What headteachers need to know about teaching and learning

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Over the last quarter of a century, the emphasis on accountability for student learning outcomes, and the findings from effective schools research, have served to draw attention to the role of heads as educational leaders. At the same time, the growing complexity of the role of the school head has meant that they have often been diverted into other roles associated with the running of the school and have had less time to devote to the core business of schools, namely teaching and learning.

With the emergence of the knowledge society it is likely that schools will come under constant pressure to find ways of improving learning outcomes for all students, and headteachers will be expected to provide the leadership required to bring about the needed transformation. This paper briefly considers what heads need to know about teaching and learning to be effective educational leaders. The discussion is structured around three key roles of school leaders, namely:

- leading and managing change

- motivating and managing people

- designing and aligning systems, processes and resources

Leading and managing change

A prime task of school heads is to exercise leadership of the kind that results in a shared vision of the directions to be pursued by the school, and to manage change in ways that ensure that the school is successful in realising the vision. In a world of increasingly rapid change, what is the terra firma on which a robust concept of the headteacher as a leader and manager of change can be built? Murphy (1999) has proposed that the profession should adopt school improvement as its centre of gravity. Placing school improvement at the centre of the profession ensures that the job of the head is pedagogically and educationally grounded, and tied directly to the core business of schooling. It requires heads who have a solid knowledge of the learning process and of the conditions under which students learn in the school setting. It also places a premium on knowledge about educational change and school improvement. In short, it emphasises the role of the head as a knowledge manager with respect to the core business of the school, namely teaching and learning, in a context of change and the ongoing imperative for improvement.

Motivating and managing people

There is overwhelming evidence from the literature on school effectiveness and improvement regarding the significance of the headteacher in establishing a culture within the school that promotes and values learning and that embodies realistic but high expectations of all students and teachers. This implies a commitment to organisational learning (ie learning within the specific context of the school and its school improvement agenda). Heads must therefore be knowledgeable about ways of promoting organisational learning that enhance simultaneously the motivation of staff, and their competence and capacity to engage in a process of ongoing development and improvement. They must provide staff with opportunities that extend well beyond traditional models of, and approaches to, professional development and in-service training. Effective professional learning involves intensive, sustained, theoretically-based yet practically-situated learning, with opportunities to observe good practice, to be involved in coaching and mentoring processes, and to take time for reflection (Fullan, 1991, 1993; Hargreaves & Fullan, 1991).

Designing and aligning systems, processes and resources

A key role of the head is to ensure that each of the elements that contribute to improved student learning outcomes is present, working effectively and in alignment with all other elements. The head is thus, as it were, the chief architect of the school, the one who has the overview of systems, processes and resources and how they combine to produce intended student learning outcomes.

This implies that the head is able to articulate the significance of all key elements, to justify their design and configuration, and to be in a position to make judgements regarding the operational effectiveness of each element and of the total impact of all of the elements as they function in combination with one another. When outcomes are not being realised, or when evidence accumulates that particular elements are not working effectively, the head is responsible for ensuring that the redesign work is carried out. This could mean minor readjustments but, in cases of endemic failure to reach required standards, is more likely to involve transforming the whole ecology of the school in order to obtain the desired result.

Most leadership programmes for school leaders pay significant attention to the role of the head in leading and managing change and in motivating and managing people, often drawing from the wider pool of knowledge and experience in preparing leaders of government, business and industry. As a consequence, heads are often quite knowledgeable about these roles. When it comes to designing and aligning systems, processes and resources, most leadership programmes tend to focus on aligning resources to priorities and in establishing systems for managing resources, especially financial and staff resources, but give little attention to the notion of educational design and the redesign process.

There is, however, within the school improvement literature, a sufficient number of well-documented and externally evaluated designs to provide usable knowledge about the kinds of things that heads and other leaders within the school need to know in order to create a learning environment that maximises student learning outcomes. Hill and Crévola (1997, 1999) have described a general design, or design template, that identifies nine critical elements of schools. These design elements are shown diagrammatically in Figure 1.

Beliefs and understandings

Beliefs and understandings about teaching and learning occupy the central position in the design summarised in Figure 1. Headteachers need a strong theoretical foundation of current knowledge about teaching and learning, practical knowledge of the beliefs and understandings of staff within the school, and applied knowledge of how to bring about development and change in those beliefs and understandings. Heads have a key role to play in ensuring that the implications of modern conceptions of teaching and learning are understood by teachers, and are reflected in the curriculum and in school and classroom structures and practices. The head and other members of the leadership team need to be involved in disseminating this new knowledge. Up-to-date knowledge of teaching and learning is critical if the head is to create a culture within the school that embodies high expectations of student achievement and a confidence in the capacity of individual teachers and of the school to realise those expectations.
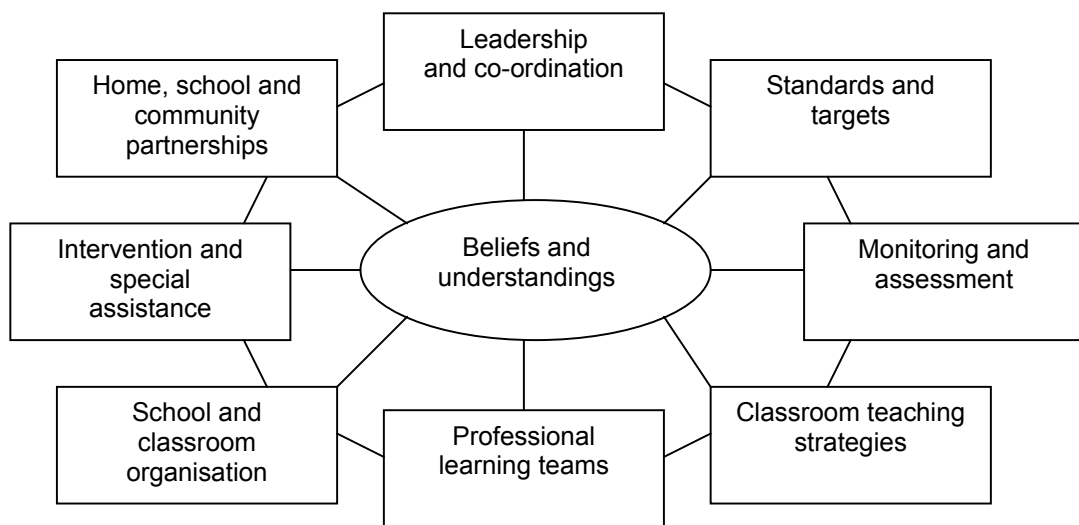
**Figure 1. General design for improving learning outcomes
(Hill & Crévola, 1997)**

Standards and targets

High expectations of student achievement need to be reflected in explicit standards that have been benchmarked against those of other schools and school systems to ensure that they reflect best practice. Standards and associated targets constitute the starting point for redesigning how schools operate, so that meeting the standards comes first in everything that schools do. Heads therefore require a knowledge of the sources of relevant content and performance standards, and of processes for setting targets at school and student levels that reflect community expectations and that are challenging yet achievable.

Monitoring and assessment

Teaching and learning involve regular monitoring and assessment of students, and the design of this element needs to be such as to ensure that consistent, coherent information is generated, on a regular basis, of the progress of all students and on all key indicators. Assessment is important to establish whether targets have been met and whether progress has been made

towards ensuring that all students meet the set standards. Effective teachers make a habit of monitoring their students' progress so that they can ensure that each student is always working within his or her level of challenge or "zone of proximal development" (Vygotsky, 1978). Indeed, the most important function of monitoring and assessment is to assist the teacher to develop a profile for each student, to establish starting points for teaching, and to use this diagnostic information to drive classroom instruction. Headteachers need to be informed about effective strategies for monitoring and assessing students, and about appropriate assessment instruments and the information they provide. They need practical knowledge in interpreting assessment data and in monitoring trends in the value-added performance of the school over time.

Classroom teaching strategies

Effective teaching is structured and focused on the learning needs of each student in the class. It requires teachers to have detailed understandings of how children learn, with well-developed classroom routines, structures, organisation and management and an ability to motivate and engage students using a range of classroom practices and strategies. Headteachers do not necessarily need detailed curriculum content knowledge, nor do they need to be expert teachers themselves, but they do need to be able to recognise good teaching and what it means to effectively implement different teaching strategies in different learning contexts. Scheerens and Bosker (1997, p106) invoke the system-theoretical concept of "meta-control" to express the over-arching control and influence exercised by an educationally- or instructionally-oriented headteacher with respect to classroom teaching strategies. As the meta-controller of classroom processes, the head must work towards the creation, within the school, of a common language to talk about and reflect upon classroom teaching, and the encouragement of a culture that constantly seeks to refine and extend classroom teaching strategies.

Professional learning teams

A crucial element in any design aimed at improved teaching and learning in schools is the provision of effective, ongoing and professional learning opportunities for teachers that promote learning, not just of individuals, but of the organisation as a whole. Put in another way, central to a design approach to improving learning in schools is the establishment of a culture and of systems and processes for promoting organisational learning. Learning teams function through a mixture of both off- and on-campus learning, but principally through a combination of demonstration teaching, mentoring, coaching and opportunities for the team to debrief and reflect on their practice and their progress. Heads need theoretical knowledge about organisational learning and applied knowledge about strategies for establishing learning teams among groups of teachers for the purpose of improving specific student learning outcomes.

School and classroom organisation

In order to maximise engaged learning time and to facilitate teaching that is responsive to student needs, interests and current readiness to learn, it is necessary to align organisational structures and processes within the school. For example, it is important to ensure that adequate time is devoted to key learning outcomes, and that this time is, as far as possible, free from interruptions. In large schools, it is important that structures are in place that promote cohesion, pastoral care and a sense of identity, and do not lead to feelings of isolation and alienation among students. It is also important that forms of classroom organisation are in place that are conducive to focused teaching. Headteachers need to be aware of the findings of research into such issues as the impact of class size and of different forms of school and class organisation,

including the impact of whole-class teaching and within-class student grouping practices. These are issues that impinge massively on the resources available within schools and on the capacity of teachers to focus their teaching on the needs, aptitudes and abilities of their students.

Intervention and special assistance

Even with the best classroom teaching in place, a significant proportion of students fail to make satisfactory progress. Among these students will be:

- those with disabilities and impairments

- those who come from homes devoid of books and see no purpose in school learning

- those who may have severe emotional blocks that interfere with their concentration

- those who may have frequent absences from school

For such students, the school must establish systems and processes to provide support and assistance beyond regular classroom instruction to enable them to catch up quickly with their peers. Without timely and effective intervention, these students continue to fall further and further behind in their school work, and experience diminished self-esteem and increased alienation from schooling. Headteachers require a knowledge of effective intervention programmes and how they can be implemented in a manner that is cost-effective and that supports and compliments regular classroom instruction.

Home, school and community partnerships

Linking with the home, with feeder schools and with the community is important at all levels of schooling. There is a strong body of research to show that when parents, care-givers and the community are supportive of the work of the school and are involved in its activities, students make greater progress (Booth & Dunne, 1996; Cairney, Ruge, Buchanan, Lowe & Munsie, 1995; Epstein, 1991). But, to be effective, it is not enough to establish links with the home: what is needed is comprehensive and permanent programmes of partnerships with families and communities. Headteachers need a knowledge of the role of the home and the community in supporting school learning, and in particular of strategies for establishing lasting partnerships in learning.

Leadership and co-ordination

Studies of effective schools have consistently drawn attention to the importance of strong educational leadership. Good teaching may be possible in a school in which there is weak and ineffective educational leadership, but it is harder. Change and sustained improvement are extremely difficult, if not impossible, without good educational leadership, particularly where whole-school change is sought. Educational leadership and co-ordination are not the sole responsibility of school heads: they can and should be exercised at all levels of the organisation. In particular, attention has been drawn to the critical role of senior teachers chosen to co-ordinate and lead professional learning teams, and to act as mentors, coaches and lead learners. It is nevertheless incumbent on heads to ensure that leadership and co-ordination are indeed happening at all levels, and that they are allocating sufficient time to the role relative to other roles, such as administration, the management of personnel and student welfare issues, and so on. This may require considerable re-thinking to enable heads to reclaim the role of

educational leadership and successfully delegate other leadership and management tasks to general administrative staff within the school.

Given that the role of the head is primarily concerned with school improvement, then the role becomes one of the ongoing fostering of educational change. Miles (referred to in Fullan, 1991) talks about change as progressing through three phases, namely initiation, implementation and institutionalisation. During each phase, the head and the leadership team need to be able to provide an appropriate balance of pressure and support. Pressure is necessary to provide a stimulus and incentive to change and improve. Low expectations and complacency are unavoidable consequences of lack of pressure. At the same time, pressure needs to be balanced with the kind of support and assistance that staff need in order to change and improve. Improvement in schools rarely happens simply by raising the level of challenge or by exhorting teachers to work harder or more effectively. It happens because the right mix of pressure and support is in place.

Acquiring knowledge about teaching and learning

Drawing upon the preceding discussion, Table 1 provides a summary of what it is considered that headteachers need to know about teaching and learning. The knowledge base is an extensive one and, while overlapping with the kinds of knowledge expected of teachers, also covers additional areas which are not typically covered in either pre-service or postgraduate courses and programmes, and which are almost completely absent from principal leadership programmes.

How are headteachers to acquire knowledge about teaching and learning? Traditional methods are likely to be appropriate in providing a grounding in much of the knowledge associated with leading and managing change and in motivating and managing people. On the other hand, much of the knowledge associated with designing and aligning systems, processes and resources would appear to call for "on-the-job" approaches to learning that are not always found in current leadership programmes.

Table 1: What headteachers need to know about teaching and learning

Role	Knowledge base
Leading and managing change Motivating and managing people	• curriculum theory and educational outcomes required by young people living in the knowledge society • child development and the learning process, including modern theories of learning and motivation • teaching and learning in school settings • educational change and school effectiveness and improvement
Designing and aligning systems, processes and resources	• the redesign process in education • educational standards and target-setting • monitoring and assessment of student progress • classroom teaching strategies • organisational learning and strategies for promoting professional learning • school and classroom organisation • safety nets, intervention and special assistance • the role of home, school and community partnerships in promoting learning

The answer would seem to lie in the extensive use of less traditional methods, such as the use of mentors and coaches to support leaders in training as they go through the process of initiating, designing, implementing and evaluating improvement projects as they develop their capacity to exercise educational leadership. It would also seem appropriate to make use of professional learning teams of heads who support and learn from each other as they collectively seek to extend their applied knowledge base of teaching and learning. The establishment of such teams could provide a much-needed boost to the morale of principals at a time when the headship is being regarded as onerous and senior teachers are becoming increasingly reluctant to apply for headteacher positions.

Based on the experience of earlier attempts to promote the instructional leadership role of school heads, it is clear that systemic support for headteachers in redefining their role, and technical assistance and policy designed to support the use of new knowledge about teaching and learning, are critical.

As a final comment, it is suggested that by placing school improvement at the centre of the role of the headteacher, and by placing an emphasis on the acquisition of an extensive applied knowledge base about teaching and learning, a natural consequence will be that the most valued expertise about school leadership will reside in the leaders within the profession itself

and not within the academies and university faculties. This may be a vital step in creating a genuine profession of school leaders.

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