Putting Education Back into Educational Leadership

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ABSTRACT: Educational leadership research is increasingly focused on the role that school leaders play in the improvement of teaching and learning and on the relationship between various types of leadership and student outcomes. This new focus represents a substantial shift from the prior emphasis in educational leadership research on the generic leadership and management skills of school leaders. Generic leadership and management skills are those that apply in any kind of organisation.

This paper begins by examining the extent to which existing research and theory on educational leadership provides high quality information about how to increase the impact of school leaders on a range of valued student outcomes. Having concluded that this body of research is only tangentially relevant to the issue, an alternative approach to the development of theories of educational leadership is proposed. Employing the logic of backward mapping, the author argues that theories of educational leadership should be grounded in our best evidence about effective teaching i.e. teaching which has positive impacts on students. The next step in this backward mapping process involves identifying the classroom, school and policy conditions that enable and inhibit effective teaching. Using this logic, an agenda for educational leadership is developed which comprises strengthening the conditions that enable effective teaching and weakening the impact of those that inhibit or prevent it. The author then briefly considers the leadership content knowledge needed to pursue this agenda, and the major challenges involved.

INTRODUCTION

The tide is turning in research on educational leadership. After 15 years of focus on the effective management of schools, the spotlight is now going on the leadership of teaching and learning (Elmore, 2004, Firestone & Riehl, 2005). School leaders should not only run efficient, safe and caring learning environments - they should also be leaders of teaching and learning. This was the conclusion of a Taskforce of the American Educational Research Association in their report on a new agenda for research in educational leadership. In the introduction to their report the chairs wrote:

In the past, educational leaders were judged routinely on their effectiveness in managing

fiscal, organizational, and political conditions in their schools and school systems. In essence, they were expected simply to set the stage for student learning. Now leaders are increasingly being held accountable for the actual performance of those under their charge...Given growing expectations that leaders can and should influence learning, it is important to understand how leadership, learning, and equity are linked (Firestone & Riehl, 2005, p. 2).

In many ways, this new emphasis is to be welcomed. Leadership of teaching and learning is what senior staff say they would like to do more of, if only student behaviour, staff crises, and numerous other tasks did not constantly demand their attention (Gibson, 2005; Hodgen & Wylie, 2005). As for many new expectations, however, there is the danger that this apparently simple and sensible challenge will turn out to be much more complex than anticipated. My purpose in this paper is to review the extent to which research on educational leadership provides school leaders with useful guides about what they need to know and do to make a difference to teaching and learning in their schools.

In answering this question, I begin with a brief overview of educational leadership theory and research, explaining why, until recently, it has provided little guidance about the leadership of teaching and learning. I then discuss a recent trend in research on educational leadership which shows much greater promise of providing insights into how principals and other school leaders can make a difference to the quality of teaching and learning in their schools. That trend has the potential to put education back into educational leadership - that is, to ground leadership in the core business of teaching and learning. This new research is helpful in two ways:

- 1. It tells us about what school leaders need to know and understand if they are to lead the improvement of teaching and learning.
- 2. It identifies some of the features of school and teacher culture which support principals or their designees in the leadership of teaching and learning

My argument is that there is a need to redirect research on educational leadership so that it makes stronger links with curriculum, pedagogy, assessment and student learning and gives less emphasis to what I call 'generic leadership'. Generic leadership research provides important guidance about the influence processes involved in leadership and about the character and dispositions required to exercise the particular type of influence we call leadership (Fay, 1987). It provides little or none of the knowledge base needed to answer questions about the direction or purpose of the influence attempt. In short, while generic leadership research can inform us about how to influence, and about the values that should inform the influence process (e.g. democratic, authoritative, emancipatory) it is silent about what the focus of the influence attempt should be. It is the research base on student and teacher learning, and on effective teaching in particular, that can give content to otherwise abstract leadership processes. There is a need for stronger linkages between this knowledge base and the research on principal and teacher leadership (Stein & Spillane, 2005, p. 29).

The Traditional Literature on Leadership

The starting point for research on educational leadership has typically been a theory, based on a

particular philosophy or set of values, about the qualities of good or effective leadership (Bass, 1990; Bryman, 1996). There are numerous such theories – so many in fact, that Ken Leithwood in a recent synthesis of research on the impact of leadership on student learning warned of the "need to be skeptical about the 'leadership by adjective' literature" (Leithwood, Louis, Anderson & Wahlstrom, 2004, p. 8). Some examples of currently influential leadership adjectives include: transactional, transformational, authentic, and sustainable leadership.

The values and philosophical positions that are expressed by these theories are typically concerned with qualities of leader-follower relations. For example, theories of transactional and transformational leadership describe contrasting ways in which leaders motivate their followers (Bass, 1990). A considerable proportion of the educational leadership literature consists either of debates about the merits of these and other leadership theories, or of empirical research assessing the extent to which educational leaders exemplify the qualities of the selected theory. Such research usually involves the completion by teachers, parents or school leaders themselves, of standardised leadership questionnaires that are conceptually linked to the chosen theory of leadership. Two linked research programmes, that of Mulford and Silins in Australia and Ken Leithwood in Canada, are exceptional in their attempt to go beyond the assessment of leadership (in their case transformational) to test its impact on student outcomes (Leithwood & Jantzi, 2005; Leithwood & Louis, 1998; Silins & Mulford, 2002).

The scarcity of research on the impact of school leadership on students is revealed by the recent review conducted by the Institute of Education's specialist evidence-based policy unit (Bell, Bolam & Cubillo, 2003). The initial scoping phase for the review identified almost 5000 studies on aspects of school principalship or headship that were published between 1988 and 2002. Of these 5000, eight studies included specific reference to such student outcomes as attitudes, behaviour or achievement. There are other recent compilations which have located more research on the links between leadership and student outcomes (Hallinger & Heck, 1998; Leithwood et al. 2004; Marzano, Waters & McNulty, 2005; Witziers, Bosker & Kruger, 2003). Marzano et al. located 70 such studies but 60 of them were unpublished American doctoral dissertations or conference papers. Witziers et al. located 37 published studies of the direct effect of leadership on student achievement and the reviews of Hallinger and Heck and Leithwood include a similar number of studies reporting both direct and indirect effects. These compilations all report a paucity of empirical evidence about the impact of leadership on the core business of schooling.

Questions about the impact of leadership on a range of student outcomes are difficult to answer because there is a very long causal chain between how a principal thinks and acts and student outcomes. This may help explain why the authors of the five compilations noted above have drawn very different conclusions about the overall impact of leadership on student outcomes. Witziers et al., for example, conclude that the impact is minimal, Hallinger and Heck and Leithwood that it is modest but important, and Marzano et al. that it is quite substantial. The discrepancy between these conclusions is well illustrated by the two meta-analyses of Marzano et al., with the former author concluding that leadership makes an impact on student outcomes that is approximately *twelve times greater* than that suggested by the latter.

Limitations of the Traditional Approach

The preceding brief discussion of educational leadership research has shown that it has produced limited evidence about the links between leadership and learning and that the evidence to date is very inconclusive. A possible reason for this state of affairs is the logic used to link educational leadership with student outcomes. Traditional theories of leadership are grounded in value positions about leader-follower relationships and about how to accomplish important generic tasks such as setting and achieving challenging goals, and promoting organisational learning. Questions about how these theories might impact student achievement are asked *after* the theories have been developed. Given that leadership theory development has not been grounded in the details of effective teaching and learning, it is not surprising that leadership appears to make little difference to these outcomes.

I suggest the logic should be reversed, so that theories of educational leadership are the outcome and not the starting point of research on the relationship between leadership and achievement. The starting point for such research should be our best evidence about how teachers make a difference to the achievement of their students (Alton-Lee, 2003; Darling-Hammond & Bransford, 2005). The next step should then be a backward mapping process which identifies the conditions that need to be developed so that teachers can make a bigger positive difference to their students (Elmore, 1979). These conditions are the clues to the leadership practices that matter. Once leaders have access to that knowledge base they know what the focus of their leadership efforts needs to be if they are to improve teaching and learning.

There is considerable evidence, for example, that students need multiple opportunities to learn over a relatively short period of time if they are to learn and remember important new ideas and concepts (Nuthall & Alton-Lee, 1993; Walberg, 1999). A backward mapping logic invites us to consider the conditions which enable teachers to provide such opportunities. One of many such conditions is a focused curriculum which enables teachers to explore key ideas in depth over a whole instructional unit. It follows, therefore, that two relevant leadership practices are developing or negotiating a classroom, school or departmental curriculum around a few key ideas, and allocating time in ways that enable teachers to provide multiple opportunities for students to gain a deep understanding of those ideas.

Once the conditions for effective teaching are understood, then leadership research can investigate the knowledge, skills and dispositions that leaders need to establish those conditions in their schools and to remove or weaken those that are detrimental to effective teaching (Prestine & Nelson, 2005).

This backward mapping process should produce theories of educational leadership that are much more firmly grounded in teaching and learning than those whose origins lie in preferred leadership values, styles or characteristics. The validity of the resulting theory would, as for any other, need to be established by showing that leaders who engage in the specified practices have a greater impact on student outcomes than those who do not. In other words, the process of testing the impact of the theory on students is exactly the same as that used in what I have called traditional educational leadership research. It is the process of theory development that differs, because, in traditional research on educational leadership, it involves a forward mapping logic, while the approach I am arguing for in this paper calls for theory development by backward

mapping from our best evidence on effective teaching.

There is an additional argument for focusing educational leadership more strongly on teaching and learning. Recent research has confirmed what parents knew all along – that teachers make a substantial difference to the achievement of students (Cuttance, 1998; Muijs & Reynolds, 2001; Nye, Konstantopoulos & Hedges, 2004). In the seventies and eighties, the focus of the educational research community was on the search for school effects on achievement, with the results showing that such effects were minor compared to the impact of social background (Stringfield & Herman, 1996). One reason for these negative findings was that, in searching for differences between schools, the differences in achievement within schools were averaged out. With the more sophisticated statistical methods now available, we have learned from several studies in the USA (e.g. Nye et al. 2004), Australia (Cuttance, 1998) and the UK (Mujis & Reynolds, 2001), that teacher effects on achievement in particular curriculum areas may far outweigh school effects. This new research suggests that the most important work of school leaders is in recruiting, developing and sustaining excellent teachers and teaching – in short, being the leaders of teaching and learning.

In summary, the approach to educational leadership research I am advocating begins, not with the traditional literature on leadership, but with robust research findings on effective teaching. Those findings provide the clues to the leadership practices and dispositions that are required to develop and sustain effective teaching. If theories of educational leadership described those practices and dispositions, the relationship between leadership and student achievement would probably be substantial.

I turn now to the recent leadership research, which tells us more than traditional approaches, about how leadership can make an impact on teaching and learning. It involves a shift from the study of generic leadership to the study of educational leadership, by which I mean, the leadership of teaching and learning.

From Generic to Educational Leadership

One of the reasons why there has been so little emphasis, until recently, on the educational role of the principal in particular, is the dominance of the idea of generic management. Generic management refers to the belief that the knowledge and skills required to run one type of organization are readily transferred to other types (Whitley, 1989; Pollitt, 1990). Under a generic management approach, creating a vision in a corporate environment has sufficient in common with vision building in a school, that it is useful to have school leaders attend business courses on vision building. Similarly, leading and motivating staff in the business and education world are thought to be sufficiently similar to enable educational leaders to apply lessons from the business world to their own school.

With the trend to school self management in the late eighties and nineties, the pressure was on principals to learn these new business skills. There was little emphasis on updating and expanding their knowledge of curriculum, assessment and pedagogy (Stein & Nelson, 2003). It was assumed that, as experienced teachers, principals had sufficient knowledge of teaching and learning, and

that much of the work of instructional leadership would be delegated to senior staff. Principals' priorities were to get on with being good generic managers, through the development of a vision, excellent communication with all stakeholders and wise use of resources.

In the widely read professional journal 'Educational Leadership', Waters et al. (2004) write about leadership in a style that is typical of the generic approach. They list 21 leadership responsibilities that are characteristic of effective leaders – 16 of which are expressed in generic terms. Here are some extracts from their list:

Communication: establishes strong lines of communication with teachers and students.

Culture: fosters shared beliefs and a sense of community and cooperation.

Monitoring and evaluation: monitors the effectiveness of school practises and their impact on student learning (Waters et al. 2004, p. 49).

In order to be useful, such lists need to be infused with educational content – the generic 'strong lines of communication' needs to be integrated with educational knowledge about what needs to be communicated in order to advance particular educational goals. A strong and cohesive school culture is not in and of itself desirable – some cohesive school cultures, such as those where there are strong norms around the privacy of teachers' practice, are not conducive to instructional improvement (Elmore, 2004). Generic management can teach the importance of cohesive organizational culture, but it can tell us little about the characteristics of school cultures which advance educational ends. Similarly, generic management teaches educational leaders that regular educational evaluation is needed but it does not tell them how to do it. The following practical example, based on a real situation, makes this point:

A principal has planned, as part of his regular reporting cycle, to report to his Board on achievement in writing. In preparing his report, he notes that in one class the teacher has claimed that 94% of the students have achieved the intended learning outcomes. He asks the teacher if the learning objectives she set are typical of those set for children of that age. He is assured by the teacher that the children are 'working at age appropriate levels' in writing (Robinson, 2004, pp. 39-43).

In the real situation on which this example is based, the leader did not have sufficient curriculum knowledge to recognise that the learning outcomes on which the children had been so successful were normally set for students who were about 18 months younger than those in this class. Table 1 identifies the knowledge needed to exercise effective leadership in this type of situation, and shows why generic management skills and knowledge are insufficient.

The first three skills exemplify generic management skills because they can be learned and exercised by those with little knowledge of curriculum and pedagogy. They are applicable to any leadership situation where there is a need for monitoring performance against some benchmark. The fourth skill is quite different, for the information obtained can only be evaluated accurately by those with the required curriculum knowledge. At this point leadership becomes embedded in the specifics of the educational task (Robinson, 2001). Generic management can teach us the questions to ask but not how to evaluate the answers we get.

My emphasis on a leader's knowledge of pedagogy, learning and curriculum should not be taken as a denial of the worth of what I have called more generic management skills. After all, three of the four skills in Table 1 represent this more generic category. My point is that they can

not be harnessed to serve educational goals if they are not integrated with specific educational knowledge.

TABLE 1: SKILLS AND KNOWLEDGE REQUIRED TO MONITOR AND EVALUATE ACHIEVEMENT

	Leadership Skills	Generic	Specific
1.	Ask teacher for information about students' achievement	$\sqrt{}$	
2.	Recognise absence of information about benchmark	\checkmark	
3	Ask follow-up questions of teacher to find out what the		
	benchmark was	$\sqrt{}$	
4.	Use curriculum and pedagogical knowledge to evaluate the		
	adequacy of teacher's answers.		$\sqrt{}$

As the expectation grows that schools will help all students achieve in cognitively demanding tasks, the limitations of generic leadership become more obvious. Fortunately, educational researchers and policy makers are now recognising that educational leadership is not a generic leadership process that happens to take place in educational organizations. Richard Elmore of Harvard University is at the forefront of this shift from generic to educational leadership. He goes so far as to define educational leadership as the 'guidance and direction of instructional improvement' (Elmore, 2000, p. 13). This definition sets a very ambitious agenda for school leaders and programmes of leadership preparation. The goal is no longer to develop a cohesive culture, have strong communication channels with staff and students and monitor and evaluate instruction. The new goal requires leaders to do all those things in a manner that improves teaching and learning. What type of knowledge is needed to lead such instructional improvement? How much of it needs to be in the head of the principal rather than in the heads of curriculum leaders and advisors both inside and outside the school?

For reasons I have already explained, traditional research on educational leadership provides few answers to this question. More recent research on the leadership of instructional improvement is beginning to address this issue by exploring what leaders need to know in order to take on this role. In 2003, a landmark study was published in the United States on the knowledge base used by leaders of instructional change (Stein & Nelson, 2003). One of the three cases included in the study was of an elementary principal who used formative teacher evaluation as a context for the improvement of maths instruction. It is important to note that this principal had not liked maths and had taken the minimum required courses at high school and college. What had inspired her

efforts was a course in maths education for principals at which she herself had had the opportunity to discuss and learn key math concepts.

The principal's vision for improved maths instruction involved more emphasis on the exploration of mathematical ideas. This vision served as her reference point for evaluating the quality of the maths lessons she observed and the adequacy of her teachers' understanding of mathematical exploration. The depth of the principal's knowledge of mathematical exploration enabled her to make fine discriminations between more and less adequate teacher understandings and to figure out how to help her teachers to foster mathematical exploration. This is how she described the understanding of one of her staff after she had discussed with her what she had observed her teach:

It didn't sound like [the teacher] really understood the depth of that question [about mathematical exploration]. [It] was more like [she thought] you're moving things around so you're exploring. But what is the mathematical thinking that goes behind what it is that you're doing? That was the next layer that I wasn't sure she understood (Stein & Nelson, 2003, p. 428).

It was the principal's detailed understanding of both the concept of mathematical exploration and of its pedagogical implications that enabled her to recognise that her staff misunderstood mathematical exploration as manipulating materials, working in pairs or making choices about how to complete a lesson, rather than as flexible and informal testing of mathematical ideas.

In addition to her knowledge of mathematical concepts and pedagogy, the principal drew on her knowledge of how teachers learn to teach mathematics when she designed professional development opportunities for her staff. Once again, generic knowledge of adult learning or professional development would have been insufficient. She drew, in addition, on her own experience of exploring mathematical ideas in a teacher workshop during which she was required to solve a maths problem in two different ways. In summary, the principal's knowledge of mathematics, of how children learn mathematics, of mathematical pedagogy and of how teachers learn to teach mathematics enables her to turn the teacher evaluation process from an exercise in management compliance to an exercise in teacher learning and instructional improvement.

The Problem of Curriculum Breadth

The above case raises a number of questions about the scope and depth of curriculum and pedagogical knowledge that is needed to lead instructional improvement across the curriculum. Does it suggest that leaders who have weak mathematical content knowledge cannot lead instructional improvement in maths? What are the implications for principals of large schools who delegate instructional improvement in math to a head of department or faculty? How realistic is it to expect a principal to be expert across several curriculum areas?

The traditional focus on generic leadership means there are few research-based answers to these important questions. On the basis of their three cases, however, Stein and Nelson (2003) offer the following tentative advice. They argue that principals need in-depth and up to date knowledge of at least one subject area. In-depth knowledge comprises knowledge of subject matter, (including understanding of the rules of evidence, modes of inquiry and key concepts in a

subject), and pedagogical content knowledge, comprising a detailed understanding of how students' knowledge of a subject develops, and how to represent the subject matter to students in ways that promote their learning.

If principals are going to lead pedagogical change, they also need to know how to promote the learning of their teachers. This includes knowing how teachers understand the subjects they are teaching and the extent to which those understandings are consistent with the school's vision for the subject. For example, if curriculum plans call for promoting scientific reasoning, principals need to be able to judge whether teachers' understandings are consistent with that vision. This information should then be used to design learning experiences for groups of teachers that create a bridge between their current conceptions and those that are required to meet an agreed curriculum vision.

What breadth of knowledge is it reasonable to expect principals and senior management staff to have? Surely the depth of mathematical knowledge shown by the principal in this case cannot be replicated across all curriculum areas? Stein and Nelson (2003) propose that one solution to the problem of breadth of expertise is the delegation of instructional leadership in selected curriculum areas to other staff. This is the familiar strategy of distributed leadership (Spillane, Diamond & Loviso, 2003; Spillane, Halverson & Diamond, 2004). While this is an obvious solution, the problem still remains of how a principal without in-depth knowledge of a curriculum area can recognise, let alone evaluate, the expertise of staff to whom curriculum leadership has been delegated.

Stein and Nelson (2003) propose that principals with an in-depth knowledge of at least one subject area are in a much better position than those without such knowledge, to recruit, support and evaluate instructional leadership in their non-specialist areas. They know the qualities to look for and develop in their staff and the type of professional development process that will help their teachers to learn what is required. An additional expertise required by those who lead the improvement of teaching and learning is what Earl and Katz (2002) call assessment literacy. Principals need sufficient understanding of the subject and of how it is assessed to collaborate with their staff in the analysis and use of student achievement data to improve the teaching programme

In summary, educational leadership is deeply embedded in subject specific knowledge, and leaders who have such knowledge will be more confident in and capable of leading instructional improvement. This point needs to be appreciated by those politicians and policy makers who are asking senior staff to strengthen their leadership of teaching and learning. Such staff need multiple opportunities to update and deepen their curriculum knowledge if they are to develop this aspect of their role. Researchers also need to refocus on the leadership of teaching and learning so that we have better answers to such questions as whether the skills and knowledge required for instructional leadership in one curriculum area are transferable to others.

Avoiding Utopia through a Reality Check

Researchers who advocate new approaches without demonstrating an appreciation of current realities risk being described as utopian and of alienating those they seek to influence. Such

criticism can be avoided by analysing the extent to which the current roles of school leaders, and of principals in particular, are compatible with the changes being advocated. Such analysis tells us a lot about the nature and ambitiousness of what is being advocated.

There are important mismatches between the context in which principals currently work and the conditions that would enable them to be stronger instructional leaders.

The first concerns the scope of the principal's current job and the intensity of focus that is required to lead or oversee a successful programme of instructional improvement. Most principals already have a heavy workload, with administrative duties taking up considerably more hours per month than those of instructional leadership (Martin, Mullis, Gonzalez, Smith & Kelly, 1999; Wylie, 1999). If instructional leadership is the policy priority, then how will the existing workload of principals be reorganized to make this a reality? There is no one answer to this problem: part of it requires greater clarity from government officials about curriculum and assessment priorities, part of it lies in a more sophisticated infrastructure so that compliance requests can be met more easily, part of it lies in a ruthless elimination of change projects that have no demonstrated impact on valued student outcomes (Hess, 1999), and part of it lies in redesigning time-consuming school practices such as teacher appraisal so that they serve the goal of instructional improvement (Ellett & Teddlie, 2003).

The second mismatch between the call for principals to be more focused on instructional improvement and existing practice is that it is in tension with one of the most enduring features of school organization and culture - the loose coupling between the work of the classroom and the school organization (Orton & Weick, 1990; Weick, 1976). Richard Elmore (2004, p. 46) explains this mismatch as follows:

Detailed decisions about what should be taught at any given time, how it should be taught, what students should be expected to learn at any given time, how they should be grouped within classrooms for purposes of instruction and, perhaps most importantly of all, how their learning should be evaluated - resides in individual classrooms, not in the organizations that surround them.

The traditional justification for light oversight of classroom practices lies in the complexity and uncertainty of the teaching-learning relationship. In the absence of clear cause-effect relationships, each teacher must exercise professional judgment about what works best in their classroom with their particular students. This view of teaching means that what is led and managed is not instructional practice per se, but the structures and processes that surround it. Where leaders have focused on instructional improvement, they have done so, as Elmore (2004, p. 47) puts it, 'as a consequence of purely voluntary acts among consenting adults'. He claims that while a few heroic leaders have been able to mount demonstrably successful programmes of instructional improvement, these instances only prove the rule that oversight of teaching is not a priority for most school leaders.

Against this backdrop, how realistic is it to call for a tighter coupling between leadership and teaching? Recent research on teacher and professional learning and on school improvement is helpful in outlining a possible approach to a high trust, high commitment approach to effective instructional improvement. Here are some of the key messages for educational leaders who wish to take up this challenge:

- 1. Start with the curriculum area in which you have most knowledge (Stein & Nelson, 2003).
- 2. Collect shared and trusted evidence about patterns of student achievement on learning outcomes that are valued by you, your staff and community (Fitz-Gibbon, 1996).
- 3. Develop your own and teachers' skills in identifying the links between how they teach and what students learn (Fitz-Gibbon, 1996; Earl & Katz, 2002).
- 4. Acknowledge out of school influences on achievement but insist on focusing on variables that are within teachers' control.
- 5. Collaborate with staff to develop evidence-based practice and performance targets for what counts as improvement so that success and priorities are clear.
- Collaboratively design professional development opportunities that are directly focused on learning how to meet instructional and achievement targets (Cohen & Hill, 2000).
- 7. Focus teacher talk in collegial groups on records of student work and achievement and their implications for future instructional practice (Annan, Lai & Robinson, 2003; Timperley, 2005).
- 8. Use teaching practice and student work, rather than teacher satisfaction, as the criteria for evaluating the success of professional development (Ball & Cohen, 1999).
- 9. Protect instructional time and programme coherence (Brophy, 2001; Newmann, Smith, Allensworth & Bryk, 2001).

Conclusion

New policies make an impact when they change the practice of educators in ways that are intended by the policy. The call for school leaders to be leaders of teaching and learning is no exception. In this paper, I have examined some of what is involved in meeting this challenge.

First, school leaders need opportunities to extend and up-date both the breadth and depth of their pedagogical and pedagogical content knowledge. Principals, for example, cannot competently and confidently lead instructional improvement, even with substantial delegation of responsibilities, without in-depth and up-to-date knowledge of at least one curriculum area. Even though this specialist knowledge base is not directly transferable to other subject areas, it provides principals with a rich appreciation of the type and depth of expertise they need in other curriculum and instructional areas.

Second, school leaders need a balanced programme of professional preparation and development to support them in this new work. While there will always be a place for what I have called generic leadership, the balance between generic and educational leadership needs to shift in favour of the latter if school leaders are to get the learning opportunities they need to support this work. It is no longer helpful to assume that it is only classroom teachers who need to learn about teaching and learning.

Third, rather than treating instructional leadership as an additional responsibility, existing leadership practices need to be adapted so they are better aligned to the overall goal of instructional improvement. For example, teacher appraisal, as currently designed in many schools in the USA and Australasia, is a time consuming leadership activity which, as predicted by Weick's (1976) loose coupling thesis, delivers little in terms of opportunities for teachers to learn about their contribution to their students' learning (Davis, Ellett & Annunziata, 2002; Ellett & Teddlie, 2003; Halverson & Clifford, 2003; Sinnema, 2005). Such changes within schools need to be supported by realignment of state and national policies so that compliance requirements support rather than detract from principals' instructional leadership role.

Finally, the shift from generic to educational leadership has profound implications for research on leadership itself. We need theories of leadership that are firmly grounded in knowledge of the conditions that teachers need to promote their students' learning. Good educational leaders are those who have the skills, knowledge and dispositions to initiate and sustain those conditions. Whether or not the qualities of good leadership identified by such theories are the same as those identified by one or more of the generic theories is an interesting question that will not be answered until research on leadership and research on effective teaching are much more closely aligned.

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