

CHAPTER 6

Leading to Learn: School Leadership and Management Styles

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Highlights

- Some principals in every country have adopted the “instructional leadership” styles which are central to today’s paradigm of effective school leadership.
- However, the prevalence of such practices varies greatly by country and they are much more in evidence in some countries such as Brazil, Poland and Slovenia than they are in others, such as Estonia and Spain.
- Across TALIS countries, a significant number of principals employ both instructional and administrative leadership styles.
- Greater autonomy for the school principal in decision making about schools is not related to either management style.
- In more than half of the TALIS countries, schools with more pronounced instructional leadership tend to link teacher appraisals with teachers’ participation in professional development. Also in many TALIS countries, schools whose principals are instructional leaders are more likely to take account of innovative teaching practices in the appraisal of teachers.
- In almost three-quarters of TALIS countries, principals who adopt an instructional leadership style tend to develop professional development programmes for instructionally weak teachers.
- In more than one quarter of TALIS countries, teachers whose school principal adopts a more pronounced instructional leadership style are more likely to engage in collaborative activities with their colleagues.
- In contrast, variations in principals’ use of an administrative leadership style are unrelated to classroom practices, pedagogical beliefs and attitudes, or to the amount of professional development teachers receive.

INTRODUCTION

Teachers teach and work in schools that are usually administered by managers, often known as principals or headmasters. School administration is itself often part of larger administration units. The conditions of teachers' working life are influenced by the administration and leadership provided by principals, and it is widely assumed that school leadership directly influences the effectiveness of teachers and the achievement outcomes of students (e.g. Hallinger and Murphy, 1986; OECD, 2001; Pont, Nusche and Moorman, 2008).

In OECD countries as elsewhere in the world, school leaders face challenges due to rising expectations for schools and schooling in a century characterised by technological innovation, migration and globalisation. As countries aim to transform their educational systems to prepare all young people with the knowledge and skills needed in this changing world, the roles of school leaders and related expectations have changed radically. They are no longer expected merely to be good managers; effective school leadership is increasingly viewed as key to large-scale education reform and to improved educational outcomes.

Since at least 2001, with its series of reports, *What Works in Innovation in Education*, produced by the Centre for Educational Research and Innovation, the OECD has recognised the significant challenges faced by principals and school managers in member countries (OECD, 2001). As countries increasingly turn to improving education to address an ever more complex world, many governments give school leadership more responsibility for implementing and managing significantly more demanding education programmes. Globalisation and widespread immigration mean that children, youth and their families represent an increasingly challenging clientele for schools in many countries. Also, the standards to which schools must perform and the accountability required of management raise expectations regarding school leadership to an unprecedented level.

A recent OECD report, *Improving School Leadership*, summarises the changing landscape of schools and their management over recent decades (Pont, Nusche and Moorman, 2008, p. 6):

In this new environment, schools and schooling are being given an ever bigger job to do. Greater decentralisation in many countries is being coupled with more school autonomy, more accountability for school and student results, and a better use of the knowledge base of education and pedagogical processes. It is also being coupled with broader responsibility for contributing to and supporting the schools' local communities, other schools and other public services.

This report argues that to meet the educational needs of the 21st century the principals in primary and secondary schools must play a more dynamic role and become far more than an administrator of top-down rules and regulations. Schools and their governing structures must let school leaders lead in a systematic fashion and focus on the instructional and learning processes and outcomes of their schools.

These recommendations flow from a field of education that has recently experienced a fundamental change in its philosophy of administration and even in its conception of schools as organisations. A significant research literature also indicates that what the public and other stakeholders of schools want as learning outcomes for students can only be achieved if school leadership is adapted to a new model (Pont, Nusche and Moorman, 2008). These changes are directly relevant to the working lives, professional development, instructional practices, pedagogical beliefs and attitudes and the appraisal and feedback of secondary school teachers, all of which were measured in the TALIS survey.

From bureaucratic administrator to leader for learning

Changes in school administration over recent decades are part of a larger trend in the management of public service organisations that can be characterised as the decline of older public administrative models and the rise of a new public management (NPM) model. The ideas and research findings behind the NPM model in public

services – flatter management structures, market-like mechanisms, decentralisation, customer orientation and evidence-based improvement of services – have significantly changed the approach to organisational management (e.g. Barzelay, 2001; Jones, Schedler and Wade 1997; Sahlin-Andersson, 2000; Schedler and Proeller, 2000). The effectiveness of these changes is still debated in education research and policy circles, but it is clear that these ideas, and the debate surrounding them, have changed the terms of management.

Perhaps the most salient change in attitudes about school management created by the NPM trend is the centring of the principal's activity and behaviour on what is referred to as "instructional leadership" (Wiseman, 2002, 2004a). The term "instructional leader" has been explicitly promoted for principals since the beginning of the effective schools movement around 1980 in the United States (Blumberg and Greenfield, 1980; Bossert *et al.*, 1981) and continues to lead ideas about how principals will meet the educational challenges of the new century (e.g. Heck, Larsen and Marcoulides, 1990; Duke, 1987; Kleine-Kracht, 1993; Boyd, 1996; Hallinger and Murphy, 1986; Lemahieu, Roy and Foss, 1997; Reitzug, 1997; Blase and Blase, 1998; Fullan, 2000).

During the 1980s, the educational research and policy communities specifically encouraged principals to emphasise activities that would enhance or benefit classroom instruction and learning (e.g. National Commission on Excellence in Education, 1983). Increasingly, this means that as managers of organisations whose formal or official functions are instruction and learning, principals are responsible and accountable for school outputs such as student achievement. In particular, proponents of instructional leadership suggest that principals are the most effective of all potential instructional leaders because they are situated within the school context, unlike upper-level administrators in ministries. A package of reforms being developed by a number of OECD countries includes recommendations for greater professionalisation and specialty training for school managers with greater on-the-job managerial accountability for learning outcomes (Pont, Nusche and Moorman, 2008).

Along with the emphasis on accountability, the decentralisation of school management and the devolution of educational control have increased throughout much of the world (Baker and LeTendre, 2005). Less centralised control has meant more responsibility for a broader range of aspects of school management at the school level. For better or worse, this trend translates into a more complex school governance environment in many countries.

These ideas and the associated research on school leadership have led to reforms of the principal's role in many countries, from an emphasis on administration in terms of the school's compliance with bureaucratic procedures to an expanded role which combines administration with instructional leadership (OECD, 2001; Pont, Nusche and Moorman, 2008). This expanded role focuses strongly on the principal's management of the school's teachers and their teaching.

Goals of the TALIS survey of principals

In each TALIS country, schools and schooling have specific characteristics. School management is shaped by these characteristics, which potentially influence every aspect of a teacher's job and professional development. At the same time, there are global trends towards similarity in schooling and its management across countries (Baker and LeTendre, 2005). For the first time, the TALIS survey of principals provides rich information on the management behaviour and style of principals in secondary schools in 23 countries on four continents. The questionnaire was designed to answer three broad questions:

- In an era of accountability and devolution of authority in education, what are the salient dimensions of the management behaviour and style of secondary school principals?
- To what degree have recent trends in school leadership penetrated countries' educational systems?
- How are school leadership styles associated with the management of teachers, across the three main areas of TALIS: *i*) teachers' professional development; *ii*) teachers' practices, beliefs and attitudes; and *iii*) teachers' appraisal and feedback?

Chapter outline

The chapter begins with a description of school management behaviour based on the reports of the principals of schools providing lower secondary education in TALIS countries. It describes this behaviour on the basis of five indices (or dimensions) of management derived from a statistical analysis of principals' responses, which are then summarised as two main management styles – instructional leadership and administrative leadership – on the basis of which principals are compared. The two styles are not mutually exclusive and in fact the TALIS data demonstrate that a number of principals use both styles to a considerable degree. The section concludes by analysing these management styles according to the characteristics of schools and of the principals themselves.

The chapter then examines the relation between management styles and five aspects of teachers' work taken from Chapter 4: *i*) beliefs about the nature of teaching and learning; *ii*) teachers' classroom practices; *iii*) teachers' professional activities; *iv*) teachers' classroom environment and school climate; and *v*) teachers' attitudes towards their job.

The next two sections examine, in turn, the links between school management and teachers' appraisal and feedback, the theme of Chapter 5, and the links with teachers' professional development, the theme of Chapter 3. The final section summarises these findings and draws implications for school management.

SALIENT DIMENSIONS OF SECONDARY SCHOOL MANAGEMENT BEHAVIOUR OF SCHOOL PRINCIPALS

The questionnaire for school principals was constructed with the aid of experts on school administration and organisational reform and research. Various instruments were adopted for assessing the managerial behaviour of secondary school principals and new items were also developed. The final questionnaire included 35 items on the management behaviour of principals. Using techniques of modern item response modelling and factor analysis (described in the *TALIS Technical Report* [forthcoming]), five indices of management behaviour were constructed from the responses of 4 665 school principals in the 23 countries. These indices and the specific survey questions on which they are based are displayed in Table 6.1.

As with the indices in Chapter 4, analysis was conducted to test for cross-cultural consistency of the five indices of management behaviour (See Annex A1.1 and the *TALIS Technical Report*). As this analysis indicated that countries' mean scores on these indices may not be directly comparable, analysis in this chapter focuses more on broad comparisons against the international means. Nevertheless, care in interpretation is necessary. The analysis therefore focuses more on the pattern of cross-cultural differences than on specific country-by-country comparisons of the index scores.

Management behaviour

1. Management for school goals – explicit management via the school's goals and curriculum development

Principals scoring high on this index frequently take actions to manage schooling operations in accordance with the school's goals, with direct emphasis on ensuring that teachers' instruction in classrooms aims to achieve these goals. These principals also tend to use student performance levels and examination results to set goals and promote curricular developments. They endeavour to ensure clarity within the school about the responsibility for co-ordinating the curriculum. Principals scoring high on this index also report that they frequently make sure that teachers' professional development activities are aligned with school goals and curricular objectives.

As Table 6.2 shows, there is considerable variation as principals in Hungary, Poland and Slovenia are notably above the TALIS mean, while those in Austria, Denmark, Italy and Spain, among others, are notably below. On average, principals in 10 countries are significantly above the TALIS average on this index, while 10 countries are below it. Also on average, principals in Estonia, Lithuania and Mexico are at the TALIS mean.

2. Instructional management – actions to improve teachers’ instruction

Principals scoring high on this index frequently work with teachers to improve weaknesses and address pedagogical problems, and also to solve problems with teachers when there are challenges to learning in a particular classroom. Also, they often inform teachers about possibilities to update their curricular knowledge and instructional skills. Finally, these principals report being vigilant about disruptive student behaviour in classrooms. In general, principals scoring high on this index spend significant amounts of their managerial time in attempting to improve classroom instruction.

On average, principals in 10 countries, including Brazil, Denmark and Malta, are above the TALIS mean and 10, including Estonia, Malaysia and the Slovak Republic, are below it (Table 6.2).

3. Direct supervision of instruction in the school – actions to directly supervise teachers’ instruction and learning outcomes

Principals who score high on this index frequently use direct observation of teachers’ pedagogical practices and also make frequent suggestions to teachers on how to improve instruction in classrooms. These principals also frequently monitor students’ academic efforts and work.

There is again considerable variation among countries on this index (Table 6.2). On average in 11 countries, including Brazil, Poland and Slovenia, principals undertake more direct supervision of instruction than the TALIS average. Another 11 countries, including Denmark, Ireland and Portugal, are below the TALIS average; only Australia is at the TALIS average.

4. Accountable management – managing accountability to shareholders and others

Principals scoring high on this index see their role as making the school accountable internally and to stakeholders outside the school. Their role is to ensure that ministry-approved instructional approaches are explained to new teachers and that all teachers are held accountable for improving their teaching skills. These principals also focus on convincing students’ parents of the need for new ideas and procedures at the school.

On average, principals in 10 countries, most markedly in Bulgaria, Malaysia and Norway, are above the TALIS mean on this index and 10 are below (Table 6.2).

5. Bureaucratic management – management actions mostly aimed at bureaucratic procedures

Principals scoring high on this index report that it is important for them to ensure that everyone in the school follows the official rules. They see their role as being significantly involved in dealing with problems in the scheduling of teachers and courses and in ensuring adequate administrative procedures and reporting to higher authorities. These principals also focus on creating an orderly and task-oriented atmosphere in the school.

The pattern across countries on this index is slightly different (Table 6.2). In just eight countries, including Bulgaria, Malaysia and Turkey, principals score above the TALIS average, in five countries they are at the TALIS average, and in ten they are below it. On average, principals in Australia, Denmark and Iceland are among the least involved with this type of management.

Management styles and school leadership

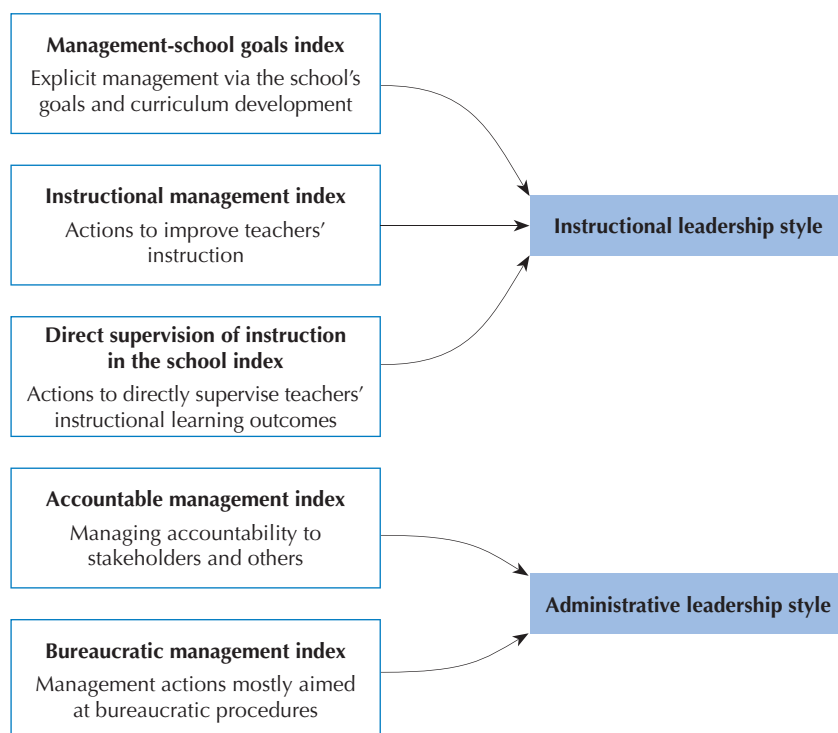
The five behavioral indices cover a significant range of principals' management actions. To further summarise their behaviour, two management styles – *instructional leadership* and *administrative leadership* – were defined (Figure 6.1). They characterise more comprehensively principals' approach to their leadership approach.

Principals scoring high for the first management style are significantly involved in what is referred to in the research literature on school management as an *instructional leadership style*. This index was derived by averaging the indices for the first three management behaviours, *management for school goals*, *instructional management* and *direct supervision of instruction in the school*.


The second management style can be best referred to as an *administrative leadership style* and was derived by averaging the indices for the management behaviours *accountable management* and *bureaucratic management*. This style of management focuses on administrative tasks, enforcing rules and procedures, and accountability.

Figure 6.1

Composition of the indices for instructional and administrative leadership



Source: OECD, *TALIS Database*.

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The two styles are not necessarily mutually exclusive, even though they are sometimes portrayed as such in the research literature on school leadership (e.g. Hallinger and Murphy, 1986). This point is reinforced by the idea of an evolution of school leadership and a move from competent administration to school management which includes an emphasis on instructional leadership and a stronger focus on student learning. Also, as the results below indicate, a number of principals use both styles to a considerable degree. So while these styles help to capture the underlying approaches that principals take to their job, particularly concerning teachers, they need not be mutually exclusive in practice.

The recent OECD report, *Improving School Leadership*, recommends that effective school management generally comes from engagement in instructional leadership (Pont, Nusche and Moorman, 2008). At the same time, effective leadership also involves administrative accountability and a workable bureaucracy. The question that arises is the extent to which these two management styles have been embraced by the TALIS countries' school leadership. Three notable findings address this question.

First, as Table 6.3 indicates, while some principals in each TALIS country adopt an instructional leadership style, there is significant variation in its use across TALIS countries. In other words, the ideas and behaviour related to instructional management are evident to varying degrees in all TALIS countries, at least according to principals' self-reports. Even the countries with the lowest average use of instructional leadership, such as Austria, Estonia and Spain, have principals that focus on this style of management.

Second, the TALIS countries fall into two roughly equal groups in terms of the emphasis on instructional leadership. In 10 countries, including Brazil, Poland and Slovenia, principals on average engage in an instructional leadership style above the overall TALIS average. Principals in the 13 other TALIS countries are less involved in this management style than the overall average.

Third, it is interesting that in countries in which principals are on average more involved in instructional leadership, they do not neglect administrative leadership. Obviously the principal's task in most schools in most countries involves actions and priorities from both management styles, and individual principals may be high on one and low on the other, or high on both, or low on both. In practice each of the two styles involves activities and priorities that can be helpful in managing schools. The TALIS results show in fact that a significant group of principals employs both styles, as shown by the positive association between them: about one-fifth of the difference among principals in each style is related ($r = .44, p < .0001$).

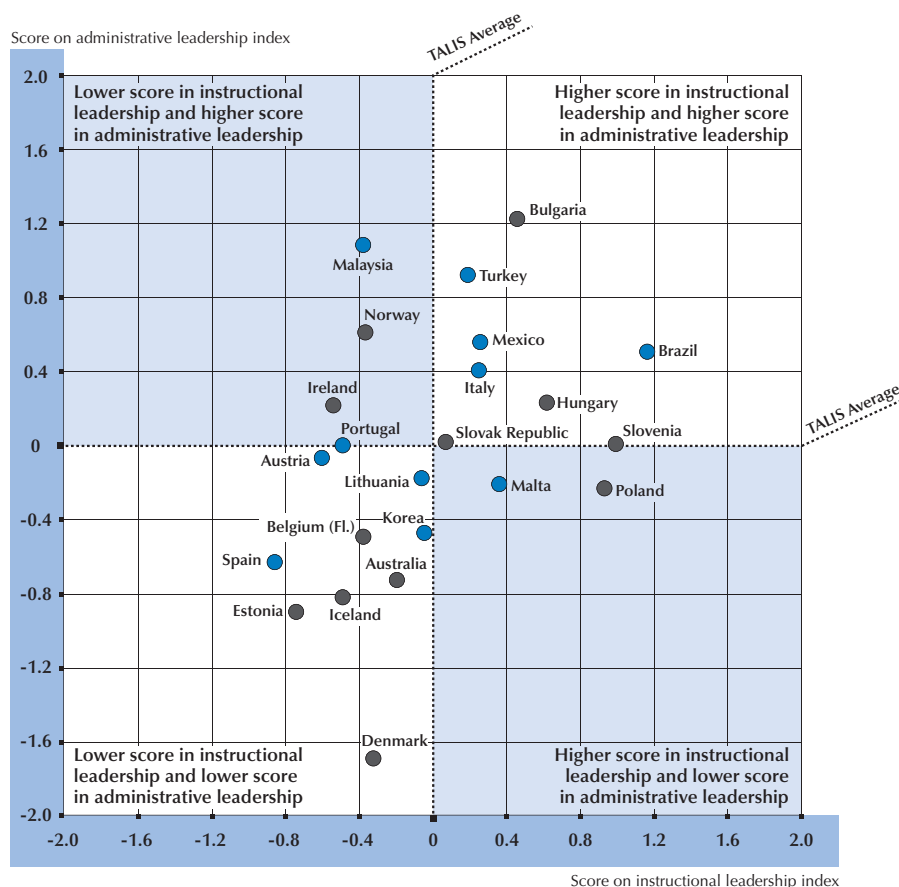
To demonstrate this, Figure 6.2 plots the TALIS countries' means on the two management styles. Seven countries fall into the upper right quadrant where on average principals are highly involved in both instructional *and* administrative leadership. At the other end in the lower left quadrant are nine countries where on average principals are only moderately involved in both management styles. Malta and Poland are the only two countries in which principals are on average more involved in instructional than in administrative leadership, while the opposite applies in Ireland, Malaysia and Norway. Lastly, in three countries principals are on average at the OECD average for administrative leadership, but in two of these, the Slovak Republic and Slovenia, they are more involved in instructional leadership while in Portugal they are less involved in instructional leadership.

Management styles and decision making

Pont, Nusche and Moorman (2008) also considers that effective instructional leadership in schools requires some degree of administrative autonomy in decision making about key components of inputs to the instructional process. The TALIS questionnaire asked principals about the degree to which they had significant input into decisions about teachers, instruction, school resources and curriculum. While there is interesting variation across countries, decision-making autonomy is unrelated to either management style, as is clear from the distribution of countries with greater principal involvement in decision making (gray points in Figure 6.2) and those with lower involvement (blue points in Figure 6.2).

Figure 6.2

School principals according to their management styles (2007-08)



Countries in gray have a higher than average principal involvement in decision making, while countries in blue have a lower than average involvement.

Source: OECD, TALIS Database.

StatLink <http://dx.doi.org/10.1787/608025205225>

Management styles and characteristics of principals and schools

Are management styles of principals related to their qualities as professionals and to the characteristics of the schools they administer? Research on leadership of formal organisations in general, and in schools specifically, finds contrasting evidence on this question (e.g. Wiseman, 2004a, 2004b). Some research suggests that the professional characteristics of leaders and the qualities of the organisations they lead help determine their management styles, while an equally sizable research literature suggests the opposite. The TALIS questionnaire asked principals a series of questions about their professional standing and about the qualities of their school. These associations are summarised in Tables 6.12 and 6.13.

The results presented in this section and the section following, are generated from a series of statistical regression analyses which examine the relation between a number of predictor (or independent) variables and a predicted (or dependent) variable (see Annex A1.4 for technical details and specifications of the variables). Tables 6.4 to 6.13 highlight the variables that were statistically significant in these regressions, with a plus sign indicating a significant positive relationship and a minus sign indicating a significant negative relationship. Where no significant relationship was found, the cell in the table is left blank. Tables containing the regression coefficients are available on the TALIS website.

Interestingly, the TALIS results find little association between characteristics of principals and either their management behaviours or overall styles. By and large the associations are more evident in the instructional leadership style than in the administrative leadership style, and no one characteristic is consistently associated with either management style across all TALIS countries. As shown in the first sections of Table 6.12 and 6.13, neither the principals' educational level nor the number of years they have been principals is consistently related to their position on either the management behaviour indices or the style indices. For each of these variables there is positive relation with the style of leadership in a handful of countries but a negative one in a handful of others. The same is true for the public or private school sector, the size of the school's community, and the student/teacher ratio. Nevertheless, one trend is evident: in Belgium (Fl.), Estonia, Hungary, Malaysia, Norway, Poland, Spain and Turkey, female principals tend to use an instructional leadership style more than male principals.

Management styles and characteristics of evaluations of school performance

Are management styles of principals related to the characteristics of evaluations of the school's performance and principals' beliefs about instruction? In many countries school reforms to improve teachers' instruction and student learning focus on the idea of aligning school management with clear indicators of instructional practice and student outcomes. The TALIS questionnaire asked the sampled principals about the characteristics of their school's evaluation, including the degree to which there are both internal and external evaluations, which indicators of the school's performance are important in evaluations, and the extent to which the outcome of the school evaluation influence the appraisal of the school management or of teachers. These associations are summarised in the third sections of Tables 6.12 and 6.13.

In eight countries – Belgium (Fl.), Bulgaria, Estonia, Korea, Mexico, Norway, Portugal and Turkey – principals in schools in which indicators of teachers' innovative teaching practices are important to the evaluations tend to take an instructional leadership style of management.

There are also some mixed patterns. For example, in Australia, Austria, Belgium (Fl.), Brazil, Korea, Malta and Norway, principals have a more pronounced instructional leadership style in schools where internal (self-evaluation) evaluations are more frequent, but the opposite is true in Denmark, Lithuania, Malaysia and Spain. Similar, but weaker, associations are found between the characteristics of school evaluations and principals who adopt an administrative leadership style.

One clear trend concerns the relation between principals' beliefs about approaches to teaching and their leadership style. Instructional leadership is used in nine countries in which principals have a more constructivist belief about instruction. In countries in which principals believe that the task of teaching is to support students in their active construction of knowledge, they are also more likely to demonstrate instructional leadership. However, in 14 countries there is a similarly positive association between more administrative leadership and constructivist beliefs about instruction.

ASPECTS OF TEACHERS' WORK AND SCHOOL MANAGEMENT

This section examines the relation between the management styles of principals and five aspects of teachers' work described in Chapter 4.

For each aspect of teachers' work, the same model is estimated to examine the relation with principals' management styles. The model statistically controls for a number of teachers' professional and personal characteristics: gender, level of experience as a teacher, educational training, permanency of their teaching position, number of hours they teach, how many schools they teach in, and how much administrative work they undertake. Estimated for each country, this basic statistical model represents the main components of the teacher's professional background and summary conditions of their position within their school. Added to this basic model are the degrees to which the school's principal engages in instructional and administrative leadership styles.

As described below, the level of a principal's use of the instructional leadership style is in some cases associated with the school's teachers' beliefs, practices, professional activities, classroom environments and job-related attitudes, while the use of an administrative leadership style is usually less related to these variables. The associations tend to be moderate in size and are statistically significant net of the influences of the teacher's personal, professional background and working conditions. It should be pointed out that, since TALIS is a cross-sectional study, it is not prudent to draw sweeping causal conclusions from such results. That is, one should not assume from these findings that an association means that management style causes teachers' beliefs, practices and so forth. Such associations are necessary, but not sufficient, to draw causal conclusions, but at the very least it can be concluded that across TALIS countries, secondary school principals who have an instructional leadership style tend to work with certain types of teachers.

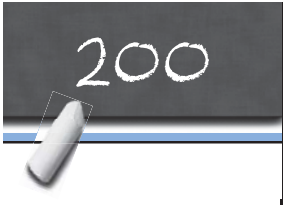
Beliefs about the nature of teaching and learning

In Chapter 4 two indices were developed to summarise teacher beliefs and attitudes towards pedagogy: constructivist beliefs about instruction and direct transmission beliefs about instruction. Constructivist beliefs are characterised by a view of the teacher as a facilitator of learning who gives more autonomy to students; a direct transmission view sees the teacher as the instructor who provides information and demonstrates solutions. Are principals' management styles related to teachers' pedagogical beliefs?

As displayed in Table 6.4 the first notable finding is that in most countries the degree to which a principal manages the school according to either leadership style is unrelated to the school's teachers' pedagogical beliefs and attitudes.

Net of the other factors about teachers' professional background and the basic conditions of their position within their school, it is only in Malta that principals with a more instructional leadership style tend to work with teachers who believe in a constructivist approach to instruction and learning, while the opposite is true in Iceland. These teachers see their role as more of a facilitator of students' own inquiry. They believe in encouraging independent problem solving on the part of students and also that general thinking and reasoning skills are more important than specific curricular content.

In contrast, teachers who believe strongly in direct transmission of instruction may be characterised as having more traditional attitudes towards classroom instruction. These teachers value instruction that is built around problems for students to solve which have clear and correct answers and are within the grasp of the learners. They see the teacher's main role in problem solving as demonstrating the correct procedure. These teachers tend to hold firm to the belief that teaching facts is necessary as this is how students accumulate knowledge. Lastly, these teachers believe that a quiet classroom is most conducive to learning. Interestingly, as for constructivist teachers, there is no association in most TALIS countries between either of the two leadership styles and belief in this more traditional approach to instruction and pedagogy. This finding is not necessarily surprising given the results in Chapter 4 indicating that across a number of TALIS countries there are teachers who hold both strong constructivist and direct transmission beliefs about instruction and learning. In Belgium (Fl.), Hungary and Portugal a more pronounced instructional leadership style is associated with beliefs in direct transmission instruction; in Estonia and Iceland a more pronounced administrative leadership style is associated with these beliefs.



Classroom practices of teachers

The range of instructional practices reported on by teachers is summarised on three indices for structuring practices, student-oriented practices and enhanced learning activities. As described in Chapter 4, structuring practices include such activities as stating learning goals, summarising former lessons, checking students' understanding and reviewing homework. Student-oriented practices involve students working in groups, grouping students by ability and differentiating the tasks they are set and the involvement of students in planning classroom activities. Enhanced learning activities for instance have students working on projects, holding debates and making a product. Are principal management styles related to what teachers do in the classroom?

As Table 6.5 shows, as in the case of beliefs, the degree to which a principal manages the school according to a more administrative leadership style is not directly related in most countries to any of the three classroom practices of teachers; the same is also generally true for an instructional leadership style. Among the few cases where significant relations are evident, administrative leadership is more likely than instructional leadership to be associated with all three teaching practices in Iceland and Malta. Conversely, in Italy instructional leadership is more likely to go hand in hand with greater degrees of student-oriented and enhanced learning activities.

Teachers' professional activities

In Chapter 4, teachers' co-operative professional behaviour in TALIS countries is captured by exchange/co-ordination for teaching and professional collaboration. Are principals' management styles related to how teachers co-operate with each other for effective instruction?

As Table 6.6 indicates, teachers' collaborative behaviour is related to management styles in a number of countries. In Hungary, Iceland, Lithuania, Malaysia, Mexico and Poland, where principals use an instructional leadership style of management, teachers are more likely to co-operate and work together in groups or teams for job-related purposes such as administrative tasks, the actual teaching of students or professional development. Other than in Mexico and with the addition of Norway, the same is true for more complex forms of professional collaboration: collective learning activities such as observing and critiquing other teachers' instruction and team teaching of courses. In neither case is the level of administrative leadership associated with teachers' professional activities.

Teachers' classroom environment and school climate for learning

TALIS teachers were asked about the usual classroom environment in terms of the degree of disruptive behaviour and lack of attention by students and also about the amount of time they usually allocate to actual instruction as opposed to classroom management. They were also asked about the types of support they gave students to help them learn. Chapter 4 described the three elements used to summarise the learning environment: classroom disciplinary climate, time on task, and teacher-student relations. Are school management styles associated with classroom and school environments that are conducive to learning?

The first column in Table 6.7 shows that in most TALIS countries the classroom disciplinary climate is not associated with either leadership style, after controlling for certain background characteristics of the principal and the school. The same is true for time on task (second column). However, in Denmark, Hungary, Iceland, Malta, Mexico and Portugal, schools with principals who adopt more of an instructional leadership style tend to have more positive relations between teachers and students, net of other factors regarding the school and the teacher.

Teachers' attitudes towards their job

Chapter 4 also described teachers' level of job satisfaction and their sense of self-efficacy in terms of helping students to learn. Are these attitudes towards their job related to principals' management styles?

Table 6.8 shows that teachers in Estonia, Hungary, Malta and Turkey are more satisfied with their job in schools whose principal employs an instructional leadership style of management. At the same time, teachers' job satisfaction is unrelated to administrative leadership in most countries. In Hungary, Malta, Portugal and Spain teachers who see themselves as successful with students learning work in schools where the principal has a more pronounced instructional leadership style.

TEACHER APPRAISAL AND FEEDBACK AND SCHOOL MANAGEMENT

Chapter 5 describes the frequency, use and consequences of appraisals of teachers' work. This section examines the relation between principals' management styles and three aspects of teacher appraisals: importance of appraisal criteria, objectives of the appraisal, and feedback and consequences of the appraisal. The results in Chapter 5 come from teachers' reports about appraisals. Principals were asked similar questions and the results are used here for principals in schools in which teacher appraisals take place regularly.

For each indicator about the teacher appraisal process, the same model is estimated to examine the relation with principals' management styles in each country. The model statistically controls for a number of professional and personal characteristics of principals and characteristics of their schools: gender, level of experience as a principal, educational training, the number of schools they administer, average class size, student/teacher ratio, public/private status of the school and the type of school community. This basic statistical model covers the main components of the principal's professional background and summary conditions of schools in the principal's country. Added to this basic model are the degrees to which the school's principal engages in instructional and administrative leadership styles. The caveat about drawing causal conclusions from cross-sectional data mentioned applies here as well.

Learning outcomes, teachers' practices and professional development as appraisal criteria

TALIS principals were asked about the importance of various aspects of the schooling and teaching process for use in appraisals. The review of research on teacher appraisals in Chapter 5 identifies three criteria that are crucial for maintaining and increasing effective instruction: student learning outcomes, innovative teaching and teacher's participation in professional development. Is the level of importance accorded to these criteria in teacher appraisals related to school management styles? Since these aspects of teaching are closer to school managerial processes, there are generally more associations between them and principals' leadership styles than for teachers' beliefs and practices.

As the first column of Table 6.9 indicates, higher levels of an instructional leadership style are associated with the use of student test scores as an evaluation criterion for the appraisal of teachers in Austria, Belgium (Fl), Bulgaria, Mexico, Norway, Portugal and Spain. A positive relation between an administrative leadership style and use of test scores for appraisals is found only in Austria, Denmark, Estonia and Iceland. In Portugal and Slovenia, student test scores are less likely to be used when the principal adopts a more administrative leadership style. The associations in these countries are net of characteristics of principals, schools and the community the school serves.

As shown in the second column of Table 6.9, similar results are found for the use of retention and pass rates of students for teacher appraisals. In Austria, Hungary, Ireland, Mexico, Portugal, Slovenia and Spain, the use of an instructional leadership style by principals is associated with the use of these student performance measures. However, in Denmark and Norway, an administrative leadership style is associated with the use of this criterion.

The third column of the table shows that in more than half of the TALIS countries (Brazil, Bulgaria, Estonia, Hungary, Iceland, Ireland, Lithuania, Malta, Mexico, the Slovak Republic, Slovenia, Spain and Turkey) when a principal uses a more pronounced instructional leadership style, teacher appraisals are based on the teacher's use of professional development. The association is strong in a number of cases. Only in Austria, Brazil, Estonia and Portugal does more administrative leadership go hand in hand with the use of this criterion.

Objectives of the appraisal

Chapter 5 found two contrasting objectives of teacher appraisals. One is the improvement of teachers' practices, and the other is external bureaucratic accountability. TALIS principals were asked to what degree these two types of objectives were important in the school's teacher appraisal process. Are these objectives related to school management styles?

The fourth set of columns of Table 6.9 shows that in ten countries (Australia, Estonia, Hungary, Iceland, Korea, Lithuania, Mexico, Poland, Slovenia and Turkey) principals who adopt instructional leadership manage schools in which the objective of appraisals is to improve teacher practices; administrative leadership is associated with this appraisal objective in only two countries. In most countries neither leadership style is associated with the importance school leaders attach to informing higher administrative levels of the outcome of teacher appraisals (last two columns of Table 6.9).

Feedback and consequences of the appraisal

Chapter 5 showed that effective appraisals provide good feedback and can help teachers to improve their teaching practices. Are feedback and its consequences related to management styles?

The first relevant finding is that in most countries the use of either self-evaluation or external evaluation are only weakly related to principals' leadership styles, in part because such evaluations are fairly widespread in most countries (Table 6.14). However, there is some indication that both kinds of evaluations are linked to both styles. In particular, in almost half of the countries, those schools whose principals have a more pronounced instructional leadership style are more likely to have conducted a self-evaluation in the previous five years.

The level of administrative leadership is not associated with the amount of feedback received by teachers, but in schools with more instructional leadership there is more feedback given to teachers¹.

Principals were also asked about various scenarios involving feedback and its consequences following an appraisal of a teacher with weak instructional skills. Three scenarios were proposed: *i*) the principal and others develop a training programme to address the teacher's weaknesses; *ii*) the appraisal outcome is reported to other parts of the school system for action; and *iii*) the principal imposes material sanctions on the teacher.

As shown in Table 6.10, in 17 countries, net of other factors in the model, principals with an instructional leadership style report significantly more often that they would develop a professional development programme to improve the instructional practices of the weak teacher. Neither leadership style is strongly related to the use of material sanctions or corrective actions external to the school.

Teachers' professional development

Chapter 3 describes the extent of teachers' professional development. The relation between management styles and two indicators of teachers' participation in professional development are examined here: the number of days of teachers' professional development over the previous 18 months and whether or not they would have liked more.

For each indicator, the teacher model is estimated for each country to examine the relation with principals' management styles, controlling for a number of professional and personal characteristics of teachers: gender, level of experience as a teacher, educational training, permanency of their teaching position, how many schools they teach in, and size of the community of the school.

As Table 6.11 indicates, in most TALIS countries neither leadership style is related to the number of days of professional development completed or to teachers' satisfaction with the number of professional development days that they received. There is some relation in a few countries but no consistent pattern. For instance, in Bulgaria, Iceland, Malta and Slovenia, the degree of unsatisfied demand for professional development was

greater in schools with a stronger administrative leadership style, but this was also the case in Hungary, Iceland, Malta and Turkey in schools with a strong instructional leadership style.

CONCLUSIONS AND IMPLICATIONS FOR POLICY AND PRACTICE

In an era of accountability and devolution of authority in education, this chapter has considered five dimensions of the management behaviour and style of secondary school principals. Three of these are closely aligned with new ideas about school management and recent recommendations of the OECD. One concerns principals' actions for managing the school along clearly stated goals based on student learning and performance objectives. Second is management of the instructional quality of teachers in the school. Third is management that includes direct supervision of instructional quality and feedback to teachers. These three dimensions of management behaviours form the *instructional leadership style*.

The two remaining dimensions of managerial behaviour represent more traditional school administration. The first is principals' actions related to accountability regarding the school's performance and administration within the education system. The second involves actions taken with regard to scheduling of teachers and courses and the enforcement of school policies and procedures. These two dimensions of management behaviour form the *administrative leadership style*.


Figure 6.3

Effects of greater use of instructional or administrative leadership styles Effects that are evident in at least one-quarter of the TALIS countries¹

Leadership style	Effects	Number of countries
Instructional leadership	Greater degree of collaboration among teachers, both for exchange and co-ordination for teaching and more sophisticated professional collaboration	6
	Better teacher-student relations	6
	Greater recognition given to student test scores or other student outcome measures in teacher appraisals or feedback	7
	Greater recognition given to teachers' participation in professional development activities in teacher appraisals or feedback	13
	Greater recognition given to teachers' innovative teaching practices in teacher appraisals or feedback	10
	A development plan is established to address weaknesses following a teacher appraisal	17
Administrative leadership	No effects are consistently evident in at least one-quarter of TALIS countries.	

1. Results from multi-level linear regressions, controlling for teachers' gender, level of education, years of experience, community of the school, permanent employee, and work in other schools.

Source: OECD, *TALIS Database*.

StatLink  <http://dx.doi.org/10.1787/608025205225>

The chapter has examined how these styles of leadership vary from country to country and how they relate to the work of teachers. Figure 6.3 summarises the relations that are most commonly found in the participating countries. The following conclusions can be drawn:

New trends in school leadership are evident to varying degrees in countries' educational systems

Key results:

- In 10 countries, principals use instructional leadership more; in the other 13 they use it less (Table 6.3).
- A sizeable group of principals combine instructional leadership with administrative leadership (Table 6.3).
- Leadership style is unrelated to autonomy in decision making (Figure 6.2).

Discussion

These findings suggest that the instructional leadership paradigm has made some progress in all countries, but much more in some than in others. It also challenges two common assumptions about the spread of such leadership. First, it is not necessarily an alternative to administrative leadership, and an effective principal is likely to display elements of both styles. Second, simply devolving responsibilities to schools does not necessarily trigger a change in leadership style. This points to the need for active interventions to develop the skills and practices of individual principals. It should not be assumed that structural changes in national administrative systems will automatically result in a desired form of leadership.

While neither leadership style is consistently associated with teachers' beliefs and practices, there is evidence to suggest that instructional leadership is related to important aspects of the management of effective instruction in schools

Key results

- In most countries, principals' leadership style has limited direct association with teachers' beliefs and practices or with the amount of professional development teachers receive, after other factors are controlled for (Tables 6.4, 6.5 and 6.11).
- However, more pronounced instructional leadership is associated with managerial aspects of teaching, such as the use of effective and supportive teacher appraisals and feedback processes to improve instruction (Table 6.9).
- In many TALIS countries an instructional leadership style is associated with schools that make more frequent use of an appraisal process aimed at student learning outcomes and at teachers' use of professional development. It is also associated with adopting specific professional development plans tailored to help weaker teachers to improve their teaching practices (Tables 6.9 and 6.10).

Discussion

The use of instructional leadership by principals is associated with aspects of the management of instruction that is in line with recent research and policy recommendations for developing teachers in schools. Supportive appraisals and feedback from which teachers can judge and improve their professional practices is a crucial part of effective teacher management. Similarly, aligning teacher appraisals with student achievement outcomes is a sound managerial practise to focus teachers' efforts on what really counts in the educational process. The same is true for recognising the use of professional development of teachers in the appraisal of teachers' work. Finally, school leadership that develops professional development plans to fit individual teachers' needs, as assessed by appraisals, completes the managerial process for supporting effective teachers. The fact that in a number of countries, principals who employ a significant level of instructional leadership run schools with this kind of process for appraising and developing instruction points to possible benefits to national school systems in training principals to use instructional leadership techniques.


The lack of strong relations between school leadership behaviour and teachers' practices, beliefs and attitudes (after other factors are controlled for) is an interesting finding. It is consistent with other research that shows the impact of school leadership to be indirect and mitigated through the actions of teachers and others. To some extent the finding also echoes the analysis in Chapter 4 which showed that, in the main, teachers' practices, beliefs and attitudes vary to a far greater extent among a country's teacher population generally than between teachers in different schools. Such individuality among teachers illustrates a challenge for school leaders to address the needs of a heterogeneous group of teachers in seeking to achieve common school goals.

It should also be noted that TALIS focuses on secondary school teachers and principals, the former of which are likely to be subject specialist and will develop specific attitudes and practises within their academic field.

Given this, principals' management styles in secondary education may be expected to have less of an influence on teachers' practices and behaviours than might be the case in primary education. Instead as described above, secondary school leadership has its most significant impact on teachers through the overall managerial process that aligns appraisal with achievement outcomes and both of these with professional development.

ADDITIONAL MATERIAL

The following additional material relevant to this chapter is available on line at:

StatLink  <http://dx.doi.org/10.1787/608025205225>

- Table 6.4a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on teacher beliefs (2007-08)
- Table 6.5a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on teaching practices (2007-08)
- Table 6.6a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on co-ordination and professional collaboration among teachers (2007-08)
- Table 6.7a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on classroom climate, time spent on learning and teacher-student relationship (2007-08)
- Table 6.8a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on teacher's job satisfaction and self-efficacy (2007-08)
- Table 6.9a Results of multivariate linear regressions, examining the net effect of instructional and administrative leadership on aspects of teacher appraisals (2007-08)
- Table 6.10a Results of multivariate linear regressions, examining the net effect of instructional and administrative leadership on principal's use of three scenarios to improve an instructionally-weak teacher (2007-08)
- Table 6.11a Results of multilevel linear regressions, examining the net effect of instructional and administrative leadership on teachers' professional development (2007-08)

NOTES

1. Based on a regression analysis of leadership style and teachers' responses to whether they received feedback or not.

Table 6.1

School principal leadership behavioral items (2007-08)

Items in behavioral indices for principals in lower secondary education

Indices	Item name	Description of the item
Management-school goals index	bcg15a	I make sure that the professional development activities of teachers are in accordance with the teaching goals of the school.
	bcg15b	I ensure that teachers work according to the school's educational goals.
	bcg15d	I use student performance results to develop the school's educational goals.
	bcg15j	I take exam results into account in decisions regarding curriculum development.
	bcg15k	I ensure that there is clarity concerning the responsibility for co-ordinating the curriculum.
	bcg16m	In this school, we work on goals and/or a school development plan.
Instructional management index	bcg15g	When a teacher has problems in his/her classroom, I take the initiative to discuss matters.
	bcg15h	I inform teachers about possibilities for updating their knowledge and skills.
	bcg15l	When a teacher brings up a classroom problem, we solve the problem together.
	bcg15m	I pay attention to disruptive behaviour in classrooms.
Direct supervision of instruction in the school index	bcg15c	I observe instruction in classrooms.
	bcg15e	I give teachers suggestions as to how they can improve their teaching.
	bcg15f	I monitor students' work.
	bcg15i	I check to see whether classroom activities are in keeping with our educational goals.
Accountable management index	bcg16a	An important part of my job is to ensure ministry approved instructional approaches are explained to new teachers, and that more experienced teachers are using these approaches.
	bcg16d	A main part of my job is to ensure that the teaching skills of the staff are always improving.
	bcg16e	An important part of my job is to ensure that teachers are held accountable for the attainment of the school's goals.
	bcg16f	An important part of my job is to present new ideas to the parents in a convincing way.
Bureaucratic management index	bcg16h	It is important for the school that I see to it that everyone sticks to the rules.
	bcg16i	It is important for the school that I check for mistakes and errors in administrative procedures and reports.
	bcg16j	An important part of my job is to resolve problems with the timetable and/or lesson planning.
	bcg16k	An important part of my job is to create an orderly atmosphere in the school.
	bcg16o	I stimulate a task-oriented atmosphere in this school.

Source: OECD, TALIS Database.


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Table 6.2

School principal leadership behavioral indices (2007-08)

Indices for styles of leadership of principals in lower secondary education¹

	Indices for instructional leadership						Indices for administrative leadership			
	Management-school goals index		Instructional management index		Direct supervision of instruction in the school index		Accountable management index		Bureaucratic management index	
	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)
Australia	0.47	(0.10)	-0.80	(0.08)	-0.15	(0.08)	-0.29	(0.08)	-1.00	(0.09)
Austria	-0.99	(0.05)	0.14	(0.06)	-0.47	(0.04)	-0.11	(0.06)	0.00	(0.07)
Belgium (Fl.)	-0.34	(0.08)	-0.15	(0.07)	-0.40	(0.05)	-0.54	(0.06)	-0.34	(0.05)
Brazil	0.42	(0.08)	1.10	(0.05)	1.08	(0.05)	0.63	(0.06)	0.28	(0.06)
Bulgaria	0.47	(0.11)	-0.12	(0.07)	0.62	(0.07)	1.32	(0.10)	0.87	(0.09)
Denmark	-0.77	(0.13)	0.88	(0.09)	-0.88	(0.03)	-1.65	(0.07)	-1.37	(0.05)
Estonia	0.03	(0.07)	-0.93	(0.07)	-0.79	(0.04)	-1.04	(0.06)	-0.56	(0.04)
Hungary	0.67	(0.06)	0.46	(0.07)	0.20	(0.07)	-0.09	(0.07)	0.50	(0.09)
Iceland	-0.29	(0.10)	-0.44	(0.08)	-0.41	(0.04)	-0.72	(0.07)	-0.75	(0.07)
Ireland	0.30	(0.08)	-0.24	(0.07)	-1.31	(0.07)	0.30	(0.07)	0.10	(0.07)
Italy	-0.74	(0.06)	0.68	(0.06)	0.63	(0.08)	0.13	(0.06)	0.60	(0.04)
Korea	-0.28	(0.06)	-0.27	(0.06)	0.46	(0.05)	-0.14	(0.06)	-0.70	(0.10)
Lithuania	0.06	(0.07)	0.03	(0.07)	-0.20	(0.04)	m	m	-0.18	(0.07)
Malaysia	-0.30	(0.09)	-0.87	(0.08)	0.35	(0.06)	1.03	(0.05)	0.91	(0.06)
Malta	0.27	(0.10)	0.76	(0.11)	-0.21	(0.07)	-0.24	(0.09)	-0.13	(0.10)
Mexico	0.10	(0.08)	-0.38	(0.06)	0.87	(0.06)	0.53	(0.07)	0.47	(0.09)
Norway	-0.31	(0.06)	0.12	(0.07)	-0.68	(0.04)	0.79	(0.06)	0.31	(0.06)
Poland	0.83	(0.08)	0.25	(0.08)	0.94	(0.03)	-0.27	(0.06)	-0.14	(0.06)
Portugal	0.41	(0.06)	0.25	(0.04)	-1.73	(0.07)	-0.15	(0.07)	0.15	(0.08)
Slovak Republic	0.22	(0.07)	-0.98	(0.11)	0.87	(0.06)	0.25	(0.05)	-0.21	(0.05)
Slovenia	0.63	(0.05)	0.37	(0.05)	1.16	(0.04)	0.08	(0.04)	-0.06	(0.05)
Spain	-0.67	(0.08)	-0.40	(0.07)	-0.82	(0.08)	-0.88	(0.07)	-0.24	(0.09)
Turkey	-0.40	(0.14)	0.49	(0.13)	0.36	(0.09)	0.61	(0.09)	1.04	(0.12)
TALIS average	0.00	(0.02)	0.00	(0.02)	0.00	(0.01)	0.00	(0.02)	0.00	(0.01)

1. Country values that are shaded are not statistically different from the TALIS average.

Source: OECD, TALIS Database.


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Table 6.3

Management leadership styles (2007-08)
Indices of leadership styles adopted by principals in lower secondary education

	Instructional leadership ¹		Administrative leadership ²	
	Mean	(S.E.)	Mean	(S.E.)
Australia	-0.22	(0.09)	-0.72	(0.08)
Austria	-0.59	(0.05)	-0.06	(0.06)
Belgium (Fl.)	-0.40	(0.08)	-0.49	(0.05)
Brazil	1.17	(0.07)	0.51	(0.06)
Bulgaria	0.43	(0.07)	1.23	(0.10)
Denmark	-0.34	(0.09)	-1.68	(0.06)
Estonia	-0.76	(0.06)	-0.89	(0.05)
Hungary	0.59	(0.07)	0.24	(0.09)
Iceland	-0.51	(0.07)	-0.81	(0.07)
Ireland	-0.56	(0.08)	0.22	(0.06)
Italy	0.26	(0.08)	0.41	(0.05)
Korea	-0.04	(0.07)	-0.46	(0.08)
Lithuania ³	-0.05	(0.06)	-0.20	(0.08)
Malaysia	-0.37	(0.09)	1.09	(0.06)
Malta	0.37	(0.09)	-0.20	(0.09)
Mexico	0.26	(0.08)	0.56	(0.08)
Norway	-0.39	(0.05)	0.62	(0.05)
Poland	0.91	(0.07)	-0.22	(0.05)
Portugal	-0.48	(0.06)	0.01	(0.07)
Slovak Republic	0.05	(0.09)	0.03	(0.05)
Slovenia	0.97	(0.05)	0.01	(0.04)
Spain	-0.85	(0.09)	-0.62	(0.08)
Turkey	0.20	(0.15)	0.92	(0.11)
TALIS average	0.00	(0.02)	0.00	(0.01)

1. Average of the indices for Management-school goals, Instructional management and Direct supervision in the school.

2. Average of the indices for Accountable management and Bureaucratic management.

3. The score for Lithuania in the Administrative leadership index is based only on the Bureaucratic management index because of missing data in the index for Accountable management.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.4

Relationship between school leadership style and teachers' beliefs about instruction (2007-08)
Significant variables in the multilevel linear regression of the indices for school leadership styles and the indices for beliefs about instruction in lower secondary education^{1,2}

Example: In Belgium (Fl.), teachers who work with a principal with a more pronounced instructional style of leadership have a stronger belief in a direct transmission approach to teaching.

	Teacher beliefs: Direct transmission		Teacher beliefs: Constructivist	
	Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia				
Austria				
Belgium (Fl.)	+			
Brazil				
Bulgaria		-		-
Denmark				
Estonia		+		
Hungary	+			
Iceland		+	-	+
Ireland				
Italy				
Korea				
Lithuania				
Malaysia				
Malta	-	-	+	+
Mexico				
Norway				
Poland				
Portugal	+			
Slovak Republic				
Slovenia				
Spain				
Turkey				

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teacher's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


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Table 6.5

Relationship between school leadership style and teaching practices (2007-08)

Significant variables in the multilevel linear regression of the indices for school leadership styles on the indices for the following teaching practices in lower secondary education^{1, 2}

Example: In Iceland, teachers use structuring teaching practices more frequently if they work with a principal adopting a more pronounced administrative style of leadership.

	Teacher practices: Structuring		Teacher practices: Student oriented		Teacher practices: Enhanced activities	
	Dependent on:		Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia						
Austria						
Belgium (Fl.)						
Brazil						
Bulgaria						
Denmark						
Estonia						
Hungary			+			
Iceland		+	-	+	-	+
Ireland					+	
Italy			+		+	
Korea	-					
Lithuania	+					
Malaysia						
Malta	-	+	-	+	-	+
Mexico						
Norway						
Poland		+				
Portugal						
Slovak Republic						
Slovenia						
Spain						
Turkey						

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teachers' gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.6

**Relationship between school leadership style and co-ordination
and professional collaboration among teachers (2007-08)**

*Significant variables in the multilevel linear regression of the indices for school leadership styles on the indices
for co-ordination and professional collaboration in lower secondary education^{1, 2}*

Example: In Hungary, teachers are more likely to exchange and co-ordinate in their teaching activities if they work with a principal who adopts a more pronounced instructional style of leadership.

	Exchange and co-ordination for teaching		Professional collaboration	
	Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia				
Austria				
Belgium (Fl.)				
Brazil				
Bulgaria				
Denmark				
Estonia				
Hungary	+		+	
Iceland	+	-	+	
Ireland				
Italy				
Korea				
Lithuania	+		+	
Malaysia	+	-	+	-
Malta	-	+	-	+
Mexico	+			
Norway			+	
Poland	+		+	
Portugal				
Slovak Republic				
Slovenia				
Spain				
Turkey				

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teacher's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.7

Relationship between school leadership style and classroom disciplinary climate, time on task and teacher-student relation indices (2007-08)

Significant variables in the multilevel linear regression of the indices for school leadership styles and the indices for classroom disciplinary climate, time on task and teacher-student relations in lower secondary education^{1, 2}

Example: In Denmark, teachers are more likely to report better relations with students if they work with a principal who adopts a more pronounced instructional style of leadership.

	Classroom disciplinary climate		Percentage of time dedicated to actual teaching and learning in class		Teacher-Student relation	
	Dependent on:		Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia			+			
Austria						
Belgium (Fl.)						
Brazil						
Bulgaria						
Denmark					+	
Estonia						
Hungary					+	
Iceland	-	+		-	+	+
Ireland						
Italy						
Korea						
Lithuania						
Malaysia						
Malta	+	-	+	-	+	-
Mexico					+	
Norway						
Poland						
Portugal					+	
Slovak Republic						
Slovenia						
Spain						
Turkey						

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teacher's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.8

Relationship between school leadership style and teacher's job satisfaction and self-efficacy (2007-08)

Significant variables in the multilevel linear regression of the indices for school leadership styles and the indices for teacher's job satisfaction and self-efficacy in lower secondary education^{1, 2}

Example: In Estonia, teachers tend to be more satisfied with their jobs if they work with a principal who adopts a more pronounced instructional style of leadership.

	Teachers' job satisfaction		Teachers' self-efficacy	
	Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia				
Austria				
Belgium (Fl.)				
Brazil				
Bulgaria				
Denmark				
Estonia	+			
Hungary	+		+	
Iceland	-	+		+
Ireland				
Italy				
Korea				
Lithuania				
Malaysia				
Malta	+	-	+	-
Mexico				
Norway				
Poland				
Portugal			+	
Slovak Republic				
Slovenia				
Spain			+	
Turkey	+			

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teacher's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.9

Relationship between school leadership style and objectives of teacher appraisals (2007-08)
Significant variables in the multilevel linear regression of the indices for school leadership styles and aspects of teacher appraisals in lower secondary education^{1,2}

Example: In Australia, a greater importance is given to innovative teaching practices in teacher appraisals if the school principal adopts a more pronounced instructional style of leadership.

	Factors considered in teacher appraisals								Objective of teacher appraisal is to inform an administrative level above the school ³	
	Student test scores		Retention and pass rates of the students		Professional development undertaken by the teacher		Innovative teaching practices			
	Dependent on:		Dependent on:		Dependent on:		Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia								+		
Austria	+	+	+					+	+	
Belgium (Fl.)	+									
Brazil					+		+			
Bulgaria	+				+					+
Denmark		+		+					+	
Estonia		+			+		+	+		+
Hungary			+		+		+	+	+	
Iceland		+			+		+			
Ireland			+		+					
Italy									+	
Korea								+		
Lithuania					+		+			
Malaysia										
Malta					+					
Mexico	+		+		+		+	+	+	
Norway	+			+						
Poland							+			
Portugal	+	-	+	-			+			
Slovak Republic					+					
Slovenia		-	+		+		+		+	
Spain	+		+		+					
Turkey					+		+			

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the principal's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located, the public/private status of the school, the student-teacher ratio and average class size in the school.

3. School board, municipality, school district and school inspectorate.

Source: OECD, *TALIS Database*.


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Table 6.10

Relationship between school leadership style and outcomes of teacher appraisals (2007-08)
Significant variables in the multilevel linear regression of the indices for school leadership styles and the actions taken if a teacher appraisal reveals weaknesses in the teachers' work, in lower secondary education^{1, 2}

Example: In Austria, a training or development plan is more likely to be provided for a teacher if the principal adopts a more pronounced instructional style of leadership.

	A development or training plan is established for the teacher to address the weaknesses in their teaching		Material sanctions are imposed on the teacher		The underperformance is reported to another body to take action	
	Dependent on:		Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia						
Austria	+					
Belgium (Fl.)	+					
Brazil	+					
Bulgaria	+			+	+	
Denmark						
Estonia	+					
Hungary	+					
Iceland	+					
Ireland						-
Italy						
Korea	+					
Lithuania	+					
Malaysia	+					
Malta	+				+	
Mexico	+					
Norway	+				+	
Poland						
Portugal	+					
Slovak Republic	+		+		+	
Slovenia	+					
Spain	+					
Turkey					+	

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the principal's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.11

Relationship between school leadership style and the professional development of teachers (2007-08)
Significant variables in the multilevel linear regression of the indices for school leadership styles on aspects of teachers' professional development in lower secondary education^{1, 2}

Example: In Bulgaria, teachers are more likely to want more professional development than they undertook if the school principal adopts a more pronounced administrative style of leadership.

	Number of days of professional development taken during the last 18 months		Teachers wanting more professional development than they received in the last 18 months	
	Dependent on:		Dependent on:	
	Instructional leadership	Administrative leadership	Instructional leadership	Administrative leadership
Australia				
Austria				
Belgium (Fl.)				
Brazil				
Bulgaria				+
Denmark				
Estonia				
Hungary			+	
Iceland	+	+	+	+
Ireland				
Italy				
Korea				
Lithuania				
Malaysia				
Malta	-	+	+	+
Mexico				
Norway				
Poland				
Portugal				
Slovak Republic				
Slovenia				+
Spain		+		
Turkey			+	

1. Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

2. Controlling for the teacher's gender, level of education, years of experience, employment status, whether they work in another school and the size of the community in which the school is located.

Source: OECD, *TALIS Database*.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.12

Relationship between the background characteristics of the principals and their school and the use of instructional leadership style (2007-08)

Significant values for principals in lower secondary education

	School principals' characteristics						School characteristics					Frequency of school self-evaluation		Criteria in school evaluation			Influence of school evaluations	
	Gender (Female)	Level of education (Master or higher)	Years of experience (< 5 years)	Years of experience (6-15 years)	Work in other school	Constructivist beliefs about instruction	Public school	Locality of the school: Village	Locality of the school: Town	Student-teacher ratio	Average of class size	Once in 5 years	Two or more during 5 years	Student test scores	Innovative teaching practices	Teacher's professional development	Appraisal of the school management (high influence)	Appraisal of the individual teachers (high influence)
Australia												+						
Austria									+			+	+					
Belgium (Fl.)	+	-				+						+		+				
Brazil						+					+	+						
Bulgaria		+				+	-	+							+			
Denmark		+		+					+		-	-	-					+
Estonia	+					+								+	+			
Hungary	+																	
Iceland		+	+	-	+			-	-		-			-		+		+
Ireland		+						-	-									
Italy		-					a									+	+	
Korea						+	+					+		+	-			+
Lithuania					-	+	-					-						
Malaysia	+						+	-	-		-	-			+			
Malta		+										+						
Mexico					+	+									+			
Norway	+				+						+	+	+	+				
Poland	+		-	-														
Portugal		+					+								+			
Slovak Republic		a					+											
Slovenia							a						+		+			
Spain	+				-	+	-			+		-	+					+
Turkey	+		+	+		+			-					+	+	-		

Note:

- Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.

- "a" denotes that the variable is not available.

Source: OECD, TALIS Database.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.13

Relationship between the background characteristics of the principals and their school and the use of administrative leadership style (2007-08)

Significant values for principals in lower secondary education

	School principals' characteristics						School characteristics					Frequency of school self-evaluation		Criteria in school evaluation			Influence of school evaluations	
	Gender (Female)	Level of education (Master or higher)	Years of experience (< 5 years)	Years of experience (6-15 years)	Work in other school	Constructivist beliefs about instruction	Public school	Locality of the school: Village	Locality of the school: Town	Student-teacher ratio	Average of class size	Once in 5 years	Two or more during 5 years	Student test scores	Innovative teaching practices	Teacher's professional development	Appraisal of the school management (high influence)	Appraisal of the individual teachers (high influence)
Australia						+			+		-	-						+
Austria					-								+	+				
Belgium (Fl.)						+						+						
Brazil		+				+												
Bulgaria		+				+	+	+					+					
Denmark				+		+				-								+
Estonia						+							+					
Hungary	+					+		+					+	-				
Iceland														+				
Ireland						+							+				-	
Italy				-			a	+										
Korea			-	-		+	+							+				
Lithuania						+												
Malaysia							+				-	-						
Malta												+					+	
Mexico						+				-								
Norway	+										+	+						
Poland		+	-			+				+								
Portugal				-					+	-								
Slovak Republic		a				+												
Slovenia							a											
Spain						+												+
Turkey			+		+	+								+				

Note:

- Variables where a significant positive relationship was found are indicated by a "+" while those where a significant negative relationship was found are shown with a "-". Cells are blank where no significant relationship was found. Significance was tested at the 5% level.
- "a" denotes that the variable is not available.

Source: OECD, TALIS Database.


StatLink  <http://dx.doi.org/10.1787/608025205225>

Table 6.14


Correlation between leadership styles and types of evaluation¹ (2007-08)*Correlations for school principals in lower secondary education*

	Instructional leadership		Administrative leadership	
	School self-evaluation	External evaluation	School self-evaluation	External evaluation
Australia	0.24	0.10	0.14	-0.01
Austria	0.20	0.21	-0.03	-0.01
Belgium (Fl.)	0.34	0.14	0.21	0.10
Brazil	0.31	0.26	-0.05	-0.01
Bulgaria	0.10	0.19	0.02	-0.06
Denmark	0.23	0.25	0.30	0.25
Estonia	0.09	0.06	0.16	0.07
Hungary	0.11	0.16	0.00	-0.02
Iceland	0.22	0.18	-0.09	0.26
Ireland	0.22	0.17	0.19	0.08
Italy	0.09	0.09	0.03	0.17
Korea	0.21	0.16	0.18	0.14
Lithuania	0.14	-0.03	0.10	0.01
Malaysia	0.28	0.10	0.22	0.18
Malta	0.30	0.01	0.15	-0.11
Mexico	0.11	0.06	0.06	0.05
Norway	0.12	0.14	0.11	0.07
Poland	0.08	0.12	-0.02	0.01
Portugal	0.14	0.12	0.16	0.15
Slovak Republic	0.19	0.06	0.03	0.09
Slovenia	0.12	0.16	-0.02	0.10
Spain	0.23	0.13	0.33	0.12
Turkey	0.15	0.40	0.06	0.15

1. Whether or not an evaluation was conducted in the previous five years.

Note: Correlations that are significant at the 5% level are shaded in light gray.

Source: OECD, *TALIS Database*.

StatLink  <http://dx.doi.org/10.1787/608025205225>