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Forging the Links between Distributed Leadership

and Educational Outcomes

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Abstract

Purpose: Several arguments have been put forward about why distributed leadership in schools should contribute to the improvement of teaching and learning. This paper investigates the extent to which conceptual and empirical research in the field is aligned to this goal.

Approach: The discussion of alignment was structured around two differing and overlapping conceptions of distributed leadership. The first conception examines the distribution of the leadership of those tasks designated by researchers as leadership tasks. The second conception examines the distribution of influence processes.

Findings: The first conception has the advantage of giving leadership educational content by embedding it in the tasks and interactions that constitute educational work. The selected leadership tasks are typically not specified, however, in ways that discriminate the qualities required to make a positive difference to student outcomes. The knowledge base needed to make such discrimination is found in outcomes-linked research on the selected educational tasks rather than in research on generic leadership and organisational theory. There is also little attention to the influence processes that are at the heart of leadership. While the second approach pays more attention to these influence processes, its generic treatment of leadership limits the possibility of finding and forging stronger links to student outcomes.

Conclusion: Research which integrates both concepts of distributed leadership, in suitably modified form, is likely to be a productive way of making stronger links

between distributed leadership and student outcomes. The linkage requires more

explicit use of the evidence base on the improvement of teaching and learning.

Forging the Links between Distributed Leadership

and Educational Outcomes

Research on distributed leadership, like the study of educational leadership itself, has not been tightly focused on student outcomes. Of the thousands of published studies of educational leadership, less than 30 have empirically tested the relationship between leadership and student academic and non-academic outcomes (Robinson, Lloyd, & Rowe, in press). Given the much shorter history of research on distributed leadership in education, the number of such studies is, understandably, substantially fewer.

The disconnection between distributed leadership research and educational outcomes is not, however, just a matter of the youth of the field. The primary purpose of this paper is to discuss how particular conceptions of distributed leadership, and particular types of normative theorising about the concept, work against learning more about its educational consequences. A second purpose is to suggest how alternative conceptions and normative approaches could deliver more insight into the relationship between aspects of distributed leadership and a range of educational outcomes.

Several researchers on distributed leadership have appealed for more investigation of its impact on student outcomes (Camburn, Rowan, & Taylor, 2003; Harris, 2005). They have presented arguments about why schools with a more distributed pattern of leadership should have, all else being equal, a greater density of instructional leadership, more innovation and more positive student

outcomes. One argument is based on the assumption that under a pattern of distributed leadership more of the expertise and talent of staff will be identified, developed and utilised than under a more traditional hierarchical pattern. This argument seems particularly compelling given the breadth and depth of pedagogical expertise required to meet today's ambitious goal of all students succeeding on intellectually challenging curricula.

A second and related argument is to do with the sustainability of efforts to improve teaching and learning. Schools with stronger distributed leadership will, it is argued, have more staff who are knowledgeable about and take responsibility for the improvement of educational outcomes. Such distribution of knowledge, responsibilities and formal and informal instructional leadership roles, protects a school improvement effort against the consequences of a loss of key personnel. Such losses, together with a failure to develop a broad base of strong instructional leadership, have been identified as key reasons for the stalling of improvement efforts (Camburn et al., 2003).

Despite agreement among researchers about the importance of linking distributed leadership to student outcomes, there are aspects of the conceptualisation and measurement of distributed leadership which militate against finding such links. My argument begins with a discussion of two different approaches to the conceptualisation of distributed leadership, and an analysis of their implications for empirical investigation of the relationship between distributed leadership and student outcomes. I discuss how each of these concepts could be modified in ways that connect more strongly to the existing

knowledge base on how leadership makes a direct and indirect impact on outcomes. The subsequent section examines how distributed leadership is used as both a normative and descriptive concept, and how certain types of normative theorising about distributed leadership are unhelpful for the purpose of investigating its educational impact on students. The final section of this paper shows how both concepts of distributed leadership, modified in the ways discussed, could inform a rich programme of empirical research on distributed leadership.

The argument is illustrated at certain points with detailed discussion of particular empirical studies of distributed leadership. These discussions should not be construed as criticisms of the illustrative studies, for the studies were not designed to investigate the impact of leadership on student outcomes. Indeed there is only one such quantitative study that I know of (Leithwood & Jantzi, 2000). My intention is to use these studies to suggest some of the conceptual and associated empirical shifts that would advance the goal of investigating and strengthening such connections.

Alternative Conceptions of Leadership and Distributed Leadership

Theoretical writing on the nature of distributed leadership reveals two main concepts. I call the first "distributed leadership as task distribution" and the second "distributed leadership as distributed influence processes". I do not intend to set up an opposition between the two, for while most researchers give prominence to one of these concepts, they may also recognise the importance of the second. In addition, one of the difficulties in discussing how authors

conceptualise distributed leadership, is that they may offer more than one definition, and those definitions may not be fully reflected in their empirical measures of leadership. Since the main purpose of this paper is to promote the empirical investigation of the relationship between distributed leadership and student outcomes, I pay particular attention to how the concept is operationalised in measures of distributed leadership.

   Distributed leadership as task distribution. Much of the recent work on distributed leadership has framed leadership as the performance of particular tasks. Spillane, for example, defines leadership as, "the activities engaged in by leaders, in interaction with others in particular contexts around specific tasks" (Spillane, Halverson, & Diamond, 2004, p. 5). He then goes on to specify the tasks involved in school leadership as the "identification, acquisition, allocation, co-ordination, and use of the social, material, and cultural resources necessary to establish the conditions for the possibility of teaching and learning" (p. 11).

   While these tasks constitute the *what* of leadership, the *how* of leadership involves "mobilizing school personnel and clients to notice, face, and take on the tasks of changing instruction as well as harnessing and mobilizing the resources needed to support the transformation" (p. 11). This elaboration introduces a second, social dimension to leadership through reference to the role of leadership in influencing others to make change. In summary, Spillane's theoretical account of distributed leadership is both situated in the performance of particular tasks and involves interactions between shifting combinations of leaders and followers in the course of task performance. Leadership is distributed

because the performance of tasks is distributed across the three constitutive elements of leader, follower and task or situation.

In a recent series of studies of distributed leadership, Spillane and colleagues assessed patterns of distributed leadership using the electronic logs of 52 school principals (Spillane, Camburn, & Pareja, 2007). Electronic beeps prompted them to record, at random intervals throughout the day, whether they were engaged in particular leadership tasks, and whether they or others were leading or co-leading those tasks. The *how* of leadership was assessed by asking them to record their primary intention by choosing from a list of intentions which included increasing knowledge, monitoring teaching and the curriculum, developing common goals, motivating or developing others or redesigning the teaching and learning. Some of these options capture the principal's intention to exercise direct or indirect influence over staff.

Camburn, Rowan & Taylor also take a leadership as task performance approach in their study of distributed leadership in schools participating in a comprehensive school reform program (Camburn et al., 2003). For them leadership is "a set of organizational functions that leaders might be expected to perform - including not only instructional leadership functions, but also functions related to broader school and building management, as well as boundary-spanning functions entailing the acquisition of resources and the establishment or maintenance of relationship with external constituents" (Camburn et al., 2003, p.349).

These authors measured distributed leadership by asking all those with formally designated leadership roles to report the priority and/or the amount of time they devoted to a variety of leadership activities in the current school year. In short, the study of leadership distribution in this study involved the study of who performed the designated leadership tasks. In contrast to Spillane, there was no exploration of intended or actual influence.

The implications of this task-focussed account of distributed leadership for the study of its impact on student outcomes are more readily discerned if the logic of the possible relationship is made explicit. In simple terms, the logic is as follows:

1. Leadership is manifested in the performance of certain functions or tasks.

2. Some patterns of distribution of the leadership of these tasks (e.g., wider distributions) have more powerful effects on student outcomes than other patterns (e.g., more hierarchical distributions).

The first step in testing the above argument is to establish what counts as a leadership task. For Camburn, the reference point for such decisions has typically been one or more theories of organisation. For example, Camburn writes that he follows "a long line of research and theory that conceptualizes leadership in terms of organizational functions and then examines who within an organization performs these functions" (Camburn et al., 2003, p. 349).

There are problems associated with this approach to the selection of leadership tasks when the research purpose is to test the impact of leadership on

student outcomes. The purpose of organisation theory is to identify functions associated with organisational survival, and as such the leadership tasks required for that purpose are likely to be different from those required for the much narrower purpose of achieving particular goals (improved student outcomes) in a particular type of organisation (schools). Generic organisational theories are not designed to discriminate between those leadership tasks that have more and less direct and indirect impact on student outcomes.

A better theoretical resource to use in the selection of critical leadership tasks is the existing evidence base on the links between particular types of leadership and student outcomes. Broadly speaking, the leadership tasks that deliver for students are those involved in instructional leadership. A recent meta-analysis of 27 published studies of the impact of leadership on student outcomes showed that the impact of instructional leadership was between two and three times greater than that of transformational leadership (Robinson et al., in press).

Within instructional leadership itself, the relative impact of five different sets of leadership practices were calculated. Small effects were found for establishing goals, strategic resourcing and establishing an orderly and supportive environment, moderate effects for planning, coordinating and evaluating teaching and the curriculum and large effects for promoting and participating in teacher learning and development (Robinson et al., in press).

While research about the impact of leadership on student outcomes provides better guidance than generic organisational theory about the leadership tasks that are more and less likely to make a difference, further specification of

these instructional leadership tasks is still required if connections between distributed leadership and student outcomes are to be found. Take, for example, the leadership dimension that has the strongest impact on student outcomes – leaders' promotion of and participation in teacher learning and development. We know from a recent meta-analysis of the impact of professional learning opportunities on the students of participating teachers, that aspects of the context, content, learning activities and learning processes associated with these opportunities, make a discernible difference to their effectiveness for students (Timperley & Alton-Lee, 2008). With respect to context, for example, what is critical to effectiveness is not whether or not teachers volunteer for the learning opportunity, but whether they engage with the ideas at some point in the process.

This new evidence suggests that in testing the links between distributed leadership and student outcomes, researchers need to go beyond measures of the density and distribution of the leadership of professional development activities. They also need to assess leaders' ability to shape professional development opportunities in ways that ensure they have the qualities that are most strongly associated with positive outcomes for students.

In summary, the first step in testing the logic outlined above of the relationship between distributed leadership and student outcomes is to specify the selected leadership tasks in a manner that captures those qualities that the evidence suggests are responsible for student impacts.

The second step in testing this logic is to collect evidence on patterns of responsibility for the selected tasks. Who is involved and who has responsibility?

To what extent are those with the responsibility knowledgeable about the task characteristics that increase the impact on students? To what extent do they ensure that those task qualities shape task performance?

The third critical step in testing the logic is investigating the links to student outcomes. Such studies are complex and costly to carry out, as testing these links requires modelling and measuring the impact of other variables, particularly student background, which would otherwise confound the impacts of distributed leadership (Hallinger & Heck, 1998; Leithwood & Levin, 2005; Levacic, 2005). This may be why there are so few multivariate studies of leadership impacts let alone of the impact of distributed leadership.

Given the complexity of testing the relationship between leadership and student outcomes, valuable contributions can be made by researchers who study the leadership of those teaching and teacher learning practices where there is prior evidence of their impact on student outcomes. Careful descriptive studies of the leadership of such practices, provided they are measured in ways that capture those qualities already shown to be strongly associated with student impacts, will tell us a great deal about the distribution of the type of leadership that is most likely to make a difference to students. Ideally, of course, subsequent descriptive or intervention studies would provide more direct tests of the proposed leadership-outcome relationships.

Before turning to the second concept of leadership that is employed in the distributed leadership literature, some further more general comments about this first approach are in order. Even though I have argued that there are problems

with the selection and specification of leadership tasks, a focus on tasks has advantages for studying the impact of distributed leadership on students. By embedding leadership in tasks, attention is given to its content and purpose. Are the tasks that leaders are engaged in shaped by them in ways that are most likely to deliver benefits for students? The answer to this question requires, as already discussed, engagement with outcomes-linked evidence on teaching and teacher learning as well as with any available outcomes-linked leadership research. The former type of evidence is particularly critical as it contains a great deal more detail about the task qualities that make the difference than does the leadership literature (Robinson, 2001).

The empirical literature on distributed leadership that has employed what I have called the "leadership as task performance" approach has paid much more attention to the task dimension of leadership than to its interpersonal or influence dimension. The work of Spillane is a possible exception as his measures have included principal self reports of their intentions to motivate, develop or increase the knowledge of others (Spillane et al., 2007). In general, however, the assessments concentrate on the relative frequency of tasks which are intended or assumed to influence others, rather than on establishing that such influence actually occurred.

One implication of not studying the consequences of various influence practices is that little is learned about the change process that is at the heart of leadership. This is problematic since a key rationale for the current emphasis on distributed leadership is the belief that widely distributed instructional leadership

will foster more sustained improvement of learning and teaching (Elmore, 2004).

This requires skilled change agents, whether they are principals, faculty or

department heads, curriculum leaders, coaches, professional developers and

facilitators or classroom teachers.

A greater focus on the influence process itself would tell us more about

the shifts in school and teacher culture that are needed to support the wider

distribution of those leadership tasks that are critical to sustained improvement

in learning and teaching (Harris, 2005; Little, 1982). There is a considerable

literature about the conditions which facilitate and inhibit teacher influence over

their peers and if distributed leadership is to fulfil its potential then attention is

needed to such questions as: How do those in senior leadership positions

authorise and develop a more distributed leadership approach? What influence

processes are involved in shifting a privatised teacher culture to one in which

more teachers are more willing to take collective responsibility for the quality of

teaching and learning experienced by all their students? What influence

processes increase the willingness of teachers to influence one another, and

what conditions encourage teachers to exercise such influence in the areas that

matter for students?

I turn now to the second concept of leadership and distributed leadership.

Unlike the "leadership as task approach" it has an explicit focus on leadership as

an influence process. As we shall see, however, it needs to be supplemented

with a stronger focus on the educational content of the influence process.

Distributed Leadership as Distributed Influence Processes

Many writers characterise leadership as an influence process which changes how others think or act with respect to the content of the influence (Fay, 1987; Leithwood & Riehl, 2005; Yukl, 1994). This means that the determination of leadership involves, among other things, the examination of its consequences.

The identification of acts of leadership involves more, however, than the detection of successful influence attempts, for there are many ways of exercising influence that one would not want to call leadership. Leadership must be distinguishable from other influence processes such as force, coercion and manipulation. The distinction between these three influence processes and those involved in leadership rests on the source of influence. In the case of leadership, others are influenced because they judge "that the leaders occupy a position which gives them the right to command a course of action, or that they possess the requisite personal characteristics of leaders, or that they seek an action that is correct or justifiable" (Fay, 1987). These three sources of influence – positional authority, personal qualities and rational persuasion - distinguish leadership from the other forms of power relationships, such as force, coercion and manipulation.

As I did for the earlier account of distributed leadership, I spell out below the logic that links this view of leadership with student outcomes:

1. Track those influence attempts that cause changes in the thoughts and or actions of followers

2. Distinguish those that are based on those influence processes associated with leadership rather than with manipulation, coercion or force

3. Track the impact of the change in followers for student outcomes.

By making this logic explicit we see some of the considerable conceptual and measurement challenges involved in such a research programme. On this account of leadership, measures of who engages in particular tasks would not qualify as measures of leadership, because the consequences of the influence attempt are constitutive of leadership. As Gronn explains, the aggregation of individual leadership acts does not capture the idea of leadership as conjoint activity (Gronn, 2000). If leadership is exercised in the performance of particular tasks by interdependent and reciprocally-influencing agents, then the unit of analysis may need to be a pattern of interaction rather than the frequency of leadership acts by a particular individual.

Spillane goes some way towards capturing the influence process by asking principals to record their *intention* to influence. If we are to learn more about the links between leadership and students, however, we also need to know the outcome of such intentions. In the following hypothetical scenario we can see some of what is involved in identifying acts of leadership in the manner suggested.[1]

Mary, the Head of Science, is chairing a meeting in which her staff are reviewing the results of the assessment of the last unit of work. She circulated the results in advance, with notes about how to interpret them, and asked the team to think about their implications for next year's teaching of the unit. The team identifies common

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[1] The following section is based on Robinson, V. M. J. (2001). Embedding leadership in task performance. In K. Wong & C. Evers (Eds.), *Leadership for quality schooling: International perspectives* (pp. 90-102). London: Falmer Press.

misunderstandings and agrees they need to develop resources which help students to overcome them. Julian, a second year teacher, was pretty unhappy with the assessment protocol used this year, and suggests revisions which he thinks will give more recognition to students who have made an extra effort. Most of his suggestions are adopted. Lee, who teaches information technology as well as science, shows the group how the results have been processed on the computer so that they can be combined with other assessments and used in reports to parents and the Board. Several team members express nervousness about reporting to the Board so they decide to review a draft report at the next meeting.

There are several instances where staff appear to have influenced each other. They follow Mary's request for meeting preparation, and the meeting structure that she has prepared. Julian and Lee also change how the task is done through their ideas about how to improve the assessment and reporting procedures. Leadership is distributed in this meeting in the sense that it has emerged in the course of task performance from different participants, including those with no positional authority. The interchangeable and transient nature of leader and follower roles is also illustrated (Gibb, 1954).

The above scenario is artificial in the sense that the time span over which one would normally judge the impact of influence attempts has been curtailed. As Gronn explains, the effect of the influence may be immediately apparent or may not be felt until a considerable period of time has elapsed. "The absence of evidence of immediate causal effects at any point in time, therefore, should not be interpreted as absence of influence or leadership" (Gronn, 2000, p. 331). If

researchers link leader action and teacher reaction more tightly, then they begin to open up the black box between leadership and student outcomes. Admittedly, there is still considerable work required to link teacher reaction with student outcomes, but at least a shift has been made from the study of isolated individuals to the study of interacting units of leaders and followers.

Another way of tracking the consequences of leadership attempts, that might lend itself more readily to large scale quantitative research designs is to focus on followership rather than leadership and seek information about sources of influence through such questions as "where did you learn that?" or "what led you to make [the selected] change?" Whatever methodological choices are made, the distributed influence concept of leadership requires a focus on the links between influence attempts and their consequences. Unless this interactive link is captured, however crudely, research on distributed leadership will continue to tell us who does what but not whether those activities change the intended recipients of influence.

The second step in establishing the link between distributed leadership and student outcomes is identifying whether the particular influence process used is of the type that counts as leadership. For Julian and Lee who do not hold positions of authority, their influence is probably due to the fact that their ideas, were recognised by colleagues as progressing the goal of better science assessment and reporting. It is more difficult to determine the source of Mary's influence – was it her positional authority as Head of Science, or was it based on the fact that her staff have learned that her suggestions about how to prepare for

and structure the meetings are usually helpful? Perhaps staff acceptance of

Mary's influence was due more to their belief that she would act punitively

towards them if they did not do the preparatory work – in which case her use of

power reflects coercion rather than leadership.

Once again, a way forward may be found by giving more attention to

followers. Under certain circumstances, they could provide insights into why they

appeared to accept certain influence attempts. Caution is needed in using such

data, however, for the distinction between coercive, manipulative or leadership

influence processes should rest on analysis of the interaction rather than on

follower judgment.

One of the advantages of Fay's analysis of leadership is that it makes

explicit reference to the power of reasoning and ideas. This is particularly

important in the study of educational organisations where professional norms

constrain the use of positional authority. Friedkin and Slater argue that "the

professional orientation of this [school] culture stipulates that it must be the

competence of the leader, rather than the leader's formal office, that legitimates

the leader's power (Friedkin & Slater, 1994, p. 140).

These authors assessed expertise as a source of leadership by asking

staff in a sample of 20 California primary schools to nominate those persons in

the school to whom they turn for advice on events or issues that arise in the

school. The fact that teachers report that they turn to others for advice does not

guarantee that they are influenced by them, but it is probably one good indicator

of sources of leadership influence.

The first and second steps in the logic outlined above help us establish that the interactions of interest constitute leadership. The next step involves establishing the impact of distributed leadership on student outcomes. One of the few studies in the "leadership as influences process" tradition that examines this relationship is that of Friedkin and Slater. They asked teachers to nominate their sources of advice and then tested the relationships between nominations of principals and of teaching colleagues with schools' average performance, over a four year period, on standardised tests of reading, language and mathematics.

There was a strong association between the degree to which principals were central in teachers' advice networks and school performance. In contrast, there was no independent association between a school's performance and the extent to which teachers reported other teachers as sources of advice (Friedkin & Slater, 1994). This study is important because the measure of leadership is derived from followers' reaction to it (they seek advice), it investigates perhaps the most important source of leadership influence in schools (attributed expertise) and it links leadership to student outcomes.

I conclude this discussion of the second concept of distributed leadership with critical reflections on its advantages and disadvantages for the study of the linkages between leadership and student outcomes. On the positive side, the concept embraces the social dimension of leadership by elaborating the particular influence processes that distinguish it from other types of influence such as force, coercion and manipulation. One of those influence processes involves the power of ideas and argument i.e. persuasion. This source of

influence is important in schools where the professional culture typically constrains reliance on positional authority.

Another positive feature of this second concept of distributed leadership is its inclusion of follower response in the definition of leadership. Strictly speaking, if there is no change in follower thought or action, then there has been no leadership. On this account of leadership, researchers must examine the consequences of leadership attempts, for both other adults and for students themselves.

On the negative side, this second concept of "leadership as distributed influence" lacks any educational content, and as such, provides little guidance to the types of leadership that are more or less likely to influence teachers in ways that make a difference to students. The challenge for those interested in improved student outcomes is not to increase the amount of leadership or change its distribution, but to do so for those types of leadership that are most likely to improve student outcomes. There is little point in more teachers exercising more influence over one another if the content of their leadership does not deliver benefits for students (Timperley, 2005). Much of the knowledge needed to identify and specify the types of leadership task that are more or less likely to deliver such benefits is found in the educational and not in the leadership literature (Robinson, 2006). A concept of distributed *educational* leadership requires a close integration of a defensible account of leadership with the best evidence available about the type of activity that benefits students.

A second possible limitation of this concept of distributed leadership for the study of educational outcomes is that it overlooks some of the ways in which leadership is leadership is exercised indirectly rather than through direct interpersonal influence processes. All three sources of leadership influence identified by Fay (acceptance of positional authority; response to requisite personal characteristics and acceptance of reasonableness of requests and ideas) suggest that leadership influence is exercised through direct face-to-face contact.

While this type of leadership is of central importance, it neglects some of the more indirect ways in which educational leaders make critical contributions to teaching and learning *by creating the conditions* that enable others to think or act differently. This type of leadership is often described as empowerment (Fay, 1987). In the meeting of science teachers discussed earlier, Mary exercised influence by not only requesting staff preparation and chairing the meeting. She structured the task through the provision of notes about the assessment results.

 Similarly, while Lee's leadership involved face to face persuasion, his interpersonal influence was greatly enhanced by his presentation of information and ideas via computer-generated tables and graphs. If those tools are shared with staff in other departments, and they change aspects of their assessment practice as a result, then Lee's leadership of those staff would have required no face-to-face interaction with them at all.

If leadership is restricted to face-to-face influence processes, we miss the many ways in which leadership is exercised through the creation of the

conditions, including the tools, which change how people approach work activity. This is why Spillane insists that distributed leadership is more than the aggregation of the leadership acts of either individuals or interacting individuals (Spillane, 2006; Spillane et al., 2004). Even a focus on leader-follower interactions is insufficient, because it neglects the ways in which those interactions are structured by aspects of the situation, including the tools that communicate task-relevant knowledge and guide practice.

Empirical research on the role of tools in distributed leadership practice is in its infancy. Tools and their associated routines are crucial to the scale up of instructional reforms, since they free leadership influence from the space and time constraints associated with face-to-face engagement. The importance of tools in the leadership of the improvement of teaching and learning was a key finding of a recent synthesis of 17 evaluations of initiatives that had resulted in positive gains in student academic and social outcomes (Robinson & Timperley, 2007). A careful analysis of all the leadership practices reported in the evaluations resulted in the derivation of six leadership dimensions, one of which involved the design and use of "smart tools". Robinson and Timperley (2007) describe smart tools as having two distinguishing features: they incorporate a valid theory of the task for which they were intended and they are well designed with respect to such qualities as addressing the limits of users' working memory (Mayer & Moreno, 2003).

If links are to be made with student outcomes, distributed leadership researchers must go beyond analyses of tools as a constituent of distributed

leadership activity and ask normative questions about the adequacy of the tools which are shaping teaching and administrative practice - hence the importance of the distinction between tools and "smart" tools. Leadership through the design and use of tools, like any form of leadership influence, may or may not contribute to improved student outcomes. For example, many authors have argued, and there is some empirical evidence to support their argument, that the theory in many teacher evaluation tools (e.g. evaluation policies and classroom observation checklists), lacks validity in terms of the goal of improved teaching and learning (Davis, Ellett, & Annunziata, 2002; Ellett & Teddlie, 2003; Sinnema & Robinson, 2007).

Thus, while the inclusion of tools and other aspects of the situation in the concept of distributed leadership is to be welcomed, a stronger normative framework for evaluating their educational merits is needed if analyses of distributed leadership through tool design, adaptation and use are to contribute to a greater understanding of its role in the improvement of teaching and learning.

In summary, this second concept of distributed leadership as distributed influence recognises the essentially social dimension of leadership. It draws attention to its consequences and thus helps us distinguish between leader-follower interactions and those interactions that produce change – a determining feature of what counts as leadership. More recent accounts of distributed leadership have extended the unit of analysis from that of leader – follower to the interaction between leader, follower and aspects of the situation including the tools which guide and regulate teachers' work. If the tools incorporate weak

theories of the task they are intended to support, or are badly designed, they will limit teachers' ability to improve student outcomes. If, on the other hand, they are smart tools, in the sense previously explained, then they will enhance their chances of making a positive difference. The study of the design and use of such tools becomes, therefore, an important part of the study of the links between distributed leadership and student outcomes.

Distributed Leadership: Descriptive or Normative?

In this section, I argue that distributed leadership is both a descriptive and a normative concept. I further argue that if distributed leadership research is to make stronger links with student outcomes, it needs to be informed by a normative theory that is grounded in our knowledge of the conditions that teachers require to improve learning and teaching.

On several different accounts of leadership, the fact of its distribution is true by definition. Even under the most restrictive definitions of leadership, as when it is associated with those in positional authority, leadership is distributed when more than one person holds a formal leadership position. When leadership is defined less restrictively, as an emergent property of the interaction of leaders, followers and the situation, the inevitability of leadership distribution becomes even more obvious (Gronn, 2000).

Given that leadership invariably takes a distributed form, descriptive research involves studying how it is distributed in particular contexts and the antecedents and consequences of such distribution. Some of the descriptive research questions that are suggested by the prior discussion include: To what extent

does the pattern of distribution follow the contours of task relevant expertise? What do teachers report about the sources of in-school influence on selected aspects of their practice? To what extent do tools feature in those reports? Are the influential tools smart tools?

The concept of distributed leadership is used normatively when there is an implicit or explicit implication that it constitutes a desirable or effective form of leadership. For those committed to forging stronger links between distributed leadership and the improvement of schooling and teaching, effectiveness is cashed out in terms of an account of the particular qualities of distributed leadership that promote such improvement.

In a recent study of distributed leadership in seven New Zealand primary schools participating in a literacy initiative, Timperley identified some of the qualities of distributed leadership that discriminated between high and low gain schools (Timperley, 2005). With respect to expectations, teacher leaders in the two high gain schools communicated their expectation that the teachers would work together to reduce the gap between national benchmarks and each student's current reading achievement. The expectations of the leaders in the five low gain schools were that teachers would implement the literacy programme.

The leaders also differed in their use of data. In high gain schools, leaders used disaggregated data to help teachers make connections between how they taught reading and the achievement of their own students. In low gain schools

data were aggregated in ways that protected the privacy of each teacher's class results.

Analysis of transcripts of meetings also showed differences in leaders' problem-solving strategies. In the high gain schools, leaders were more willing to identify problematic teaching practice and challenge the group to come up with alternatives. By contrast, teacher leaders in low gain schools avoided discussion of teaching effectiveness, as they were reluctant to led teacher change.

This study clearly shows that identical structures of leadership distribution can have very different consequences for students depending on the cultural norms of the group, and the knowledge and skills of those in the leadership roles. As Timperley says, "Distributing leadership over more people is a risky business and may result in the greater distribution of incompetence. I suggest that increasing the distribution of leadership is only desirable if the quality of the leadership activities contributes to assisting teachers to provide more effective instruction to their students, and it is on these qualities that we should focus" (Timperley, 2005, p. 417). If researchers did focus on these qualities, then we would have stronger task- specific normative theories about how distributed leadership could make a greater impact on student outcomes.

Unfortunately, many of the normative claims made for distributed leadership are grounded in theories of power rather than in theories of teaching and learning. Distributed leadership is seen as desirable because it counters a concentration of power any authority in the hands of the principal or senior management team. Goldstein, for example, in an empirical study of a district

mandated shift to peer-assisted summative teacher evaluation, uses the wider

distribution of power as the normative justification for a more distributed

approach to teacher evaluation (Goldstein, 2003). Her data showed that rather

than take full responsibility for the summative evaluation, peer evaluators

collaborated with principals in making the final judgment about the staff they had

evaluated. She is critical of this failure to realise the potential of the policy for full

transfer of power to the peer evaluators:

> While collaboration is a legitimate approach to leadership, the term itself is
>
> pregnant with ambiguity, and allowed for a drift away from teacher jurisdiction
>
> for teacher evaluation. However attractive the shared or collective model may
>
> be, institutional theory and prior research on teacher leadership policies
>
> suggest that the shared model may be just a stop on the way back to principal
>
> jurisdiction for teacher evaluation [in this school district]. This possibility
>
> highlights the ongoing challenge to distributing leadership in public education
>
> (Goldstein, 2003).

Harris is also a strong advocate of the potential of distributed leadership for

power equalisation and pays particular attention to the features of school culture

and micro politics that may impede such shifts (Harris, 2005).

Some advocates of distributed leadership provide a second related

justification in terms of the potential for distributed leadership to make more

expertise available to staff, especially in instructional areas. As Harris puts it

"distributed leadership means multiple sources of guidance and direction,

following the contours of expertise in an organisation, made coherent through a common culture" (Harris, 2005).'

What are the implications of these two types of normative argument for learning more about the relationship between distributed leadership and student outcomes? First, arguments about more democratic forms of school organisation and the importance of teacher empowerment are, in themselves, inappropriate grounds for advocating greater distribution of leadership in schools. They are inappropriate because the ethical imperative of school leadership is to do what is in the interest of children, not what is the interest of the staff. The point and purpose of school leadership is not to run a democratic staff room or to provide multiple opportunities for collaboration or teacher leadership. It is to develop and sustain the type of leadership that delivers improved learning for students on outcomes that are valued by them and their communities. Whether or not particular forms of leadership distribution promote such outcomes is an open empirical question to be addressed through both context-specific inquiry and research generalisation.

The research on transformational leadership provides a good starting point for inquiry into these issues as there is some overlap between the broad concept of distributed leadership and transformational leadership. In the two main research programmes on transformational leadership in education, teachers are asked, among other questions, to report on the extent to which their leaders build cultures and structures to foster collaboration. Some of the survey items used to assess this aspect of transformational leadership include "delegates leadership

for activities critical to achieving goals" and "ensures we have adequate involvement in decision making" (Leithwood & Jantzi, 1999; Mulford, Silins, & Leithwood, 2004).

The outcomes-linked evidence that is available suggests that while transformational leadership has a moderate impact on teacher attitudes and satisfaction, its impact on students' affective and achievement outcomes is very small. A recent meta-analysis of five studies which included measures of both transformational leadership and student outcomes showed that the average effect of transformational leadership on student outcomes is less than 0.2 - a result that is usually interpreted as indicating a very small effect (Robinson et al., in press).

One of these five studies also included measures of both principals' and teachers' leadership, enabling comparison of the two types of leadership (Leithwood & Jantzi, 2000). With student background factors controlled, both forms of leadership had very small impacts on student outcomes and the effect of teacher leadership was half that of principals. While such limited evidence does not justify a rejection of the possibility that distributed leadership delivers educational benefits, it does suggest, as Timperley has shown, that the link between the two is by no means assured.

A second argument for distributed leadership is that it makes more expertise available to those carrying out the wide range of educational tasks now demanded of schools. Distributed leadership can make more expertise available to staff if those with relevant expertise are willing and able to exercise leadership,

and if colleagues are willing and able to be influenced by them. Once again these conditions are far from automatic. Several writers have discussed how strong egalitarian norms in teacher culture militate against public identification of expert teachers and the use of rigorous methods for their selection (Little, 1982; Timperley, 2005). In addition, as Harris has pointed out, principals may be reluctant to provide the authorisation that distributed leadership requires if it is to challenge and change those features of teacher practice that work against the improvement of learning and teaching.

Discussion and Conclusion

Research on distributed leadership in schools, like research on educational leadership itself, is only very loosely coupled to research on the improvement of teaching and learning. This separation has meant that theoretical and empirical work in distributed leadership does not yet serve the goal of educational improvement, even though that goal is espoused by many writers in the field.

I discussed the shifts that would more strongly align the field to this goal by reviewing two conceptual frameworks that underpin much of current research on distributed leadership. The first framework treats distributed leadership as the performance of those tasks which researchers, usually on the basis of an organisational theory, have designated as leadership tasks. The empirical research that adopts this concept of leadership distribution has been mostly concerned with identifying those who perform such tasks within schools and thereby identifying patterns of leadership distribution.

While the association of leadership with task performance has the advantage of firmly locating leadership in educational activities, the selection and specification of those tasks needs to be guided by outcomes-linked evidence about the particular qualities of task performance that are required to achieve shifts in academic and social outcomes for students. Some of the knowledge needed for the selection of those leadership tasks with more powerful effects on students can be found in recent research on the impact of school leadership on student outcomes (Marzano, Waters, & McNulty, 2005; Robinson et al., in press). Such research is usually not designed, however, to discover the qualities responsible for the impact on students. This is the information that researchers on distributed leadership need in order to specify and measure task performance in ways that discriminate between task performances that are more and less likely to make an impact.

Such detail is much more likely to be found in empirical research on the educational tasks themselves, than in research on leadership effects. Take the leadership of teacher professional learning and development. While the leadership literature identifies this leadership task as possibly the most powerful way that leaders can improve student outcomes, it is the outcomes-linked evidence found in recent research on professional learning that identifies the qualities that are required if this task is to have an impact on student outcomes. The same case can be made for any leadership task that has a strong educational content.

A second shift that would more strongly align research on distributed leadership with the goal of improving student outcomes is greater attention to the influence processes that lie at the heart of leadership. Those processes, in fleeting or more permanent ways, change how others think and act. A critical research agenda for researchers in distributed leadership involves the study of the conditions under which teachers, especially those without positional authority, succeed in influencing their colleagues in ways that benefit students.

The strength of the second concept of leadership, which I called "leadership as distributed influence" is that it does focus on leadership as an influence process and more explicitly connects the study of leadership to the reaction of the influence targets. It lacks the focus of the previously discussed concept of distributed leadership, however, on the content and purpose of leadership. While a focus on more generic leadership processes will tell us more about the dynamics of teacher- teacher influence, one can not tell whether such influence will benefit students unless the educational content and purpose of the influence is also specified.

The obvious conclusion, therefore, is that research which integrates both concepts of distributed leadership, in suitably modified form, is likely to be a productive way of forging stronger links between distributed leadership and student outcomes.

References

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*, 347-373.

Davis, D. R., Ellett, C. D., & Annunziata, J. (2002). Teacher evaluation,

leadership and learning organizations. *Journal of Personnel Evaluation in*

Education, 16(4), 287-301.

Ellett, C. D., & Teddlie, C. (2003). Teacher evaluation, teacher effectiveness and

school effectiveness. *Journal of Personnel Evaluation in Education, 17*(1),

101-128.

Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and*

performance. Cambridge, Mass.: Harvard Education Press.

Fay, B. (1987). *Critical social science: Liberation and its limits*. Cambridge: Polity.

Friedkin, N. E., & Slater, M. R. (1994). School leadership and performance: A

social network approach. *Sociology of Education, 67*(2), 139-157.

Gibb, C. A. (1954). Leadership. In G. Lindzey (Ed.), *Handbook of social*

psychology (Vol. 2, pp. 877-917). Reading, MA: Addison-Wesley.

Goldstein, J. (2003). Making sense of distributed leadership: The case of peer

assistance and review. *Educational Evaluation & Policy Analysis, 25*(4),

397-421.

Gronn, P. (2000). Distributed properties: A new architecture for leadership.

Educational Management and Administration, 28(3), 317-338.

Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9*(2), 157-191.

Harris, A. (2005). Leading or misleading? Distributed leadership and school improvement. *Journal of Curriculum Studies, 37*(3), 255 - 265.

Leithwood, K., & Jantzi, D. (1999). Transformational school leadership effects: A replication. *School Effectiveness and School Improvement, 10*(4), 451-479.

Leithwood, K., & Jantzi, D. (2000). Principal and teacher leadership effects: A replication. *School Leadership and Management, 20*(4), 415-434.

Leithwood, K., & Levin, B. (2005). Assessing leadership effects on student learning. In C. G. Miskel & W. K. Hoy (Eds.), *Educational leadership and reform* (pp. 53-76). Greenwich, CT: Information Age Publishing Ltd.

Leithwood, K., & Riehl, C. (2005). What do we already know about educational leadership? In W. A. Firestone & C. Riehl (Eds.), *A new agenda: Directions for research on educational leadership*. New York: Teachers College Press.

Levacic, R. (2005). Educational leadership as a causal factor: Methodological issues in research on leadership 'effects'. *Educational Management Administration & Leadership, 33*(2), 197-210.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal, 19*(3), 325-340.

Marzano, R. J., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results.* Auroroa, CO: ASCD and McREL.

Mayer, R., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist, 38*(1), 43-52.

Mulford, W., Silins, H., & Leithwood, K. (2004). *Educational leadership for organisational learning and improved student outcomes*. Dordrecht: Kluwer Academic.

Robinson, V. M. J. (2001). Embedding leadership in task performance. In K. Wong & C. Evers (Eds.), *Leadership for quality schooling: International perspectives* (pp. 90-102). London: Falmer Press.

Robinson, V. M. J. (2006). Putting education back into educational leadership. *Leading & Managing, 12*(1), 62-75.

Robinson, V. M. J., Lloyd, C., & Rowe, K. J. (in press). The impact of leadership on student outcomes: An analysis of the differential effects of leadership type. *Educational Administration Quarterly*.

Robinson, V. M. J., & Timperley, H. (2007). The leadership of the improvement of teaching and learning: Lessons from initiatives with positive outcomes for students. *Australian Journal of Education, 51*(3), 247-262.

Sinnema, C., & Robinson, V. M. J. (2007). The leadership of teaching and learning: Implications for teacher evaluation. *Leadership and Policy in Schools, 6*(4), 319-343.

Spillane, J. P. (2006). *Distributed leadership.* San Francisco, CA: Jossey-Bass.

Spillane, J. P., Camburn, E. M., & Pareja, A. S. (2007). Taking a distributed

perspective to the school principal's workday. *Leadership and Policy in

Schools, 6*(1), 103-125.

Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of

leadership practice: A distributed perspective. *Journal of Curriculum

Studies, 36*, 3-34.

Timperley, H. (2005). Distributed leadership: Developing theory from practice.

Journal of Curriculum Studies, 37(4), 395–420.

Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning:

An alternative policy approach to strengthening valued outcomes for

diverse learners. In G. Kelly, A. Luke & J. Green (Eds.), *Review of

Research in Education* (Vol. 32). Washington, D.C.: Sage.

Yukl, G. A. (1994). *Leadership in organizations* (3rd ed.). London: Prentice-Hall

International.