Distributed Leadership in Schools: Leading or Misleading?

This paper takes a distributed perspective on leadership practice in schools. Drawing upon empirical evidence from two contemporary studies of successful school leadership and the international research base concerning distributed leadership, the paper argues that leadership practice is a distributed entity that is mediated through human interaction. It suggests that leadership activity at the level of the school, rather than the level of the individual, is the appropriate unit of analysis in studying leadership practice. The paper argues that the distributed perspective offers a new and important conceptual lens through which leadership practice in school can be understood and analyzed. It concludes that further research is required to investigate the interface between distributed leadership and school improvement to ensure that this particular perspective on school leadership is not misleading. (Contains 40 references.) (Author)
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September 2003
DISTRIBUTED LEADERSHIP IN SCHOOLS: LEADING OR MISLEADING?

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Abstract

This paper takes a distributed perspective on leadership practice in schools. Drawing upon empirical evidence from two contemporary studies of successful school leadership and the international research base concerning distributed leadership, the paper argues that leadership practice is a distributed entity that is mediated through human interaction. It suggests that leadership activity at the level of the school, rather than the level of the individual, is the appropriate unit of analysis in studying leadership practice. The paper argues that the distributed perspective offers a new and important conceptual lens through which leadership practice in school can be understood and analysed. It concludes that further research is required to investigate the interface between distributed leadership and school improvement to ensure that this particular perspective on school leadership is not 'misleading.'

Introduction

Contemporary educational reform places a great premium upon the relationship between leadership and school improvement. Research findings from diverse countries and different school contexts have revealed the powerful impact of leadership in securing school development and change (e.g. Van Velzen et al, 1985; Hopkins 2001a; West et al, 2000). The evidence from the international research base is unequivocal - effective leaders exercise an indirect but powerful influence on the effectiveness of the school and on the achievement of students (Leithwood and Jantzi 2000). The research shows that although the quality of teaching has a powerful influence upon pupil motivation and achievement, the quality of leadership determines the motivation of teachers and the quality of teaching in the classroom (Fullan, 2001; Segiovanni, 2001). In summary, the contribution of leadership to school effectiveness and school improvement is significant (Wallace, 2002).

It is for this reason that 'leadership' has generated an enormous amount of interest among researchers and practitioners. A vast literature on school leadership and leadership theory exists (see Hahliger and Heck, 1996). Yet, despite a substantial research base, a singular, overarching theory of leadership has proved to be elusive. While researchers in many countries continue to produce a steady stream of empirical evidence about school leadership this endless accumulation of findings still has not produced a consensus around effective leadership practice. As Bennis (1993) reflected almost a decade ago:

Little it seems has changed. One of the major problems with the leadership literature resides in the sheer proliferation of leadership theories, styles or approaches presented. There seem to be as many perspectives on school leadership as those who research and write about it. In addition, the majority of studies, reports and articles reflect an 'orthodoxy of school leadership' largely concerned with the leadership capabilities of just one person (Harris, forthcoming). Currently, this orthodoxy is being challenged as traditional notions and models of leadership and organisational change are under scrutiny (Foster, 2001; Goleman, 2002; Gronn, 2002). It is becoming increasingly clear that much of the leadership literature fails to reflect contemporary leadership practice in schools (Razik and Swanson, 2001: Owens, 2001; Morrison, 2002). The competing and sometimes contradictory models within the leadership literature rarely capture or reflect authentic leadership activity. Constructions and understandings of the term 'leadership' vary in subtle and numerous ways. It is difficult to discern how 'instructional leadership,' 'learner centred leadership and 'pedagogical leadership' differ and how they reflect the reality of contemporary leadership practice? How far they offer different theoretical positions on leadership or simply re-label existing constructs is debatable.

Lately, the notion of leadership as a 'distributed' phenomenon is receiving much attention and growing empirical support (Gronn, 2000; Spillaine et al 2001). To date the main focus of research attention has been head teachers and as Wallace (2000:) suggests, that the bulk of school leadership research has underplayed its distributed character. This is undoubtedly true, as anyone who looks at the leadership literature will find it replete with head teacher accounts of variable quality. With
a few exceptions, evidence from other stakeholders and empirical studies of leadership practice at other levels within the organisation prove more difficult to find (Sammons et al., 1996; Harris et al., 1995; Day et al., 2000). However, there has been a growing recognition of the limitations of equating leadership with the efforts of individual head teachers. As Hallinger and Heck (1999: 186) suggest it is foolish to think that only principals provide leadership for school improvement thus presenting a compelling argument for re-defining leadership away from role-based conceptions and towards distributive views.

Another powerful argument for considering distributed leadership concerns the fact that existing theories, concepts and constructs of leadership have largely failed to deliver instructional improvement. The dominant model of leadership, which has been chiefly concerned with the skills, abilities and capabilities of one person, has been shown to be severely limited in generating and sustaining school and classroom level change (Fullan, 2001). It seems counterintuitive that schools have not adopted models of leadership that generate instructional improvement and raise levels of student achievement (Elmore, 2000). One of the main reasons for this lies in the way in which schools are organised and structured. Leadership models have evolved to control organisational functions rather to improve teaching and learning. This means that the skills and knowledge that shape leadership practice have not directly focused upon the improvement of instruction and student performance.

In contrast to traditional notions of leadership premised upon an individual managing hierarchical systems and structures, distributed leadership is characterised as a form of collective leadership in which teachers develop expertise by working collaboratively. This distributed view of leadership requires us to 'de-centre' the leader (Gronn, 2002) and to subscribe to the view that leadership resides not solely in the individual at the top, but in every person at entry level who in one way or another, acts as a leader (Goleman, 2002:14). This is dangerous ground, particularly because it challenges the conventional dualism of 'leader and led' and of 'leader and follower'. Parenthetically, distributed leadership does not mean that 'everyone leads,' as in this interpretation leadership would cease to have any distinctive identity or quality. It could be construed as any action or collective activity. Instead the distributed perspective focuses on how leadership practice is distributed among formal and informal leaders. A distributed view of leadership incorporates the activities of many individuals in a school who work at mobilising and guiding other teachers in the process of instructional change (Spillane et al., 2000).

As Elmore (2000:14) points out in a knowledge-intensive enterprise like teaching and learning there is no way to perform these complex tasks without widely distributing the responsibility for leadership among roles in the organisation. Distributed leadership therefore means multiple sources of guidance and direction, following the contours of expertise in an organisation, made coherent through a common culture. It is the 'glue' of a common task or goal- improvement of instruction-and a common frame of values for how to approach that task (Elmore 2000:15). This is not to suggest that is no one is ultimately responsible for the overall performance of the organisation or to render those in formal leadership roles redundant. Instead, the job of those in formal leadership positions is primarily to hold the pieces of the organisation together in a productive relationship. Their central task is to create a common culture of expectations around the use of individual skills and abilities. In short, distributing leadership equates with maximising the human capacity within the organisation.

Distributed Leadership in Principle?

Research has consistently underlined the contribution of strong collegial relationships to school improvement and change. Collaboration is at the heart of distributed leadership, as it is premised upon change that is undertaken collectively. For distributed leadership to be most effective it has to encompass mutual trust, support and enquiry. Evidence suggests that it is difficult for teachers to create and sustain the conditions for improved pupil learning if those conditions do not exist for their own learning (Silns and Mulford, 2002). Where teachers share good practice and learn together the possibility of securing better quality teaching is increased. The collaboration and collegiality fostered through distributed leadership has been shown to lead to an enhanced capacity for change and improvement at the school and classroom level. A wide variety of studies have found clear evidence of the positive effect of distributed leadership on teachers' self-efficacy and levels of morale (Mitchell and Sackney, 2001; Greenleaf, 1966; Macbeath, 1998). Research also shows that teachers who work together in a meaningful and purposeful way are more likely to remain in the profession because they feel valued and supported in their work (Barth, et al 1999).

In their recent review of successful school improvement efforts, Glickman et al (2001:49) construct a composite list of the characteristics of what they term the 'improving school', 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'. This work directly challenges assumptions about where leadership is located within a school because it views leadership as agency, a force for change within a school. Similarly, research by Silns and Mulford (2002) has shown that student outcomes are more likely to improve where leadership sources are distributed throughout the school community and where teachers are
empowered in areas of importance to them. In an earlier study Louis and Marks (1998) found that in schools where the teachers work was organised in ways that promoted sharing of leadership roles there was a positive relationship with the academic performance of students. This implies a changing view of structures away from command and control. It suggests view of the school as a learning community chiefly concerned with maximising the achievement capacities of all those within the organisation (Gronn, 2000).

Two recent studies of successful school leadership have reinforced the importance of distributed leadership practice in building professional learning communities. In 1999 the NAHT (National Association of Headteachers) in England commissioned research to identify, examine successful leadership practice in schools (Day, Harris, Hadfield, Tolley, Beresford, 2000). In 2001 the National College for School Leadership (NCSL) funded research that explored successful leadership in schools facing challenging circumstances (Harris and Chapman, 2002). Both studies offer a contemporary view of successful leadership and provide insights into current leadership practices in schools. The central message emanating from both studies was that successful heads recognised the limitation of a singular leadership approach and saw their leadership role as being primarily concerned with empowering others to lead.

A Study of Effective Headship (NAHT)

The NAHT research project involved in-depth case studies of 12 case study schools. Interviews were conducted with parents, pupils, teachers, governors, senior managers and headteachers at each school. A full account of the research methodology and outcomes can be found in Day et al (2000). The research set out to examine how existing theories of effective leadership e.g. 'purposeful leadership', 'transformational' or 'moral' leadership had resonance with the practices of successful heads in times of change. The primary aim of the research was to contribute to the knowledge and understanding of contemporary leadership in schools through a synthesis of theoretical perspectives derived from the literature and new evidence obtained by means of empirical research. This was achieved by the generation of theory-generating case studies at twelve school sites.

The research revealed that although the heads were at different stages in their careers, of different ages, had different experiences and were working in very different situations their approaches to leadership were remarkably similar. The evidence from this study pointed towards a form of leadership that was distributed through collaborative and joint working. The evidence showed that these successful heads led both the cognitive and the affective lives of the school, combining structural (developing clear goals), political (building alliances) and educational leadership (professional development and teaching improvement) with symbolic leadership principles (presence, inspiration) and distributed leadership practice (empowering others to lead). They were primarily transformational leaders who built self-esteem, enhanced professional competence and gave their staff the confidence and responsibility to lead development and innovation.

It's enabling other people to take over, to do things ... It's being able to trust other people. To be confident in your own ability to delegate tasks and know they will be done ... to allow people to lead and not to try and control everything yourself (Headteacher School 10).

You don't achieve things on your own. You set the way forward, lead by example, communicate what needs to be done and have to be hands on in the way you want it achieved ...it doesn't always have to be you doing the leading (Headteacher School 5).

The heads in the study were highly responsive to the demands and challenges within and beyond their own school context. In managing people and cultural change they managed external as well as internal environments. They had skills in communicating, in supporting colleagues' development so that they felt confident in fulfilling expectations of their contribution to the achievement of strategic goals and in the management of conflict and negotiating positive outcomes. From the perspectives of governors, deputies, teachers, parents and pupils the overarching message was one of the head building the community of the school in its widest sense i.e. through developing and involving others in leading the school.

Effective Leadership in Schools Facing Challenging Circumstances (NCSL)

The second contemporary study of successful school leadership also adopted a case study methodology. It investigated leadership practice within a group of 10 schools designated by the Department for Education and Skills (DfES) as 'facing challenging circumstances'. Schools in which 25% of pupils, or less, achieve five or more grades A* to C at GCSE are placed in this category. This grouping also includes a number of schools that achieve above 25% but where over 35% of their pupils receive free school meals. Currently there are approximately eight percent of secondary schools in England in this grouping.
Many of these schools are also in the DfES categories of 'Special Measures' or 'Serious Weaknesses' and are subject to regular inspection.

To explore leadership approaches in these schools a research design was constructed that incorporated multiple methods. For a full account of the research methodology see Harris and Chapman, (2000). The prime aim of this approach was to capture 'thick descriptions' of leadership practice. In depth case study data was collected from ten schools facing challenging circumstances. This included semi-structured interviews with headteachers, middle managers and classroom teachers. In addition, a wide range of documentary and contextual data was collected at each school. The selection of case study schools was informed by two factors. Firstly, care was taken to ensure that the schools represented a wide range of contexts and were geographically spread. Secondly, inspection reports were scrutinised to ensure that there was evidence of successful leadership and an upward school improvement trajectory.

As in the NAHT study the possibilities for generalisation are inevitably limited with a small number of schools. However, the volume and range of data collected in this study provided an insight into the leadership practices in SFCC which remains a relatively under-researched area. Previous research had shown that authoritarian 'top-down' forms of leadership are most prevalent in schools in special measures or serious weakness, particularly in the early stages (Gray, 2000). In a failing school context, leadership approaches often need to be very directive and task focused. However, in schools that are not in either of the failing categories but are steadily improving, the potential for alternative leadership styles and leadership approaches clearly exist.

The evidence collected within the study suggests that the heads acknowledged that they had all adopted autocratic leadership approaches at critical times. The majority of schools in the study had at some stage emerged from the special measures or serious weaknesses. All the heads acknowledged that they adopted a more autocratic leadership style during the inspection phase. This included paying special attention to issues such as policy implementation and consistent standards of teaching (Chapman, 2002). However, they also agreed that this leadership approach was least likely to lead to sustained school improvement and that no one style could meet the diverse range of challenges found in schools in difficult circumstances.

I don't think there is one leadership style or approach is there? Anymore than there is a single teaching style. You need breadth and diversity in both (SMT School 5)

Following the inspection phase the heads in this study had deliberately chosen a leadership approach designed to move the school forward, one that empowered others to lead and distributed leadership activity throughout the school. In many ways their selected approaches traversed the transformational leadership terrain, both in orientation and aspiration (Leithwood and Jantzi, 2000). However, the particular emphasis given by the heads to distributing leadership and empowering others through allocating leadership roles and responsibilities would suggest an approach to leadership that has both distributive and transformational principles at its core.

In all ten schools the research found that distributed approaches to leadership prevailed and directly influenced approaches to problem solving and decision-making. While heads' responses to problems varied, depending on the circumstance or situation, their value position remained consistently one of involving and consulting pupils, staff and parents. Within the study the heads saw the agency of staff and students as central to achieving the school's purpose. The heads used a number of strategies for distributing leadership. These included involving others in decision making; allocating important tasks to teachers and rotating leadership responsibilities within the school. They had deliberately chosen to distribute leadership responsibility to others and had put in place systems and incentives to ensure this happened. Their leadership was underpinned by a set of core personal values that included the modelling and promotion of respect (for individuals), fairness and equality, caring for the well being and the development of students and staff.

In all cases, they remained important gatekeepers to change and development, guiding their schools in a clear and purposeful direction. Their approach to leadership was not one of 'delegated headship' where unwanted tasks are handed down to others. In contrast, they distributed leadership activity through a redistribution of power within the organisation by giving those who did not occupy 'formal' leadership positions responsibility for major and important development tasks. The heads adopted highly creative approaches to tackling the complex demands of implementing multiple changes. The decision to work with and through teams as well as individuals was a common response to the management of change. From the perspectives of those within the school community, teachers, parents, governors, and pupils, the overarching message was one of the heads leading their schools through primarily through developing and involving others.

When I first came to the school, the head and SMT were considered to be the leaders, everyone else opted out. With the formulation of teams with clear targets I've been able to distribute leadership and to energise teachers to take responsibility
for change and development (Head School 7)

The teachers now have greater responsibility and authority for leading. The days of waiting for the head to lead on all fronts have gone (SMT School 10)

Both studies point towards an emerging model of leadership that is less concerned with individual capabilities, skills and talents and more preoccupied with creating collective responsibility for leadership action and activity. The focus is less upon the characteristics of 'the leader' and more upon creating shared contexts for learning and developing leadership capacity (Harris and Lambert, forthcoming). But the critical question is what does distributed leadership look like in practice?

**Distributed Leadership in Practice?**

While it would appear from the research evidence that distributed leadership can be advantageous to school and teacher development, achieving it is far from easy. In essence, it requires those in formal leadership positions to relinquish power and control to others. The inherent difficulties in achieving this are at once immediately apparent. Apart from the challenge to authority and ego, evidence would suggest that there are other barriers that need to be overcome to ensure that the distributed leadership operates effectively (Vail and Redick 1993). The literature points towards 'top-down' management structures in schools as a main impediment to the development of distributed leadership, as they militate against teachers attaining autonomy and taking on leadership roles within the school. In schools, functions and systems are premised on maintaining the bureaucratic and hierarchical structure. A concomitant of this is that distributed leadership roles cannot successfully be imposed by management. Wasley (1991) reiterates that teachers need to be involved in the process of deciding on what roles, if any they wish to take on, and must then feel supported by the school's administration in doing so.

It is worth emphasising that the model of distributed leadership is very far from the dominant structures of most schools. It challenges the 'cult of individualism' and confronts the impulse for privacy and idiosyncratic institutional practice. Instead, it offers a model in which organisational change and improvement are a collective rather than an individual concern. It proposes a theory of leadership that predicts failure in the social isolation of practice and predicts success in the creation of interdependencies that stretch over these differences (Elmore, 2002: 24). Distributed leadership poses the challenge of how to distribute responsibility and authority for guidance and direction of instruction. Creating a new model of distributed leadership consists of two main tasks 1) describing the ground rules which formal leaders of various kinds would have to follow 2) describing how leaders of various kinds and in various roles share responsibility? The practical side of a theory of distributed leadership focuses on how leadership roles would be defined if leadership was a shared and mutually owned commodity within schools. It is clear that certain tasks and functions would be retained by those in formal leadership positions but that teachers would be centrally involved in guiding and shaping instructional development. They would play a key role in designing, conducting and participating in professional development, they would support and evaluate the professional practice of teachers. The exact design of roles and functions is less important than the underlying principles of distributed expertise, mutual dependence, reciprocity of accountability and the centrality of instructional practice to the definition of leadership roles.

Under the right conditions, positive effects of distributed leadership clearly have been demonstrated. King et al (1996) and Griffin (1995) found that shared leadership resulted in positive effects on pedagogy, on school culture and on educational quality. However, the research also shows the importance of allocating time for professional development and collaborating with colleagues. Ovando (1994) found that teachers reported decreased time for lesson planning and preparation once they had undertaken leadership roles and that time being freed up for distributed leadership tasks was a crucial element of success in her case study of a school where distributed leadership was being implemented. Similar findings were reported by Seashore Louis et al (1996) who found that in the more successful school teachers were given more time to collaborate with one another.

The success or otherwise of distributed leadership within a school can be influenced by a number of interpersonal factors, such as relationships with other teachers and school management. The importance of these is evident, both with respect to teachers' ability to influence colleagues and with respect to developing productive relations with school management, who may in some cases feel threatened by teachers taking on leadership roles. There may also on occasion be conflicts between groups of teachers, such as those that do and do not take on leadership roles, which can lead to estrangement among teachers. Research has shown that colleagues can at times be hostile to distributed leadership because of factors such as inertia, over-cautiousness and insecurity (Barth, 1999). Overcoming these difficulties will require a combination of strong interpersonal skills on the part of the 'teacher leader' and a school culture that encourages change and leadership from teachers.

This alternative image of leadership is one of empowering people to understand, rather than solve, the problems that they
face (Fullan, 2001). It is as Sergiovanni (2001) proposes largely concerned with the 'lifeworld' of the school rather than the 'systemworld', where attention is focused upon developing social, intellectual and other forms of human capital rather than concentrating upon achievement of narrow, instrumental ends. It is a form of leadership premised upon building the capacity for organisational growth and change. Inevitably, this mode of leadership challenges the conventional orthodoxy of the single leader and points towards a re-definition of the school as a learning community.

Final Word

New approaches to organisational change and development are inevitable in a world that is increasingly complex and rapidly changing. Morrison (2002) advocates that the self-organising schools of the future will require democratic, person centred and relational styles of leadership. He contends that the 'command and control mentality of bureaucratic organisations where compliance is the watchword' is anachronistic. This is chiefly because it fails to recognise the necessity for people to construct social events through interaction and dialogue. The empirical evidence presented in this paper suggest that successful leaders are those who understand relationships and recognise the importance of reciprocal learning processes that lead to shared purposes (Lambert and Harris, forthcoming). Essentially, they are more connected to people and networks than the 'traditional' forms of leadership - 'the lone chief atop a pyramidal structure' (Greenleaf, 1996: 61) would suggest.

Yet the orthodoxy of school leadership that promotes the 'cult of the individual' stubbornly prevails. Fuelled by a view of organisational change that is inherently rational, stable and predictable it reinforces the status quo of the leadership-follower relationship, creating dependency cultures and an ownership divide. It is easier, far easier to point the finger of accountability in the direction of one person than to acknowledge that leadership is collective, shared and distributed throughout the organisation. However, in the business world leadership excellence is rapidly being redefined in interpersonal terms. The days of the indispensable, singular leader are numbered as those in multi-national corporations embrace a new form of leadership that strips out bureaucracy and fosters collaboration. The old fashioned 'lead from the top' figures of authority who led by virtue of power of their position are no longer tenable. A new model of leadership is emerging, one that recognises the limitations of an approach to organisational change and development premised upon the efforts of just one person.

If schools are to be true learning communities this cannot be achieved by clinging to outdated models of leadership. To cope with the unprecedented rate of change in education requires not only challenging the current orthodoxy of school leadership and relinquishing models suited to a previous age, but also establishing new models of leadership that locate power with the many rather than the few. As Jackson (forthcoming) notes despite more than two decades of writing about organisational development we are still in a position of needing to develop understandings about what leadership really involves when it is distributed, how schools might function and act differently and what operational images of distributed leadership in action might look like. Undoubtedly we need to understand much more about effective distributed leadership practice in action but primarily to know whether it contributes to sustainable school improvement. Unless distributed leadership generates school improvement, unless it impacts directly on the quality of teaching and learning, it will at best, simply encourage schools to operate more openly and collaboratively while at worse, it will be yet another redundant theory that has proved to be misleading.

Acknowledgements

I am grateful to my co-researchers for allowing me to refer to our work in this paper. Therefore thanks go to Professor Christopher Day, Christopher Chapman, Professor Harry Tolley, Dr Mark Hadfield and Dr John Beresford.

References


http://www.shu.ac.uk/bemas/papers.html


Jackson, D (forthcoming) Building Leadership Capacity-Simple, Complex, Paradoxical Necessary in Harris, A. and Lambert, L. Building leadership Capacity for School Improvement, Bucks, OU Press

Lambert, L (1998) Building Leadership Capacity in Schools Association for Supervision and Curriculum Development Alexandria, Virginia, USA


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