for teachers. Teachers adopting this perspective identify the norms, values and practices associated with the often diverse cultures of their students and adapt their teaching to acknowledge, respect and build on them.

School Conditions

Key conditions at the school level include workload volume, school structures and procedures, school culture and sense of community, student retention and promotion policies, teaching and learning programme coherence, and partnerships with parents and the wider community.

Workload volume. During the school year, teachers work an average of 50 to 53 hours per week doing a long list of tasks. Only about half of that time is devoted to teaching tasks (e.g., Dibbon, 2004). Teachers’ commitments to their school, feelings of stress and morale, each of which influences teaching performance and student learning, are eroded when teachers perceive their workload to be unfair in comparison with the work of other teachers in their own school or across the LA; when the overall number of pupils for which they are responsible becomes excessive; when the size of their classes is perceived to make unreasonable demands on the time required for preparation and marking ; and when it seriously erodes the opportunities for providing differentiated instruction for their students. Excessive paper work (filling in forms, collecting information for others, external accountability demands etc) and the burden of such

non-teaching demands add to perceptions that workload volume is excessive and have negative effects on teaching and learning (Byrne, 1991).

School structures and procedures. The primary purpose for school structures is to foster the development and maintenance of conditions, especially cultures, which support the work of teachers and the learning of students. Not all school structures are alterable, at least not easily or in the short term, however. This is the case for school location, in particular. Evidence suggests that the work of teachers is enhanced in schools located in suburban rather than urban locations. A considerable amount of evidence also suggests that struggling students, in particular, benefit from being part of relatively small organizations (e.g., Lee, 2000; Lee, Bryk, & Smith, 1993).

For primary schools, the optimum size seems to be about 250 to 300 students, whereas 600 to 700 students appears to be optimal for secondary schools. Smaller schools increase the chances of student attendance and school work being monitored. In smaller schools, the likelihood of students having a close, ongoing relationship with at least one other significant adult in the school, an important antidote to dropping out, is also much greater. Smaller school organizations tend to have more constrained and more focused academic programmes and are more communal in nature, with teachers assuming more personal responsibility for the learning of each pupil (Lee, Ready, & Johnson, 2001).

All other structural attributes of schools which influence the quality of teachers' work are potentially quite malleable and can easily outweigh the negative effects of larger school sizes and urban locations. Positive contributions to teachers' work are associated with structures which provide opportunities for teachers to collaborate with one another, (such as common planning times) work in small teams, prepare adequately for their classroom teaching, access ongoing professional development, and participate in school-level decisions (Tschannen-Moran & Barr,

2004). Physical facilities that permit teachers to use the types of teaching they judge to be most effective increase teachers' engagement in their schools and their desire to remain in the profession; this is also the case when the school has well-developed and stable teaching and learning programmes on which to build when new challenges present themselves (Tsui & Cheng, 2002).

Three features associated with school procedures also influence the quality of teaching and learning through their effects on teachers' sense of individual and collective efficacy (Tschannen-Morin & Barr, 2004), as well their job satisfaction and organizational commitment (Dannetta, 2002). These features include the quality of communication in the school, how well the school's plans for improvement match teachers' views of what the school's priorities ought to be; and provision of regular feedback to school working groups about the focus and quality of their progress.

School culture and sense of professional community. A small but compelling body of evidence suggests that pupils benefit when teachers in a school form a "professional learning" sub-community (Louis & Kruse, 1995; Newmann & Associates, 1996). Participation in such communities promotes teaching programme coherence across the school. It also stimulates growth in teachers' teaching skills, enhances teachers' sense of mastery and control over student learning, and builds teachers' sense of engagement with and responsibility for student learning. School communities and cultures enhance teaching and learning when the goals for teachers' work are clear, explicit and shared; when there is little conflict in teachers' minds about what they are expected to do; and when the atmosphere in the school is generally positive and friendly. Mutual trust among staff is also a key feature of schools that are successful in making significant improvement (Bryk & Schneider, 2002).

The Teaching and Research Unit (TRU) in Mainland China is an interesting example as it bears some resemblance to a professional community. Borrowed from the former Soviet Union, this system has been adopted in all the primary and secondary schools in China and become a centralized framework for professional support for teachers (Ding, 2003). Each district/city has a TRU that organizes professional support programs, e.g., demonstration lessons for teachers (Wong, 2006). Each school has its own teaching and research unit (tru) that works with the district TRU. All teachers belong to a 'tru' of their respective subject in the school. In each 'tru', teachers meet regularly to plan teaching schedules, decide the content of each lesson and set assignments, tests and examinations (Wong, 2005; Wong, 2006). Through the 'tru', novice teachers can learn from experienced colleagues who are often assigned as mentors (Wong, 2005). The 'tru' often organizes class observations and post-lesson discussions. The discussions, as Wong (2006) observes, are quite impressive as experienced teachers often raise open questions.

Teaching and learning is also enhanced when student behaviour is under control, when there is a positive and supportive disciplinary climate (Ma & Willms, 2004) and collaboration among teachers is encouraged. Teachers also thrive when the cultures of their schools value and support their safety and the safety of their students; and when there are high expectations for students and high expectations for student achievement evident to students and teachers across the school. School cultures which help teachers to find their work meaningful (e.g., clear and morally inspiring goals) also have a positive influence on teachers' affective dispositions and subsequent performance in class.

Both headteachers and the senior management team have especially strong influences on the development of productive school cultures (e.g., Sammons, Mortimore & Thomas, 1997).

Retention and promotion policies. While student retention by course has long been a common practice in secondary schools in North America, social promotion by grade has been a common policy in elementary schools until quite recently. Over the past decade, however, policy makers in many jurisdictions have enacted a "tough love" strategy for raising student performance which, in North America, may often include retaining students at grade until they meet minimum passing standards often judged by the results of end of grade exams. Over all groups of elementary students, retention policies rarely produce improved learning and often have negative effects on learning as well as attitudes toward school and learning (Darling-Hammond, 1998; Foster, 1993; McCoy & Reynolds, 1999; Reynolds, 1992; Shepard & Smith, 1990; Westbury, 1994).

Some of this evidence seems contradictory, however, because retention policies have dramatically different effects on different groups of pupils. For pupils with a relatively robust sense of academic self-efficacy, the raising of standards with clear sanctions for failure can be positively motivating. A robust sense of academic self-efficacy typically results in more work as a response to the threat of failure (Bandura, 1986). So those who have traditionally done well at school, acquired high levels of academic self efficacy in the process, but are not trying as hard as they could may well benefit from such policies. In contrast, those who have often struggled at school and frequently experienced failure, are likely to have developed a low sense of academic self efficacy. For them, the most likely response to the threat of retention is to give up, and at the secondary level, to drop out of school altogether (Haney, 2001).

Instructional(teaching and learning) programme coherence. While the amount of evidence about teaching programme coherence is modest, Newman, Smith, Allenswork and Bryk report impressive effects on pupils' achievement in reading and mathematics in elementary

schools serving communities experiencing high rates of poverty, social stress, and racial diversity. For the purposes of this exceptionally well-designed study, 'instructional' programme coherence was defined as:

...a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate and that are pursued over a sustained period (2001, p. 297).

In contrast to excessive numbers of unrelated, unsustainable improvement initiatives in a school, teaching, learning and assessment coherence contributes to learning by connecting students' experiences and building on them over time. As pupils see themselves becoming more competent, their motivation to learn is likely to increase also. Similar effects can be expected for teachers as they work collaboratively toward implementing a common instructional framework.

Partnerships with parents and the wider community. Creating a widely shared sense of community among all of the school's stakeholders is important for several reasons. First, the affective bonds between students and teachers associated with a sense of community are crucial in engaging and motivating students to learn in schools of any type (Lee et al., 1993). A widely shared sense of community also is important as an antidote to the unstable, sometimes threatening, and often insecure world inhabited by a significant proportion of economically deprived families and children. Creating meaningful partnerships with parents in economically poor communities is often quite difficult (Griffith, 2001; Hatton, 2001). As Crosby points out, it is difficult to "...mandate parent involvement with people whose time is totally consumed in a struggle to survive" (1999, p. 303) A collective sense of belonging for those living in these challenging circumstances provides psychological connections, identity with, and commitment to others (Beck & Foster, 1999, p. 350). Individuals who feel secure and purposeful as a result of these connections, identities and commitments are, in turn, less susceptible to the mindset of fatalism and disempowerment which often arises from repeated episodes of loss (Mitchell, cited

in Beck & Foster, 1999). Success at school depends on having goals for the academic, personal, and vocational strands of one's life, as well as a sense of self-efficacy about the achievement of those goals. Feelings of fatalism and disempowerment discourage both the setting of such goals and the development of self-efficacy about their achievement. The contribution of parent partnerships to student learning, however, varies enormously across the alternative forms that those partnerships may take. These forms range from parent involvement in the teaching of their own children, at one extreme, to direct participation in school decision-making, at the other (e.g., Epstein, 1996; 2002). No matter what the student population, involving parents primarily in the teaching of their own children is most likely to contribute to children's learning (Leithwood & Menzies, 1998).

The nature of the school's relation with the wider community also influences teaching and learning through its effects on teachers' job satisfaction as well as teachers' decisions about whether to remain in the school and profession. When the reputation of the school in the local community is positive and when there is considerable support by parents and the wider community for the efforts and directions of the school, teachers' work with students is enhanced (Ingersoll, 2001).

Conditions in the Home.

When the educational culture of the student's home is weak, students benefit from the school's direct efforts to influence that culture in ways that acknowledge the circumstances faced by students' families. This is more than just forming partnerships with parents. Beginning with the evidence reported by Coleman and his colleagues (1966), study after study has suggested that the socioeconomic status (SES) of families typically explains more than half of the variation in student achievement across schools (e.g., Rutter, Maughan, Mortimore, & Ouston, 1979). SES

also is highly related to other student-related effects such as violence, dropping out of school, entry to post secondary education and levels of both adult employment and income (Dill & Haberman, 1995; Englert, 1993).

Schools serving low SES families often find themselves in an "iron circle" that begins with the family's impoverished economic conditions. These conditions may be a consequence of unemployment, cultural, racial and/or linguistic factors, recent immigration, high mobility, family breakups etc (e.g., Gezi, 1990; Dillard, 1995). Impoverished economic conditions decrease the chances of families struggling to survive in communities of high-density housing with their members suffering from malnutrition, other health problems (Englert, 1993) and substance abuse (Portin, 2000). Low SES families are also more likely to have low expectations for their children's performance at school.

Family SES is at best a crude "proxy" for powerful conditions in the home that have a significant influence on pupils' success at school (Lee, et al., 1993). Taken together, these conditions and interactions constitute what we refer to as "family educational culture". These conditions and interactions vary widely across families, sometimes without much relation to family income or other social variables, although the relationship between SES and family educational cultures is both positive and significant.

At the core of family educational cultures are the assumptions, norms and beliefs held by the family about intellectual work in general and school work in particular. The behaviours and conditions resulting from these assumptions are demonstrably related to school success by a substantial body of evidence (e.g., Bloom, 1984; Finn, 1989; Rumberger, 1987; Scott-Jones, 1984). On the basis of such evidence, Walberg (1984) concluded that the basic dimensions of family educational cultures are family work habits, academic guidance and support provided to

children, and stimulation to think about issues in the larger environment. Other dimensions resulting from Walberg's analysis include academic and occupational aspirations and expectations of parents or guardians for their children, the provision of adequate health and nutritional conditions, and physical settings in the home conducive to academic work. A considerable proportion of the research carried out in schools has treated student background variables such as SES as unalterable. Many teachers and headteachers have, as well. And it is certainly the case that some features of pupils' family backgrounds are extraordinarily difficult for schools to change – number of parents in the home, family income, parental occupations and residence mobility, for example. However, these features of pupils' backgrounds do not directly shape pupils' abilities to be successful at school; they *influence* but do not *determine* it. Some low SES families have children who do very well at school indeed, so there must be more to the explanation.

Whilst work in schools serving large proportions of families with unhealthy or weak family educational cultures is, then, especially challenging, this is not the whole story. It does not identify the mechanisms that join particular types of family educational cultures with the ability of students to benefit from their school experiences. The primary mechanism, we argue, is “social capital”. Variation in the strength of family educational cultures matter for pupils' success at school because it exerts a powerful influence on their acquisition of, and access to, social capital (Coleman, 1988; Driscoll & Kerchner, 1999). Social capital includes the “assets” accrued by a person by virtue of their relationship with other persons and networks of persons. These assets include: reciprocal obligations and expectations of one another held by members of a social group (e.g., the obligation a child feels to work hard at school in return for the obligation a parent feels to provide a happy, secure and stimulating home environment); the potential for

information that is inherent in social relations (e.g., a relative's knowledge of who best to contact in order to be considered for a job opportunity); and the existence of effective norms and sanctions that encourage some forms of behaviour and discourage others (e.g., norms held by the family about what constitutes respectful behaviour toward teachers, and appropriate disincentives for disrespectful behaviour).

The value for schooling of the social capital a child possesses depends on what the school chooses *not to count* as educationally useful social capital, as much as what it does count.

Prejudice, bias, racism, and most other sources of inequity are instruments for denying the value of some types of social capital, especially those types that are different from the types produced within the dominant culture, religion, or race, for example. These types of social capital typically discounted by the school often hold considerable potential for the child's education. But schools must choose to view them as resources rather than deficits.

What are the implications of this information about the importance to pupil learning of family educational cultures and the social capital they help generate? While empirical evidence to answer this question is quite thin, it does suggest that successful leaders:

- Help their colleagues recast, as educationally useful, some types of social capital brought to the school by its pupils typically considered a deficit (Scheurich 1998);
- Provide a fairly assertive and positive form of leadership (Mortimore, 1993, p. 300);
- Interact with pupils directly and as frequently as possible (Reitzug & Patterson, 1998);
- Shape their practices around an ethic of care (Marshall et al., 1996; Day 2004)
- Sponsor programmes aimed at helping parents, who have an interest and felt need, acquire additional parenting skills development (Cheng Gorman & Balter, 1997; Dembo, Sweitzer, & Lauritzen, 1985); and

- Assist parents to gain access to the full range of social services which they need by helping integrate the full range of social services around the school (Volpe, Batra, Howard, Paul, & Murphy, 2001).

Smrekar & Mawhinney (1999, p. 456) have proposed additional initiatives for leaders that would help strengthen family cultures and build on the existing social capital of students:

- Rethink institutionalized practices that disempower the very groups of people that new and expanded programmes are designed to reach;
- Develop with all stakeholders a common vision and set of goals to work toward;
- Distribute leadership flexibly across roles (formal and informal leadership roles), and stakeholder groups, depending on the issues being faced, and the locus of expertise required for dealing with the issues;
- Ensure adequate communication among all stakeholder groups, including proactive efforts at resolving the conflicts among groups which inevitably arise;
- Award considerable power to pupils, parents and other community stakeholders in the process of making decisions about their needs and the types of services useful in meeting those needs; and
- Incorporate parents' home language into the provision of services.

The fact that East Asian students perform better in international comparisons and competitions has aroused much interest among education researchers all over the world. There has been a debate concerning whether schooling in East Asia is more effective.

Some researchers (e.g., Cheng and Wong, 1996) argue that schooling in China tends to be more effective because there is a large agreement among what the community and parents aspire for, what the government policies provide for and what the schools are striving for. In other words, there is a culture in China ‘which favours education in its formal sense’ and this culture for education ‘infiltrates into all aspects of the society in China’ (p. 37). The Chinese have a long tradition of valuing learning and knowledge (Wong, 2006). Throughout more than 2,000 years in China, members of the officialdom were selected from among scholars who successfully passed civil examinations. Today, the respect for examination and competition, which is inherited from ancient practice, is commonly seen as the characteristic of the East Asian education systems (Cheng and Wong, 1996).

This partly explains why Asian parents care so much about their children’s schooling and examinations, given that the educational credentials have long been regarded as the most important means for social mobility. In Cheng and Wong’s (1996) field trip in Zhejiang province, China, they found that illiterate parents regarded schooling as the sole means for raising their children’s future achievement. .

Thus, families are usually an important source of support for schools and teachers. As Stevenson and Stigler (1992: 83; quoted in Dimmock, 2003: 989) observed, schools ‘are primarily held responsible for developing academic skills, and the social skills required for integration into group life; the home is responsible for supporting the school’s role and for providing a healthy emotional environment for the child. Parents and teachers work together, but do not duplicate each other’s efforts’.

Asian children, therefore, are raised in a highly competitive and exam-intensive environment. They are more likely to feel that they are letting their parents down if they do not perform well at schools (Watkins, 2000). Asian children are usually motivated to work hard and to succeed as a mark of respect for their parents (Dimmock, 2003). Their success, in turn, is defined by their performance in examinations. Most East Asian schools rank students according to academic scores (Cheng and Wong, 1996). Students on the top of the list are usually regarded as successful.

In addition to parents and students, schools also attach utmost importance to public examinations. Examination results provide direct evidence of the effectiveness of a school 'in terms of the number and level of preparation of students' (Mohandas, Meng and Keeves, 2003: 113). When the success rate of a school becomes public knowledge, judgments can be made about 'the effectiveness of the school and the organisation's contribution to student success' (p. 113). Thus, the main preoccupation of schooling in East Asia becomes passing the examination rather than learning *per se* (Dimmock, 2003: 992), although reformers have begun examining rigid and all-consuming examination and evaluation practices in recent years (Walker, 2003).

Conclusion

We began this section with the claim that teacher working conditions are student learning conditions. This claim springs from evidence that the working conditions in which teachers find themselves have a significant influence on their emotions; and that these emotions, in turn, shape their classroom practices and influence on what pupils learn. Evidence warranting attention to

the working conditions summarized in this section can be found in the wider educational research literature as well as the research on teacher's internal states. Our description of these working conditions alluded to some of this evidence and expanded on the nature of each of these working conditions in light of this additional evidence.

While research on teacher emotions and working conditions rarely begins with an interest in school leadership, it almost always ends by discovering that it matters. It is especially the leadership of the head or principal that garners most of the attention in these results.

Furthermore, much of what has been discovered about such leadership in this body of research reinforces the validity of our four core sets of leadership practices. In brief, what this literature highlights as significant in the building of positive teacher commitment and resilience – qualities essential to classroom effectiveness (Day et al,2006) - are as follows:

- *Direction setting.* Two direction-setting practices of principals significantly influence teachers' stress, individual sense of efficacy and organizational commitment. One of these practices, helping the staff develop an inspiring and shared sense of purpose, enhances teachers' work, whereas holding (and expressing) unreasonable expectations has quite negative effects.
- *Developing people.* Included among these practices are being collegial, considerate and supportive, listening to teachers' ideas, and generally looking out for teachers' personal and professional welfare. Acknowledging and rewarding good work and providing feedback to teachers about their work are also positive working conditions for teachers. Headteachers assist the work of teachers, in addition, when they provide them with discretionary space, distribute leadership across the school and "practise what they preach" (model appropriate values and practices).

- *Redesigning the organization.* Only the “flexible enforcement of rules by the headteachers” practice were identified in this category as having consequences for teacher feelings.
- *Managing the teaching and learning programme.* This category of leadership practices included buffering teachers from distractions to their classroom work, providing teaching and learning support, either through some formal supervision procedure or, more often, in many informal more frequent ways, including joint efforts with teachers to find creative ways to improve the conditions and opportunities for teaching and learning. Providing resources for teachers and minimizing student misbehaviour or disorder in the school are highly valued conditions of work which headteachers are also in a position to provide.
- *Other practices.* Four influential practices by headteachers emerged from the review which could not readily be classified among the four sets of core leadership practices. Positive effects on teachers’ individual and collective efficacy, organizational commitment and stress were reported for headteachers who were able to influence the decisions of senior leadership colleagues to the benefit of the school, communicate effectively and act in a friendly manner. Excessive stress and loss of trust on the part of teachers resulted from inconsistent behaviour on the part of headteachers and frequent failure to follow through on decisions.

6. Conclusion

We have examined a considerable amount of evidence about many variables that are necessarily part of any comprehensive account of how school leaders influence student learning. As this account indicates, there is considerable variation in the amount of attention these variables have received by the research community. Both the number of variables and differences in the robustness of the data about each variable present substantial challenges for researchers, such as ourselves, interested in the effects of school leadership on student learning. This final section aims to:

- Provide a clear picture of all the possible variables that we could potentially try to measure, as these are touched on in our literature review;
- Assess the strength of the evidence supporting our claims about the significant contribution of each variable included in our review;
- Describe what that evidence seems to suggest about the relative contribution of each variable, directly or indirectly, to pupil learning;
- Determine which is the most appropriate source of information about each variable – headteachers or teachers; and
- Based on these several judgements, recommend a sub-set of the most promising variables for measurement by the surveys.

Table 3 summarizes our conclusions about most of these issues. The judgements seen reflected in that table – in particular, the judgements about relative *strength of evidence* and relative *size of the effects* of variables on student learning (or other variables used as criterion measures in the literature we reviewed) - are not the product of any quantitative calculation at this point. Rather, these are summative, qualitative judgements or impressions arrived at after

carefully reading the substantial quantity of literature cited in our review. Since the literature is quite enormous, it would be foolish on our part to wax overconfident on these matters. But our work is in its initial stage and we will continue to work toward greater clarity and certainty about the existing evidence base over the life of our project.

Table 3
Variables Included in the Literature Review

Variables	Strength of Evidence ⁶	Size of Effects ⁷	Headteachers' Survey	Teachers' Survey	Nominations for First Surveys
Leader: Direction setting <i>(vision, goals, high expectations)</i>	R	M	*	*	*
Leader: Developing people <i>(individual support, intellectual stimulation, modeling)</i>	R	M	*	*	*
Leader: Redesigning the organization <i>(culture, structure, partnership family, outside connections)</i>	R	M	*	*	*
Leader Practices: Managing the teaching and learning programme <i>(staffing, resources, monitoring, buffering)</i>	M	M	*	*	*
Distribution Of Leadership Practices					
Sources	R	U	*	*	*
Functions	R	U	*	*	*
Patterns	W	U	*	*	*
Roots (Antecedents) Of Leadership Practices: Cognitive					
Intellectual functioning	M	M			
Problem solving	M	M	*	*	*
Knowledge	W	L	*	*	*
Roots (Antecedents) Of Leadership Practices: Affective					
Personality	M	M	*		*
Motivation	M	M	*		
Social appraisal skills (empathy)	R	M		*	*
Values	W	S	*	*	*
Emotional Understanding	R	M			*
Intervening Variables: Immediate Colleagues					

⁶ R = Robust, M = Moderate, W = Weak

⁷ L = Large, M = Moderate, S = Small (but significant), U = Unknown

Variables	Strength of Evidence ⁶	Size of Effects ⁷	Headteachers' Survey	Teachers' Survey	Nominations for First Surveys
Recognition-based attributions	M	U		*	
Inference-based attributions	M	U		*	
Human capital	W	U		*	
Social capital	W	U		*	
Cultural capital	W	U		*	
Economic capital	W	U		*	
Influence tactics	M	M	*	*	*
<i>Intervening Variables: Teacher</i>					
Stress/burnout	R	L		*	
Individual efficacy	R	L	*	*	*
Collective efficacy	M	L		*	*
Commitment to the school	R	M		*	
Trust in leader	M	M		*	*
Mutual trust	M	M		*	*
Pedagogical content knowledge	W	L	*	*	
<i>Intervening Variables: Classroom</i>					
Workload complexity	M	S	*	*	*
Student grouping	R	M		*	*
Curriculum & Teaching	R	L		*	*
<i>Intervening Variables: School</i>					
Workload volume	W	S	*	*	*
Structures and procedures	M	S	*	*	*
Culture/PLC (<i>including academic press and disciplinary climate</i>)	R	L			*
Retention & Promotion policies	R	M	*		
Teaching and Learning programme coherence	W	M	*	*	
Parent partnerships	R	M	*	*	*
<i>Intervening Variables: Home</i>	R	L			*

Table 3 has asterisks indicating which variables we are measuring with the first survey (far right column) and which of two respondent groups (headteachers and teachers) we believe are most appropriate sources of information. A key task in developing the first survey was to select the most promising variables to measure. These were variables about which there is a large amount of evidence indicating strong effects on student learning (e.g., teachers' classroom teaching practices). We also selected a few variables for which there were a relatively small amount of evidence, but evidence of an impressive nature (e.g., collective teacher efficacy). In order to reflect change over time, respondents to our initial surveys were asked to indicate the

current status of a variable in their school and to indicate the extent to which there was change in a variable over about a three year period.

Results of the first set of surveys will provide a very good test of just how much potential each of the measured variables has to explain student learning and the link between such learning and school leadership. This information will be a primary source of guidance in our design of the second, case study, stage of our research; and this, in turn, will inform the design of the second wave survey.

References

- Allison, D. J. (1996). Chapter 16: Problem finding, classification and interpretation: In search of a theory of administrative problem processing. In K. Leithwood, C. Chapman, D. Corson, P. Hallinger & A. Hart (Eds.), *International handbook of educational leadership and administration* (Vol. 1, pp. 477-549). Dordrecht/Boston/London: Kluwer Academic Publishers.
- Andrews, R., & Soder, R. (1987). Principal leadership and student achievement. *Educational Leadership*, 44, 9-11.
- Antonakis, J., & House, R. J. (2002). An analysis of the full-range leadership theory: The way forward. In B. Avolio & F. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 3-33). Amsterdam: JAI Press.
- Avolio, B., J. (1994). The alliance of total quality and the full range of leadership. In B. M. Bass & B. J. Avolio (Eds.), *Improving organizational effectiveness through transformational leadership* (pp. 121-145). Thousand Oaks, CA: Sage.
- Avolio, B., J., & Gardner, W. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338.
- Bajunid, I. (1995) 'The educational administrator as a cultural leaders', *Journal of the Malasian Educational Manager*, 1(1): 16-29.
- Bajunid, I. (1996) 'Preliminary explorations of indigenous perspectives of educational management: the evolving Malaysian experience', *Journal of Education Administration*, 34(5): 50-73.
- Bales, R. F., & Slater, P. (1955). Role differentiation in small decision making groups. In T. F. Parsons & R. F. Bales (Eds.), *Family, socialization and interaction processes* (pp. 259-306). Glencoe, IL: Free Press.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1982). Self-efficacy and mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1993). Perceived self efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Bandura, A. (1997a). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bandura, A. (1997b). Self efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191-215.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Barry, D. (1991). Managing the bossless team: Lessons in distributed leadership. *Organizational Dynamics*, 20(1), 31-47.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.

- Beck, L., & Foster, W. (1999). Administration and community: Considering challenges, exploring possibilities. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (pp. 337-358). San Francisco: Jossey-Bass.
- Begley, P., & Johansson, O. (2003). *The ethical dimensions of school leadership*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Begley, P. T. (1988). *The influence of personal beliefs and values on principals' adoption and use of computers in schools*. Unpublished doctoral thesis. Ontario Institute for Studies in Education, Toronto, ON.
- Bell, M., Jopling, M., Cordingly, P., Firth, A., King, E., & Mitchell, H. (2006). *What is the impact on pupils of networks that have a least three schools?* Nottingham, UK: NCSL http://www.ncsl.org.uk/media/02C/23/NLG_rapid_review_full_report.pdf.
- Bennett, N., Harvey, J. A., Wise, C., & Woods, P. A. (2003). *Distributed leadership: A desk study* www.ncsl.org.uk/literaturereviews.
- Bennis, W. G. (2004). The seven ages of the leader. *Harvard Business Review*, 82(1), 46-53, 112.
- Blase, J., & Kirby, P. (1992). *Bringing out the best in teachers*. Newbury Park, CA: Corwin Press.
- Blase, J. R., & Blase, J. (1998). *Handbook of instructional leadership: How effective principals promote teaching and learning*. Thousand Oaks, CA: Corwin Press.
- Blase, J. R., & Blase, J. (1999). Implementation of shared governance for instructional improvement: Principals' perspectives. *Journal of Educational Administration*, 37(5), 476-500.
- Bloom, B. S. (1984). The search for methods of group instruction as effective as one-to-one tutoring. *Educational Leadership*, May, 4-17.
- Borko, H., & Putnam, R. (1996). Learning to teach. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 673-708). New York: Macmillan.
- Bransford, J. D., Brown, A. L., Cocking, R. R., Donovan, M. S., & Pellegrino, J. W. (2000). *How people learn: Brain, mind, experience and school* (Expanded ed.). Washington, DC: National Academy Press.
- Brophy, J. (n.d.). *Teaching: A special report reprinted by the Laboratory for Student Success*. Philadelphia, PA: The Mid-Atlantic Regional Educational Laboratory, Temple University Center for Research in Human Development and Education.
- Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York: Russell Sage Foundation.
- Burke, C. S., Fiore, S. M., & Salas, E. (2003). The role of shared cognition in enabling shared leadership and team adaptability. In C. J. Pearce & J. A. Conger (Eds.), *Shared leadership: Reframing the how and whys of leadership* (pp. 103-122). Thousand Oaks, CA: Sage.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row Publishers.
- Byrne, B. M. (1991). Burnout: Investigating the impact of background variables for elementary, intermediate, secondary and university educators. *Teaching and Teacher Education*, 7(2), 197-209.
- Camburn, E., Rowan, B., & Taylor, J. E. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models. *Educational Evaluation and Policy Analysis*, 25(4), 347-373.

- Campbell-Evans, G. (1988). *The nature and influence of values in principal decision making*. Unpublished doctoral thesis. University of Toronto, Toronto, ON.
- Campbell, C., Gold, A., & Lunt, I. (2003). Articulating leadership values in action: Conversations with school leaders. *International Journal of Educational Reform*, 6(3), 203-221.
- Chemers, M. M., Watson, C. B., & May, S. (2000). Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism and efficacy. *Personality and Social Psychology Bulletin*, 26, 267-277.
- Cheng, K. M. and Wong, K. C. (1996) 'School effectiveness in East Asia: concepts, origins and implications', *Journal of Educational Administration*, 34(5): 32-49.
- Cheng Gorman, J., & Balter, L. (1997). Culturally sensitive parent education: A critical review of quantitative research. *Review of Educational Research*, 67, 330-369.
- Cohen, D. (1990). A revolution in one classroom: the case of Mrs. Oublier, *Educational Evaluation and Policy Analysis*, 12, 311-329.
- Coleman, J. S. (1966). *Equality of educational opportunity*. Washington, DC: Government Printing Office.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120.
- Colwell, H., & Hammersley-Fletcher, L. (2004). *The emotionally literate primary school*. Paper presented at the British Educational Research Association Annual Conference, Manchester.
- Connolly, M., & James, C. (2006). Collaboration for school improvement: A resource dependency and institutional framework of analysis. *Educational Management Administration and Leadership*, 34(1), 69-87.
- Copland, M. A. (2003). The Bay Area School Reform Collaborative: Building the capacity to lead. In J. Murphy & A. Datnow (Eds.), *Leadership lessons from comprehensive school reforms* (pp. 159-183). Thousand Oaks, CA: Sage.
- Copland, M. A. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis*, 24(4), 375-395.
- Council of Chief State School Officers. (1996). *Interstate school leaders licensure consortium: Standards for school leaders*. Washington, DC: Author
- Creemers, B. P. M., & Reezigt, G. J. (1996). School level conditions affecting the effectiveness of instruction. *School Effectiveness and School Improvement*(7), 197-228.
- Crosby, E. A. (1999). Urban schools: Forced to fail. *Phi Delta Kappan*, 81(4), 298-303.
- Cuban, L. (1990). Reform again and again and again. *Educational Researcher*, 19 (1), 3-13.
- Dannetta, V. (2002). What factors influence a teacher's commitment to student learning? *Leadership and Policy in Schools*, 1(2), 144-171.
- Darling-Hammond, L. (1998). Alternatives to grade retention. *School Administrator*, 55(7), 18-21.
- Day, C. (1999). *Developing Teachers: the challenge of lifelong learning* (London, Palmer Press).
- Day, C. (2004). The passion of successful leadership, *School Leadership & Management*, 24(4), p425-437,13632434
- Day, C. (2005). The UK Policy for School Leadership: Uneasy transitions, in Bascia, N., Cumming, A., Datnow, A., Leithwood, K., Livingstone, D. (eds) *International Handbook*

- of Educational Policy, Dordrecht: Springer, 1402031890
- Day, C. (in press). Sustaining success in challenging contexts: Leadership in English schools. In C. Day & K. Leithwood (Eds.), *Successful principal leadership: An international perspective*. Dordrecht, The Netherlands: Springer.
- Day, C., Harris, A., Hadfield, M., Tolley, H., & Beresford, J. (Eds.). (2000). *Leading schools in times of change*. Buckingham, UK: Open University Press.
- Day, C., Jacobson, S., & Leithwood, K. (Eds.). (2005). *Special issue of the Journal of Educational Administration* (Vol. 43 #1).
- Day, C., & Leithwood, K. (in press). Building and sustaining successful principalship: Key themes. In C. Day & K. Leithwood (Eds.), *Successful principal leadership: An international perspective*. Dordrecht, The Netherlands: Springer.
- Day, C., & Leithwood, K. (Eds.). (in press). *Successful principal leadership: An international perspective*. Dordrecht, the Netherlands: Springer.
- Day, C., Stobart, G., Sammons, P., & Kington, A. (2006). Variations in the work and lives of teachers: Relative and relational effectiveness. *Teachers and Teaching: Theory and Practice*, 12(2), 169-192.
- Day, C., & Schmidt, M. (in press). *Resilient Leadership: Sustaining Moral Purpose.. Sustaining and Developing Leaders Book*.
- Day, D. V., & Lord, R. G. (1992). Expertise and problem categorization: The role of expert processing in organizational sense-making. *Journal of Management Studies*, 29, 35-47.
- De Maeyer, S., Rymenans, R., Van Petegem, P., van der Bergh, H., & Rijlaarsdam, G. (2006). Educational leadership and pupil achievement: The choice of a valid conceptual model to test effects in school effectiveness research. Unpublished paper: University of Antwerp.
- Dembo, M. H., Sweitzer, M., & Lauritzen, P. (1985). An evaluation of group parent education: Behavioral, PET, and Alderian programs. *Review of Educational Research*, 55, 155-200.
- DeMoulin, D. F. (1992). *Demographic characteristics associated with perceived self-efficacy levels of elementary, middle and secondary principals*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, TN.
- Dibbon, D. (2004). *It's about time: A report on the impact of workload on teachers and students*. Memorial University of Newfoundland, St. John's, NL.
- Dill, V., & Haberman, M. (1995). Building a gentler school. *Educational Leadership*, 52(5), 69-71.
- Dillard, C. B. (1995). Leading with her life: An African-American feminist (re)interpretation of leadership for an urban high school principal. *Educational Administration Quarterly*, 31, 539-563.
- Dimmock, C. (2003) 'Effective schooling in the Asia-Pacific region', in J.P. Keeves and R. Watanabe (eds.), *International Handbook of Educational Research in the Asia-Pacific Region*. Dordrecht: Kluwer Academic Publishes.
- Dimmock, C., & Hattie, J. (1994). Principals' and teachers' reactions to school restructuring. *Australian Journal of Education*, 38(1), 36-55.
- Dimmock, C., & Hattie, J. (1996). School principals' self-efficacy and its measurement in a context of restructuring. *School Effectiveness and School Improvement*, 7(1), 62-75.
- Dimmock, C. and Walker, A. (1998) 'Transforming Hong Kong's schools: trends and emerging issues', *Journal of Educational Administration*, 36(5): 476-91.
- Ding, K. (2003) 'Peer support and evaluation: the new force in renewal of teaching', *Curriculum and Teaching*, 6(2): 1-10.

- Driscoll, M. E., & Kerchner, C. T. (1999). The implications of social capital for schools, communities and cities. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 385-404). San Francisco, CA: Jossey-Bass.
- DuFour, R., Eaker, R., & DuFour, R. (2005). *On common ground*. Bloomington, IN: National Educational Service.
- Duke, D. L. (1987). *School leadership and instructional improvement*. New York: Random House.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. J. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. J. Avolio & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 35-66). Oxford: Elsevier Science Ltd.
- Earl, L., Katz, S., Elgie, S., Ben Jaafar, S., & Foster, L. (2006). Volume 1 – The Report. *How Networked Learning Communities Work*. Aporia Consulting Ltd. on behalf of NCSL.
- Elmore, R. (1995). Getting to scale with good educational practice. *Harvard Educational Review*, 66(1), 1-26.
- Englert, R. M. (1993). Understanding the urban context and conditions of practice in school administration. In P. B. Forsyth (Ed.), *City schools: Leading the way*. Newbury Park, CA: Corwin.
- Epstein, J. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Booth & J. Dunn (Eds.), *Family-school links* (pp. 209-246). Mahwah, NJ: Lawrence Erlbaum.
- Festinger, L., Schacter, S., & Back, K. W. (1950). *Social pressure in informal groups: A study of human factors in housing*. New York: Harper.
- Fink, D., & Brayman, C. (2006). School leadership succession and the challenge of change. *Educational Administration Quarterly*, 42(1), 62-89.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117-143.
- Firestone, W., & Riehl, C. (2005). *A new agenda for research in educational leadership*. New York: Teachers College Press.
- Fletcher, J. K., & Kaufer, K. (2003). Shared leadership: Paradox and possibility. In C. J. Pearce & C. Conger (Eds.), *Shared leadership: Reframing the how and whys of leadership* (pp. 21-47). Thousand Oaks, CA: Sage.
- Foster, J. E. (1993). Review of research: Retaining children in grade. *Childhood Education*, 70(1), 38-43.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2003). *The moral imperative of school leadership*. Thousand Oaks, CA: Corwin Press.
- Gareis, C. R., & Tschannen-Moran, M. (2004). *Principals' sense of efficacy and trust*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Gastil, J. (1997). A definition and illustration of democratic leadership. In K. Grint (Ed.), *Leadership: Classical, contemporary and critical approaches* (pp. 155-178). Oxford, UK: Oxford University Press.

- Gezi, K. (1990). The role of leadership in inner-city schools. *Educational Research Quarterly*, 12(4), 4-11.
- Glaser, R., & Chi, M. (1988). Overview. In M. Chi, R. Glaser & M. Farr (Eds.), *The nature of expertise* (pp. xv-xxvii). Hillsdale, NJ: Erlbaum.
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2001). *Supervision and instructional leadership*. Needham Heights, MA: Allyn & Bacon.
- Gold, A., Evans, J., Early, P., Halpin, D., & Collabone, P. (2002). *Principled principals? Evidence from ten case studies of 'outstanding school teachers'*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Goldring, E., & Rallis, S. (1993). *Principals of dynamic schools*. Newbury Park, CA: Corwin Press.
- Goldstein, J. (2004). Making sense of distributed leadership: the case of peer assistance and review. *Educational Evaluation and Policy Analysis*, 26(2), 173-197.
- Goleman, D. (1994). *Emotional Intelligence*. New York: Bantam Books.
- Goleman, D. (1996). *Emotional Intelligence: Why It Can Matter More than IQ*. London; Bloomsbury Publishing.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership*. Boston, MA: Harvard Business School Press.
- Gopinathan, S. and Kam, H.W. (2000) 'Educational change and development in Singapore', in T. Townsend and Y. C. Cheng (eds.), *Educational Change and Development in the Asia Pacific: Challenges for the Future*. Lisse, The Netherlands: Swets & Zeitlinger.
- Graetz, F. (2000). Strategic change leadership. *Management Decisions*, 38(8), 550-562.
- Gray, J. (2000). *Causing concern but improving: A review of schools' experience*. London: Department for Education and Skills.
- Griffith, J. (2001). Principal leadership of parent involvement. *Journal of Educational Administration*, 39(2), 162-186.
- Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational Management and Administration*, 28(3), 317-338.
- Gronn, P. (2002). Distributed leadership. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 653-696). Dordrecht: Kluwer Academic Publishers.
- Gronn, P. (2003). *The new work of educational leaders: Changing leadership practices in an era of school reform*. London: Paul Chapman.
- Gurr, D., & Drysdale, L. (in press). Models of successful principal leadership: Victorian case studies. In C. Day & K. Leithwood (Eds.), *Successful principal leadership: An international perspective*. Dordrecht, The Netherlands: Springer.
- Gurr, D., Drysdale, L & Mulford, B. (2005). Successful principal leadership: Australian case studies, *Journal of Educational Administration*, Vol 43 (6), pp. 539-551.
- Hadfield, M. (2003). Building capacity versus growing schools. In A. Harris, C. Day, D. Hopkins, M. Hadfield, A. Hargreaves & C. Chapman (Eds.), *Effective leadership for school improvement* (pp. 107-120). New York: RoutledgeFalmer.
- Hallinger, P. (2000) *A review of two decades of research on the principalship using the Principal Instructional Management Rating Scale*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

- Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329-351.
- Hallinger, P. (2003) 'School leadership development', in J.P. Keeves and R. Watanabe (eds.), *International Handbook of Educational Research in the Asia-Pacific Region*. Dordrecht: Kluwer Academic Publishers.
- Hallinger, P., & Heck, R. (1996a). The principal's role in school effectiveness: An assessment of methodological progress, 1980-1995. In K. Leithwood & P. Hallinger (Eds.), *International handbook of educational leadership and administration* (pp. 723-783). Dordrecht: Kluwer Academic Publishers.
- Hallinger, P., & Heck, R. (1996b). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, 32(1), 5-44.
- Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*(9), 157-191.
- Hallinger, P., & Kantamara, P. (2000). Educational change: Opening a window onto leadership as a cultural process. *School Leadership and Management*, 20(2), 189-205.
- Hallinger, P. and Kantamara, P. (2000a) 'Educational change in Thailand: opening a window onto leadership as a cultural process', *School Leadership and Management*, 20(1): 189-206.
- Hallinger, P. and Kantamara, P. (2000b) 'Leading at the confluence of tradition and globalisation: the challenge of change in Thai schools', *Asia Pacific Journal of Education*, 20(2): 45-57.
- Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *Elementary School Journal*(86), 217-247.
- Hambrick, D., & Brandon, G. (1988). Executive values. In D. Hambrick (Ed.), *The executive effect: Concepts and methods for studying top managers*. Greenwich, CT: JAI Press.
- Hammersley-Fletcher, L., & Brundrett, M. (2005). Leaders on leadership: The impressions of primary school headteachers and subject leaders. *School Leadership and Management*, 25(1), 59-75.
- Haney, W. (2001). Response to Skrla et al: The illusion of educational equity in Texas: A commentary on 'accountability for equity'. *International Journal of Leadership in Education*, 4(3), 267-275.
- Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.
- Harris, A. (2004a). Distributed leadership and school improvement: Leading or misleading? *Educational Management and Administration*, 32(1), 11-24.
- Harris, A. (2004b). Teacher leadership and distributed leadership: An exploration of the literature. *Leading and Managing*, 10(2), 1-10.
- Harris, A. (2005). *Crossing boundaries and breaking barriers: Distributing leadership in schools*: Specialist Schools Trust. <http://www.sst-inet.net>.
- Harris, A., & Chapman, C. (2002). *Effective leadership in schools facing challenging circumstances*. Nottingham, UK: National College for School Leadership (NCSL).
- Harris, A., & Muijs, D. (2004). *Improving schools through teacher leadership*. London: Oxford University Press.
- Hatton, E. (2001). School development planning in a small primary school: Addressing the challenge in rural NSW. *Journal of Educational Administration*, 39(2), 118-133.

- Heck, R. H., Larsen, T. J., & Marcoulides, G. A. (1990). Instructional leadership and school achievement: Validation of a causal model. *Educational Administration Quarterly*, 26, 94-125.
- Heinicke, C. M., & Bales, R. F. (1953). Developmental trends in the structure of small groups. *Sociometry*, 16, 7-38.
- Heller, M. F., & Firestone, W. (1995). Who's in charge here? Sources of leadership for change in eight schools. *Elementary School Journal*, 96(1), 65-85.
- Hersey, P., & Blanchard, K. H. (1984). *The management of organizational behavior* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hirsch, E. (2004). *Teacher working conditions are student learning conditions: A report to Governor Mike Easley on the 2004 North Carolina teacher working conditions survey*. Chapel Hill, NC: Southeast Center for Teaching Quality.
- Hopkins, D. (2001). *School improvement for real*. London: Falmer Press.
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: MIT.
- Imants, J. G. M., & De Brabander, C. J. (1996). Teachers' and principals' sense of efficacy in elementary schools. *Teaching and Teacher Education*, 12(2), 179-195.
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Ingvarson, L., Anderson, M., & Gronn, P. (2006). *Standards for school leadership: A critical review of literature*. Melbourne: ACER/Teaching Australia.
- Jackson, D. (2002). *The creation of knowledge networks: Collaborative enquiry for school and system improvement*. Paper presented at the CERI/OECD/DfES/QCA ESRC Forum 'Knowledge Management in Education and Learning', Oxford, UK.
- Jacobson, S. L., Johnson, L., Ylimaki, R. and Giles, C. (2005). Successful leadership in challenging US schools: enabling principles, enabling schools. *Journal of Educational Administration*, 43 (6), pp. 607-618.
- Jagers, R. F., & Carroll, G. (2002). Issues in educating African-American children and youth. In S. Stringfield & D. Land (Eds.), *Educating at-risk students* (Vol. 101 Yearbook of the National Society for the Study of Education). Chicago: University of Chicago Press.
- Jantzi, D., & Leithwood, K. (1996). Toward and explanation of variation in teachers' perceptions of transformational leadership. *Educational Administration Quarterly*, 32(4), 512-538.
- Jaques, E. (1989). *Requisite organization*. Arlington, VA: Cason Hall.
- Jermier, J. M., & Kerr, S. (1997). Substitutes for leadership: Their meaning and measurement - contextual recollections and current observations. *The Leadership Quarterly*(8), 95-101.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, 22, 375-403.
- Kets de Vries, M. F. R. (1990). The organizational fool: Balancing a leader's hubris. *Human Relations*, 43(8), 751-770.
- Kim, K., Dansereau, F., & Kim, I. (2002). Extending the concept of charismatic leadership: An illustration using Bass' (1990) categories. In B. Avolio, J. & F. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 143-172). Oxford, UK: Elsevier Science.
- Kushman, J. (1992). The organizational dynamics of teacher workplace commitment: A study of urban elementary and middle schools. *Educational Administration Quarterly*, 28(1), 5-42.

- Lee, V. (2000). School size and the organization of secondary schools. In M. T. Hallinan (Ed.), *Handbook of the sociology of education* (pp. 327-344). New York: Kluwer/Plenum.
- Lee, V., Bryk, A., & Smith, J. B. (1993). The organization of effective high schools. In L. Darling-Hammond (Ed.), *Review of research in education, 19* (pp. 171-267). Washington, DC: American Educational Research Association.
- Lee, V., Ready, D., & Johnson, D. (2001). The difficulty of identifying rare samples to study: The case of high schools divided into schools-within-schools. *Educational Evaluation and Policy Analysis, 4*(365-379).
- Leithwood, K., & Hallinger, P. (1995). *International Handbook of Educational Leadership* (1st ed.). Dordrecht, The Netherlands: Kluwer.
- Leithwood, K., & Hallinger, P. (Eds.). (2003). *International Handbook of Educational Leadership* (2nd ed.). Dordrecht, The Netherlands: Kluwer.
- Leithwood, K., & Jantzi, D. (1997). Teachers' perceptions of transformational leadership: A replication. *Journal of Educational Administration, 35*(4), 312-331.
- Leithwood, K., & Jantzi, D. (1999a). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly, 35*(Supplemental), 679-706.
- Leithwood, K., & Jantzi, D. (1999b). Transformational school leadership effects: A replication. *School Effectiveness and School Improvement, 10*(4), 451-479.
- Leithwood, K., & Jantzi, D. (2000). The effects of different sources of leadership on student engagement in school. In K. Riley & K. Louis (Eds.), *Leadership For Change and School Reform* (pp. 50-66). London: Routledge.
- Leithwood, K., & Jantzi, D. (2005). *A review of transformational school literature research 1996-2005*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, QC.
- Leithwood, K., Jantzi, D., & Dart, B. (1990). Transformational leadership: How principals can help reform school cultures. *School Effectiveness and School Improvement, 1*(4), 249-280.
- Leithwood, K., Jantzi, D., & McElheron-Hopkins, C. (in press). The development and testing of a school improvement model. *School Effectiveness and School Improvement*.
- Leithwood, K., & Levin, B. (2005). *Assessing school leader and leadership programme effects on pupil learning*: Department for Education and Skills (DfES) RR662.
- Leithwood, K., McAdie, P., Bascia, N., Rodrigue, A., & Moore, S. (Eds.). (in press). *Teaching for deep understanding: What every educational leader should know*. Thousand Oaks, CA: Corwin.
- Leithwood, K., & Menzies, T. (1998). A review of research concerning the implementation of site-based management. *School Effectiveness and School Improvement, 9*(3), 233-286.
- Leithwood, K., & Raun, T. (1993). Pragmatism, participation and duty: Values used by superintendents in their problem solving. In P. Hallinger, K. Leithwood & J. Murphy (Eds.), *Cognitive perspectives on educational leadership and administration* (pp. 54-72). New York: Teachers College Press.
- Leithwood, K., Riedlinger, B., Bauer, S., & Jantzi, D. (2003). Leadership program effects on student learning: The case of the Greater New Orleans School Leadership Center. *Journal of School Leadership and Management, 13*(6), 707-738.

- Leithwood, K., & Riehl, C. (2005). What we know about successful school leadership. In W. Firestone & C. Riehl (Eds.), *A new agenda: Directions for research on educational leadership* (pp. 22-47). New York, NY: Teachers College Press.
- Leithwood, K., Seashore-Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning: A review of research for the Learning from Leadership Project*. New York: The Wallace Foundation.
- Leithwood, K., & Steinbach, R. (1995). *Expert problem solving processes: Evidence from principals and superintendents*. Albany, NY: SUNY Press.
- Leithwood, K., & Steinbach, R. (2003). Toward a second generation of school leadership standards. In P. Hallinger (Ed.), *Global trends in school leadership preparation*. Dordrecht, The Netherlands: Swets & Zeitlinger.
- Ling, W., Chia, R.C. and Fang, L. (2000) 'Chinese implicit leadership theory', *Journal of Social Psychology*, 140(6): 729.
- Little, J. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19, 325-340.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91(4), 509-536.
- Locke, E. A. (2002). The leaders as integrator: The case of Jack Welch at General Electric. In L. L. Neider & C. Schriesheim (Eds.), *Leadership* (pp. 1-22). Greenwich, CT: Information Age Publishing.
- Lord, R. G., & Maher, K. J. (1993). *Leadership and information processing*. London: Routledge.
- Louis, K., & Kruse, S. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Newbury Park, CA: Corwin Press.
- Louis, K. S., & Kruse, S. D. (1998). Creating community in reform: Images of organizational learning in inner-city schools. In K. Leithwood & K. S. Louis (Eds.), *Organizational learning in schools* (pp. 17-45). Lisse, The Netherlands: Swets & Zeitlinger.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytical review of the MLQ literature. *Leadership Quarterly*, 7(3), 385-425.
- Lucas, S. E. (2003). *the development and impact of principal leadership self-efficacy in middle level schools: Beginning an enquiry*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Lyons, C. A., & Murphy, M. J. (1994). *Principal self-efficacy and the use of power*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Ma, X., & Willms, J. D. (2004). School disciplinary climate: Characteristics and effects on eighth grade achievement. *Alberta Journal of Educational Research*, 50(2), 169-188.
- MacBeath, J. (Ed.). (1998). *Effective school leadership: Responding to change*. London: Paul Chapman.
- Macmillan, R. (2000). Leadership succession: Cultures of teaching and educational change. In N. Bascia & A. Hargreaves (Eds.), *The sharp edge of educational change: Teaching, leading and the realities of reform* (pp. 52-71). London: Routledge/Falmer Press.
- Manz, C. C., & Sims Jr., H. P. (1980). Self-management as a substitute for leadership: A social learning perspective. *Academy of Management Review*, 5, 361-367.
- Manz, C. C., & Sims Jr., H. P. (1993). *Business without bosses*. New York: Wiley.

- Markham, S. E., & Markham, I. S. (1998). Self-management and self-leadership reexamined: A levels-of-analysis perspective. In F. Dansereau & F. Yammarino (Eds.), *Leadership: The multi-level approaches Part A* (pp. 193-210). Stamford, CT: JAI Press Inc.
- Marshall, C., Patterson, J. A., Rogers, D., & Steele, J. (1996). Caring as career: An alternative perspective for educational administration. *Educational Administration Quarterly*, 32(2), 271-294.
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Mattessich, P. W., & Monsey, B. R. (1992). *Collaboration: What makes it work?* St. Paul, MN: Amherst H. Wilder Foundation.
- Matthews, P., & Sammons, P. (2005). Survival of the weakest: The differential improvement of schools causing concern in England. *London Review of Education*, 3(2), 159-176.
- McCormick, M. J. (2000). *The influence of goal-orientation and sex-role identity on the development of leadership self-efficacy during a training intervention*. Texas A&M University, College Station, TX.
- McCoy, A. R., & Reynolds, A. J. (1999). Grade retention and school performance: An extended investigation. *Journal of School Psychology*, 37(3), 273-298.
- McLaughlin, M. W., & Mitra, D. (2001). Theory-based change and change-based theory: Going deeper, going broader. *Journal of Educational Change*, 2, 301-332.
- Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. 6(3), 329-342.
- Meindl, J. R. (1998). The romance of leadership as follower-centric theory: A social constructionist approach. In F. Dansereau & F. Yammarino (Eds.), *Leadership: The multi-level approaches Part B* (pp. 285-298). Stamford, CT: JAI Press Inc.
- Melnick, M. J. (1982). Six obstacles to effective team performance: Some small group considerations. *Journal of Sport Behavior*, 5(3), 114-123.
- Mintrop, H. (2004). *Schools on probation: How accountability works (and doesn't work)*. New York: Teachers College Press.
- Modlin, P. D. (1996). *The relationship between principal efficacy and teachers' perceptions of the principal's influence*. University of Virginia, Charlottesville, VA.
- Mohandas, R., Meng, H.W. and Keeves, J.P. (2003) 'Evaluation and accountability in Asian and Pacific countries', in J.P. Keeves and R. Watanabe (eds.), *International Handbook of Educational Research in the Asia-Pacific Region*. Dordrecht: Kluwer Academic Publishes.
- Møller, J., Eggen, A., Fuglestad, O. L., Langfeldt, G., Presthus, A., Skrøvset, S., et al. (in press). Successful leadership based on democratic values. In C. Day & K. Leithwood (Eds.), *Successful principal leadership: An international perspective*. Dordrecht, the Netherlands: Springer.
- Møller, J., Eggen, A., Fuglestad, O. L., Langfeldt, G., Presthus, A., Skrøvset, S., Stjernstrom, E. and Vedoy, G. (2005). Successful school leadership: the Norwegian case. In Jacobson, S. L., C. Day & K. Leithwood (Eds.), *Journal of Educational Administration, The international successful school principalship project (43) 6*, 584 – 594.
- Moos, L., Krejler, J., Kofod, K. K., & Jensen, B. B. (in press). Communicative strategies among successful Danish school principals. In C. Day & K. Leithwood (Eds.), *Successful*

- principal leadership: An international perspective*. Dordrecht, The Netherlands: Springer.
- Morrisey, M. (2000). *Professional learning communities: An ongoing exploration*. Austin, TX: Southwest Educational Development Laboratory.
- Mortimore, P. (1993). School effectiveness and the management of effective learning and teaching. *School Effectiveness and School Improvement*, 4(4), 290-310.
- Muijs, D., Harris, A., Chapman, C., Stoll, L., & Russ, J. (2004). Improving schools in socioeconomically disadvantaged areas - A review of research evidence. *School Effectiveness and School Improvement*, 15(2), 149-175.
- Mumford, M. D., & Connelly, M. S. (1991). Leaders as creators: Leaders performance and problem solving in ill-defined domains. *Leadership Quarterly*, 2, 289-316.
- Murphy, J. (2005). *Connecting teacher leadership and school improvement*. Thousand Oaks, CA: Corwin Press.
- Murphy, J. (in press). *Turning around struggling schools: Lessons from the organizational sciences*. Thousand Oaks, CA: Corwin Press.
- Murphy, J., & Beck, L. (1995). *School-based management as school reform*. Thousand Oaks, CA: Corwin Press.
- Murphy, J., & Datnow, A. (2003). The development of comprehensive school reform. In J. Murphy & A. Datnow (Eds.), *Leadership lessons from comprehensive school reforms*. Thousand Oaks, CA: Corwin Press.
- Murphy, J., & Seashore Louis, K. (1999). *Handbook of research on educational administration*. San Francisco, CA: Jossey-Bass.
- Newman, F., Smith, B., Allenswork, E., & Bryk, A. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis*, 23(4), 297-321.
- Newmann, F. M., & Associates. (1996). *School restructuring and authentic student achievement*. San Francisco: Jossey-Bass.
- Newmann, F. M., & Wehlage, G. (1995). *Successful school restructuring*. Alexandria, VA: ASCD.
- Nias, J., Southworth, G. & Yeomans, R. (1989). Staff relationships in the primary school (London, Cassell).
- O'Day, J. (1996). Incentives and student performance. In S. Fuhrman & J. O'Day (Eds.), *Rewards and reform: Creating educational incentives that work*. San Francisco: Jossey-Bass.
- Ostroff, C. (1992). The relationship between satisfaction, attitudes and performance: An organizational level analysis. *Journal of Applied Psychology*(77), 963-974.
- Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, 23, 215-235.
- Painter, S. R. (2000). Principals' efficacy beliefs about teacher evaluation. *Journal of Educational Administration*, 38(4), 368-378.
- Pearce, C. J., & Conger, C. (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage.
- Pittinsky, T.L. and Zhu. C. (2005) 'Contemporary public leadership in China: a research review and consideration', *The Leadership Quarterly*, 16: 921-39.

- Podsakoff, P., MacKenzie, S., Moorman, R., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader satisfaction and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107-142.
- Popper, M., & Mayseless, O. (2002). Internal world of transformational leaders. In B. Avolio & F. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 203-230). Oxford, UK: Elsevier Science Ltd.
- Portin, B. S. (1998). Compounding roles: A study of Washington's principals. *International Journal of Educational Research*, 29(4), 381-391.
- Portin, B. S. (2000). The changing urban principalship. *Education and Urban Society*, 32(4), 492-505.
- Pounder, D. G., Ogawa, R. T., & Adams, E. A. (1995). Leadership as an organizationwide phenomena: Its impact on school performance. *Educational Administration Quarterly*, 31(4), 564-588.
- Prestine, N., & Nelson, B. S. (2005). How do educational leaders promote successful teaching and learning? In W. Firestone & C. Riehl (Eds.), *A new agenda for research in educational leadership*. New York: Teachers College Press.
- Reeves, J. (2000). Tracking the links between pupil attainment and development planning. *School Leadership and Management*, 20(3), 315-332.
- Reitzug, U., & Patterson, J. (1998). "I'm not going to lose you!" Empowerment through caring in an urban principal's practice with pupils. *Urban Education*, 33(2), 150-181.
- Reynolds, A. J. (1992). Grade retention and school adjustment: An explanatory analysis. *Educational Evaluation and Policy Analysis*, 14(2), 101-121.
- Reynolds, A. J., Stringfield, S., & Muijs, D. (forthcoming). Results for the High Reliability Schools Project. Unpublished manuscript.
- Reynolds, D., Hopkins, D., Potter, D., & Chapman, C. (2001). *School improvement for schools facing challenging circumstances: A review of research and practice*. London: Department for Education and Skills.
- Riehl, C. (2000). The principal's role in creating inclusive schools for diverse students: A review of normative, empirical and critical literature on the practice of educational administration. *Review of Educational Research*, 70(1), 55-81.
- Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools*. New York: Longman.
- Rowan, B. (1996). Standards as incentives for instructional reform. In S. Fuhrman & J. O'Day (Eds.), *Rewards and Reform: Creating educational incentives that work*. San Francisco: Jossey-Bass.
- Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. *Review of Educational Research*, 57(2), 101-121.
- Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. London: Open Books.
- Sammons, P., Thomas, S., & Mortimore, P. (1997). *Forging Links: Effective Schools and Effective Departments*. London: Paul Chapman.
- Scheurich, J. J. (1998). Highly successful and loving, public elementary schools populated mainly by low-SES children of color: Core beliefs and cultural characteristics. *Urban Education*, 33(4), 451-491.
- Schwenk, C. R. (1988). The cognitive perspective on strategic decision-making. *Journal of Management Studies*, 25(1), 41-56.

- Scott-Jones, P. (1984). Family influences of cognitive development and school achievement. In E. Gordon (Ed.), *Review of research in education, III* (pp. 259-306). Washington, DC: American Educational Research Association.
- Sergiovanni, T. (1999). *Rethinking leadership: A collection of articles*. Arlington Heights, IL: Skylight Professional Development.
- Sergiovanni, T. (2001). *Leadership: What's in it for schools?* London: Routledge Falmer.
- Shelley, H. (1960). Focused leadership and cohesiveness in small groups. *Sociometry*, 23, 209-216.
- Shepard, L. A., & Smith, M. L. (1990). Synthesis of research on grade retention. *Educational Leadership*, 47(8), 84-88.
- Silins, H., & Mulford, W. (2002a). Leadership and school results. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 561-612). Dordrecht, The Netherlands: Kluwer.
- Silins, H., & Mulford, W. (2002b). Schools as learning organizations: The case for system, teacher and student learning. *Journal of Educational Administration*, 40, 425-446.
- Silins, H. C., Mulford, R. M., & Zarins, S. (2002). Organizational learning and school change. *Educational Administration Quarterly*, 38(5), 613-642.
- Simon, H. (1993). Decision making: Rational, nonrational and irrational. *Educational Administration Quarterly*, 29, 392-411.
- Smith, W., Guarino, A. J., Strom, P., & Reed, C. (2003). Principal self-efficacy and effective teaching and learning environments. *School Leadership and Management*, 23(4), 505-508.
- Smrekar, C. E., & Mawhinney, H. B. (1999). Integrated services: Challenges in linking schools, families and communities. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 443-461). San Francisco, CA: Jossey-Bass.
- Smylie, M., & Denny, J. (1990). Teacher leadership: Tensions and ambiguities in organizational perspective. *Educational Administration Quarterly*, 26(3), 235-259.
- Southworth, G. (2002). Lessons from successful small school leadership in Leithwood, K., Hallinger, P., Furman-Brown, G., Mulford, B., Gronn, P., Riley, W. & Seashore-Louis, K. (Eds). *Second Handbook of Educational Leadership and Administration*, Norwell, MA: Kluwer Academic (in press).
- Spillane, J. P. (2006). *Distributed leadership*. San Francisco, CA: Jossey-Bass.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 31(1), 3-34.
- Spillane, J. P., Halverson, R., & Drummond, J. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher*, 30(3), 23-28.
- Stein, M., & Spillane, J. (2005). What can researchers on educational leadership learn from research on teaching: Building a bridge. In W. Firestone & C. Riehl (Eds.), *A new agenda for research in educational leadership* (pp. 28-45). New York: Teachers College Press.
- Stein, M. K., & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448.
- Stevenson, H. W. and Stigler, J. W. (1992) *The Learning Gap: Why Our Schools Are Failing and What We Can Learn from Japanese and Chinese Education*. New York: Simon & Schuster.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35-71.

- Storey, J. (2004). Changing theories of leadership and leadership development. In J. Storey (Ed.), *Leadership in organizations: Current issues and key trends* (pp. 11-38). London: Routledge.
- Sugrue, C. (2004). Rhetorics and Realities of CPD Across Europe: From Cacophony towards coherence? In Day, C., and Sachs, J. (Eds.), *International Handbook on the Continuing Professional Development of Teachers*, England: Open University Press, pp. 67-93.
- Timperley, H. (2005). Distributed leadership: Developing theory from practice. *Journal of Curriculum Studies*, 37(4), 395-420.
- Townsend, T. (1994). Goals for effective schools: the view from the field. *School Effectiveness and School Improvement*, 5(2), 127-148.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student achievement: The relationship between collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, 3(3), 189-209.
- Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning and measurement of trust. *Review of Educational Research*, 70(4), 547-593.
- Tsui, K. T., & Cheng, Y. C. (2002). School organizational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation*, 5(3), 249-268.
- Van Lehn, K. (1990). Problem solving and cognitive skill acquisition. In M. I. Posner (Ed.), *Foundations of cognitive science* (pp. 527-579). Cambridge, MA: MIT Press.
- Veuglers, W. & O'Hair, J. M. (eds.) (2005) *School-University Networks and Educational Change*. Maidenhead, UK: Open University Press/McGraw-Hill.
- Volpe, R., Batra, A., Howard, C., Paul, N., & Murphy, S. (2001). *The leadership/followership dimension in integrating schools and community services (Final report)*. Toronto, ON: University of Toronto, Institute of Child Study.
- Vroom, V., & Yago, A. (1998). Situation effects and levels of analysis in the study of leadership participation. In F. Dansereau & F. Yammarino (Eds.), *Leadership: the multiple-level approaches* (pp. 145-160). Stamford, CT: JAI Press.
- Wagner, R. K., & Carter, R. L. (1996). Chapter 15: Research outside the field of education. In K. Leithwood, C. Chapman, D. Corson, P. Hallinger & A. Hart (Eds.), *International handbook of educational leadership and administration* (Vol. 1, pp. 447-476). Dordrecht/Boston/London: Kluwer Academic Publishers.
- Walberg, H. (1984). Improving the productivity of America's schools. *Educational Leadership*, 41(8), 19-27.
- Walker, A. (2003) 'School leadership and management', in J.P. Keeves and R. Watanabe (eds.), *International Handbook of Educational Research in the Asia-Pacific Region*. Dordrecht: Kluwer Academic Publishers.
- Wallace, M. (2002). Modelling distributed leadership and management effectiveness: Primary school senior management teams in England and Wales. *School Effectiveness and School Improvement*, 13(2), 163-186.
- Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on pupil achievement. A working paper*. Aurora, CO: Mid-continent Research for Education and Learning.
- Watkins, D. (2000) 'Learning and teaching: a cross-cultural perspective', *School Leadership and Management*, 20 (2): 161-74

- West, M., Ainscow, M., & Stanford, J. (2005). Sustaining improvement in schools in challenging circumstances: A study of successful practice. *School Leadership and Management*, 25(1), 77-93.
- Westbury, M. (1994). The effect of elementary grade retention on subsequent school achievement and ability. *Canadian Journal of Education*, 19(3), 241-250.
- Williams, R., Harold, B., Robertson, J., & Southworth, G. (1997). Sweeping decentralization of educational decision-making authority: Lessons from England and New Zealand. *Phi Delta Kappan*, 78(8), 626-631.
- Wong, K. C. (2005) 'Conditions and practices of successful principalship in Shanghai', *Journal of Educational Administration*, 43(6): 552-62.
- Wong, K.C. (2006) 'Contextual impact on educational management and leadership: a case of Chinese education', *Journal of Educational Change*, 7: 77-89.
- Woods, P. A. (2004). Democratic leadership: Drawing distinctions with distributed leadership. *International Journal of Leadership in Education*, 7(1), 3-26.
- Yammarino, F., Dionne, S., Chun, J., & Dansereau, F. (2005). Leadership and levels of analysis: A state-of-the-science review. *Leadership Quarterly*, 16, 879-919.
- Yonezawa, S., Wells, A. S., & Serna, I. (2002). Choosing tracks: "Freedom of choice" in detracking schools. *American Educational Research Journal*, 39(1), 37-67.
- York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255-316.
- Yukl, G. (1989). *Leadership in organizations* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G. (1994). *Leadership in organizations* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G., & Chavez, C. (2002). Influence tactics and leader effectiveness. In L. L. Neider & C. Schriesheim (Eds.), *Leadership*. Greenwich, CT: Information Age Publishing.
- Zaccaro, S. J., Kemp, C., & Bader, P. (2004). Leader traits and attributes. In J. Antonakis, A. T. Cianciolo & R. J. Sternberg (Eds.), *The nature of leadership* (pp. 101-124). Thousand Oaks, CA: Sage.

Copies of this publication can be obtained from:

DfES Publications
P.O. Box 5050
Sherwood Park
Annesley
Nottingham
NG15 0DJ

Tel: 0845 60 222 60
Fax: 0845 60 333 60
Minicom: 0845 60 555 60
Online: www.dfespublications.gov.uk

© University of Nottingham 2006

Produced by the Department for Education and Skills

ISBN 978 1 84478 822 4
Ref No: RR800
www.dfes.gov.uk/research

www.ncsl.org.uk/publications
www.dfes.gov.uk/research