Department-Head Leadership for School Improvement

Kenneth Leithwood

Routledge
Taylor & Francis Group

Department-Head Leadership for School Improvement

Kenneth Leithwood

University of Toronto, Toronto, Canada

ABSTRACT

This review of research was prompted by the widespread belief that at least in a significant number of secondary schools, department heads are an underutilized, if not untapped, source of instructional leadership, the type of leadership critical to secondary-school improvement initiatives. Forty-two methodologically diverse empirical studies were used to inquire about department and department-head contributions to secondary-school improvement. Results indicate that department and department-head effects on students are consistently positive, practically meaningful and larger than school effects. Well-functioning departments are powerful centers for improvement. But significant hurdles to effective department-head leadership often minimize its effect, for example, some secondary teacher cultures, some teacher union policies, and some heads' own conceptions of their roles and responsibilities. Conditions enabling successful department-head leadership are identified.

School leadership is widely considered to be a significant explanation for variation in student learning across schools (Leithwood & Seashore Louis, 2012; Robinson, Hohepa, & Lloyd, 2009; Waters, Marzano, & McNulty, 2003). Most of the research justifying this claim, however, is about the influence of principal leadership and by far the bulk of this research has been conducted in elementary schools (e.g., Hallinger & Heck, 2011). This article was prompted by the widespread belief that secondary schools have proven especially resistant to reform efforts and that such resistance can be explained, in part, by the underutilized, if not untapped, potential for instructional leadership exercised by department heads (e.g., Seashore Louis & Wahlstrom, 2012; Weller, 2001). This article summarizes empirical evidence addressing four key questions. What is the contribution to student achievement of secondary-school departments and department heads? How do departments and department heads compare with schools and school-level leaders as potential drivers of change? What challenges do department heads face in providing significant leadership to their departments and schools, as a whole? What is it that department heads do when they are

---

CONTACT Kenneth Leithwood ✉ kleithwood@oise.utoronto.ca 🖳 University of Toronto, Ontario Institute of Studies in Education, Toronto, Toronto, ON M5S 1V6, Canada

successful in providing significant leadership to their departments and schools and what conditions enable such leadership?

Methods and evidence

The evidence summarized in this article was located through searches of the main journals devoted to educational leadership research, along with the reference lists of papers from those sources. The journals included *Educational Administration Quarterly, Journal of Educational Research, International Journal of Leadership in Education, School Effectiveness and School Improvement, School Leadership and Management, Educational Researcher, Educational Management and Administration*, and *Management in Education*. Scholarly data bases also incorporated in the search included ERIC, Proquest, and Google Scholar. While the evidence located through this search process is not exhaustive, it likely represents, reasonably well, the complete body of evidence about departments and department heads in English-speaking educational systems. It is, however, a relatively small corpus of evidence by most social science standards (Printy, 2008; Weller, 2001). Of the 42 studies included in the review, 29 used qualitative methods, primarily interviews, observations, and document analysis, seven used quantitative methods primarily fixed-response surveys, some on-line,, and six used mixed methods. The bulk of the evidence was based on research carried out in UK (16) and U.S. (16) schools. An additional seven studies were carried out in Canada, two in Australia, and one in New Zealand.[1] In addition to the 42 original empirical studies, 15 reviews of literature were used for conceptual and interpretive purposes and 10 studies were also relevant to the analysis although not directly about department heads. These reviews and other studies are cited separately in the reference list.

While different national policy and cultural contexts may exercise subtle influences on the work of departments and department heads, similarities in secondary-school structures and cultures apparent in the research appear to overwhelm national context effects. As is apparent below, differences in teaching cultures, union regulations, department heads' own expectations and senior school leaders' views of the department-head role emerge as considerably more important.

Results

This section of the paper summarizes evidence from the 42 studies in response to each of the four questions addressed by this review.

The contribution to student achievement of secondary-school departments and department heads

Two sources of evidence are relevant to this question. The first source is a small corpus of research examining only department and department-head effects on students. The second source is research demonstrating that the farther away from students' direct experiences is the work carried out at an organizational "level," the less that level of work influences student performance.[2] Individual teachers' work, this evidence indicates, has the most influence on student performance, followed by work at department, school, district and such broader organizational levels as provincial or state and national educational systems.

Research about only department and department-head effects

Arguably the best and most recent evidence about department and department-head effects on students is provided by a study carried out in New Zealand (Highfield, 2012). This study collected data from staff and students in a sample of 10 secondary schools and 30 departments (science, English, math) within those schools. Among other things, the study estimated the amount of variation in student achievement accounted for by department-head leadership beyond the variation explained by school SES and student cultural background. For higher grade (older) students in particular, department-head effects were quite significant. While school SES and student culture explained from 46 to 62% of the variance in student achievement[3] across schools, department-head leadership explained a further 16 to 22%.

A second much older U.S. study, concerned with the development of students' higher order thinking skills, found that success in developing such skills depended on strong leadership at the department level. The authors reported that:

> [Department heads in the study schools were] dynamic leaders who inspire commitment. They work energetically to improve the quality of thinking in their department's classes. The department heads at [two schools] Bradley and Scarborough differ in many ways, but both take a relatively non-directive stance when it comes to shaping their colleagues' teaching styles in particular directions. (McCartney & Schrag, 1990, p. 542)

A third study, conducted in Australia, began by identifying 50 schools designated as high performing based on a diverse array of data, student test data among them. Researchers then collected an extensive amount of qualitative data in each school as a means of identifying "What organizational and institutional factors [government], district, school, leadership, community, department, other groups and individuals contribute to and constrain this success?" (Dinham 2007, p. 66). Department-head leadership emerged as a prominent factor explaining the high performance of these schools.

Additional evidence supporting claims about department and department-head effects comes from research demonstrating significant within-school variation in department contributions to student learning. One study (Harris, Jamieson, & Russ, 1995) conducted within overall high-performing schools (based on student achievement data) demonstrated that within those schools were both high- and low–performing departments. So the average performance of students across departments typically used to calculate a school effect masks the more significant department effects on achievement. Different department effects, this evidence also suggests, may be a consequence of wide variation in the participation by department heads in school-wide decision making.

Research on comparative effects

Evidence comparing the effects on students of different organizational units or levels (e.g., individual classroom, department, school, district) reinforces claims about significant department effects, although in part by extrapolation. Using U.S. national data bases, one of the most rigorous and well-known studies (Darling-Hammond, 1999) reporting the influence on student achievement of teacher quality (the professional knowledge and skill of teachers, as well as their background preparation) found that grade 4 and 8 math and reading achievement[4] were highly correlated with measures of teacher quality, partial correlations ranging from .61 to .75 in math and from .75 to .80 in reading.[5] While this evidence is from elementary schools, there seems little reason not to expect similar results in secondary schools. Individual teachers and classrooms explain the largest amount of variation in achievement of all organizational levels.

A recent, methodologically sophisticated study (Chingos, Whitehurst, & Gallaher, 2013) using 10 years of student achievement data from districts in both North Carolina (115 districts) and Florida (67 districts) examined the relative amounts of variation in student achievement accounted for by districts, schools, and individual teachers. Ignoring the variation explained by factors over which education systems have little influence (student age, race/ethnicity, cognitive disability status, free and reduced lunch, limited English proficiency status), results from the relatively small North Carolina districts found that about 54% of the variation in achievement was explained at the teacher level, with schools and districts each explaining in the 20 to 25% range. Results from the much larger Florida districts demonstrated much more exaggerated differences between organizational levels. Individual teachers explained from 75 to 85% of the variation in student achievement, schools about 12 to 15%, and districts only 4 to 6%. About the substantial differences in district effects between the two states, Chingos et al. (2013) speculate that:

> Superintendents of smaller districts may more easily be able to change education policies and practices than their counterparts in larger districts. There may also be more idiosyncratic variability in smaller districts, such as the departure of a highly effective principal of a school that accounts for a significant share of enrolment in the district. (p. 14)

Put differently, the work of superintendents in smaller districts is much more likely to influence the direct experiences of students than is the work of large-district superintendents.

Finally, an exceptionally rigorous review of evidence comparing effects on student achievement of work done at different organizational levels found that "variance between…school subjects [departments] nearly always outweighs the school-level variance" (Luyten, 2003, pp. 45–46). This study also found widely different estimates of the size of effects at various organizational levels among the studies examined. This result echoes Sisken's synoptic observation that most educational research has been about either schools or classrooms, overlooking intermediate structures, even though robust research (e.g., using the U.S. High School and Beyond data) has found "results surprisingly robust and consistent" (Siskin, 1991, p. 136) at the subject level.

In sum, compelling evidence of several types demonstrates a strong association between student performance and the proximity to students' direct experiences of the work carried out at different organizational levels. Work carried out at the department level is likely to have more influence on the direct experiences and performance of students than work carried out at the school level, although not as much influence as the work carried out by individual teachers in their classrooms. As one study concluded about department heads:

> No other position has more potential to increase school effectiveness than the department-head position because it is a direct extension of the school's administration and department heads enjoy the unequaled opportunity of direct, daily contact with teachers and students. (Weller, 2001, p. 74)

Departments and department heads as compared with schools and school-level leaders as potential drivers of change

While the work of departments and department heads is likely to have a greater influence on students than the work of schools and school-level leaders (although both levels working together is ideal), the most promising locus or "driver" of change initiatives is a separate and quite strategic question. By far the bulk of the evidence favors the department over the school for reasons having to do with structure, sources of leadership expertise, and teachers' identity and culture.

Structure

The large size of many secondary schools, the complexity of the secondary-school curriculum, and the necessarily limited subject-matter knowledge of school-level leaders means that department heads are potentially in the best position to provide the kind of instructionally oriented leadership that is likely to improve the quality of students' classroom experiences. Although departments vary widely in size, all are smaller than their host schools, making it easier for teachers to develop an organizational identity and sense of collegiality within their departments. Such collegiality leads to shared understandings and cultures of professional collaboration which have the potential to improve instruction. One recent study, for example, found department-head leadership to be the most influential factor in "determining the quality of teachers' participation in communities of practice" (Printy, 2008, p. 214). Furthermore, according to the results of this study, the strength of such leadership mattered more to such participation than did the subject specialization of the department.

Sources of leadership expertise

At least relatively effective department heads have the specialized "pedagogical content knowledge" (Shulman, 2000) required to both improve teaching and learning and to garner the respect and allegiance of teachers implicated in such improvement efforts. Indeed some evidence suggests that in many secondary schools, departments and their heads do make many of the most critical decisions about the curriculum, how it is taught, and how it is evaluated (Hord & Murphy, 1985).

Perceptions on the part of teachers about their principals' and vice principals' lack of experience and subject-related expertise often isolates these senior school leaders from teachers, whereas the academically based resistance some teachers hold about these senior administrators is absent from their relationship with at least those department heads considered to be "leading professionals" (Hord & Murphy, 1985). Department heads bring different perspectives to school decisions by virtue of their subject or discipline specializations. This disciplinary specialization gives heads a type of expertise and legitimacy that extends well beyond the school (Siskin, 1997).

The comparatively longer tenure of department heads, as compared with principals, facilitates the development of trusting relationships between teachers and heads, an important contribution to school improvement (Tschannen Moran, 2013). One recent study reported that 68% of department heads had served in that role for more than 6 years and only about 21% of them aspired to move on to a principal position; this same study also reported a very strong commitment by heads to mentoring their teachers (Kinsella, 2011).

Departments also are sources of improvement initiatives that can be independent of either their schools or districts. Secondary subject-matter teachers are often members of informal, same-subject networks across schools and districts; they typically belong to professional subject associations, as well, which provide their own professional development opportunities. Through mechanisms such as these, new ideas in the subject field and how to teach it can seep into the department, bypassing the professional development initiatives of either the school or the district (Siskin, 1991).

Teacher identity and culture

Teachers often identify much more closely with their departments and subjects than with their schools because departments have distinctive cultures and offer potentially rich environments for the exercise of collegial work; these distinctive cultures may also "exert a substantial pull away from teachers' allegiance to the school as functional unit" (Lee, Bryk, & Smith, 1993, p. 215).

Several studies demonstrate the important effects of departments and department heads on the professional work of teachers. Departments are portrayed in this research as central in the professional lives of teachers. One large-scale U.S. study (Printy, 2008), for example, found that both school-level leadership and department leadership were instrumental in providing opportunities for teachers to learn in professional communities. School-level leaders, however, were relatively distant from the instructional concerns of teachers whereas department heads were much closer.

A considerable proportion of teachers' sense of efficacy and satisfaction flows from department-level decisions about, for example, the courses offered and the types of students taught, because the psychic rewards for teachers depend to a great extent on their students (Lee et al., 1993; Siskin, 1991). The widely different response of departments to improvement initiatives may also be a function of deeply embedded, subject-related department cultures or "microclimates" (Sisken, 1997). Some evidence indicates that collegial relationships across departments in the same school can range widely from conflict, which would make improvement efforts difficult, to collaboration, which would enhance the chances of improvement. Differences such as these exist because of differences in teachers´ beliefs, their commitments to their work, and the nature of their relationships with their colleagues (Lee et al., 1993). Furthermore, evidence suggests that:

> Department designations label teachers, are a key part of their professional identities and provide boundaries dividing teachers into distinctive worlds... Departments thus form intimately interconnected subgroups within the school, and it is at the department level that the potential for collegiality, for collaboration, for shared goals within a high school seems most possible…. (Siskin, 1991, p. 154)

Additional evidence also points to the possible further amplification of differences arising from teachers' race, gender, and seniority. These differences within and among departments provide major challenges to school-level leaders aiming to develop wide agreement on school-wide priorities and improvement plans. These are not differences that can be safely ignored.

Finally, a systematic review of research reported more than two decades ago summed up evidence about departments' [and department heads'] contributions to teachers' work, as follows:

> The existing research, although limited, suggests that departments play an important role in teachers' professional lives. High school teachers most often describe themselves as subject-matter specialists, seeing their social ties primarily to their departments rather than to the school. Important curricular decisions occur here, and significant consequences may accrue in terms of teachers' efficacy and staff morale. (Lee et al., 1993, p. 2013)

In sum, well-functioning departments are not only powerful centers for improvement work but also are less dependent on the work of school-level leaders than might be expected (Harris et al., 1995; Harris, 1998), although a supportive school-wide context makes it easier for departments to function effectively. Departments, it would seem, are more suitable units for improving teaching and learning than are secondary schools, as a whole, and the value of department-head leadership likely outweighs (but does not replace) the value of principal leadership for improving teaching and learning. As one study concluded:

> It is clear that heads of department…can play a central role in defining and sustaining collegial sub-cultures, by ensuring departments operate as socially cohesive communities where all members work collaboratively with a high degree of commitment. Within this management role, more than any other, is the real potential of organizational change and improvement. (Busher & Harris, 1999, p. 79)

Challenges to significant department-head leadership

Department heads, as outlined above, are in a powerful position to exercise significant leadership with their immediate department colleagues, if not across the school as a whole. But this potential is severely limited in many schools. According to the studies reviewed, the most critical of these challenges can be traced to teachers' preferences and beliefs, teacher unions, department heads expectations and understandings, principals' perceptions about department-head roles.

Teachers' preferences and beliefs
Most relevant evidence indicates that a high proportion of teachers do not support an instructional leadership or "middle manager" role for department

heads, especially one that would include observing teaching (Bennett, Newton, Wise, Woods, & Economou, 2003). Indeed, some evidence (Worner & Brown, 1993) indicates that many teachers oppose department-head engagement in assigning and supervising teachers, selecting new department members, observing classroom instruction, or supervising for instructional purposes only.

Instead, many teachers prefer their heads to engage primarily in such administrative tasks as exam recording, obtaining and distributing resources, and organizing the teaching timetable (Jarvis, 2008). These teachers had the "wrong attitude" for collegiality to work in their departments. None of these teachers believed that their department heads had an influence on their classroom practices. Rather, they believed that they had complete autonomy in decisions about their teaching practices. Clearly, proposing a significant leadership role for department heads threatens the individual autonomy that a sizeable number of teachers believe they have and want to keep.

Teacher unions

Teacher unions figure prominently in the role played by department heads and differences in union guidelines account for considerable variation in the extent to which significant leadership is possible for department heads. To illustrate, in the Canadian province of Ontario, as in some other educational jurisdictions, teacher unions have actively opposed the type of expanded leadership role for department heads that focus directly on the improvement of instruction. For example, according to the guidelines for the work of department heads provided to its members by Ontario English Catholic Teachers Association (OECTA), department heads can support teaching by providing resources, a collaborative work environment, advocacy for the department in the school and help in identifying exemplary practices. Peer and curriculum leadership are OECTA's conceptions of department-head leadership. But such leadership must not include the formal evaluation of teaching (the signature issue for most teachers and teacher unions), the hiring of teachers, the resolution of conflicts between teachers, the mentoring of department staff (unless voluntarily) or "any other management function."

There are significant historical reasons for OECTA's guidelines, reasons largely related to contracts and conditions of work. But the outcome of the guidelines means allocating the formal responsibilities for improving instruction to principals and vice-principals, whose subject-related leadership capacities would need to be impossibly stretched over the full range of disciplines taught in a secondary school. OECTA's guidelines, however, do not rule out a role for department heads in fostering instructional improvement through "cultural" means, an approach discussed further in the conclusion of this paper

Department heads' expectations and understandings

Many department heads themselves are content to avoid exercising significant leadership in their departments and schools. One Canadian study found that department heads had, at best, a limited conception of their leadership potential and its value in secondary-school improvement efforts (Bestard, 1996). A second Canadian study (Hannay, 1992) reported very little perceived responsibility on the part of department heads for such improvement-related activities as staff development, organizing staff deliberations about curriculum improvement, and working with other heads in the school on school-wide change issues. Similarly, several UK studies (Bennett et al., 2003; Earley & Fletcher-Campbell, 1989; Jarvis, 2008) have found that many department heads do not conceive of themselves as having responsibilities for others and being in positions of leadership; nor they do not view themselves as leading improvements in their departments. Department heads in these studies did not accept responsibility for evaluating and reviewing the work of their departments; this was considered an embarrassing activity to be avoided whenever possible. One of these studies reported that department heads avoided the task of observing the teaching of their colleagues, instead focusing their efforts on the preparation of such written material as exercise books, lesson plans, and assessments. Most department heads, according to this study, kept a tight rein on the syllabus (often writing lesson plans for the department) and on resource allocation. Most did not dictate teaching approaches but did direct content and time allocation. This appears to indicate that heads of department are aware that they should be monitoring instruction but are unwilling or unable to do so directly. Many department heads are also reluctant to risk the "collegial" relationships they have developed with their teaching colleagues (Wise, 2001). Rather, these heads view their role in monitoring teaching practice as one of casual, informal inquiry.

Senior school leaders' perceptions of the department-head role

Some research indicates that the approach to leadership adopted by senior school leaders, especially principals, varies considerably in its expectations for department-head leadership. Some principals hold a shared or distributed view of school leadership, a view that creates opportunities and expectations for department heads to lead improvements in their own departments and contribute to school-wide leadership. In other cases, however, principals view department heads merely as conduits for their own initiatives and leave little room for department-head initiative. For example, the style of line management experienced by middle managers included in several studies (Bennett et al., 2003; Wise, 2001) varied markedly within and between schools; at one extreme was the very distant "there if needed" line manager, at the other were regular timetabled meetings with a specific member of the senior management team. However,

there was less variation in the line management routines these principals instigated with their team members, which was generally one of casual informal enquiry.

Another study (Brown & Rutherford, 1999) demonstrating variation in department effects was carried out in 21 comparable-sized English secondary schools. This study found three levels of such department-head participation ranging from quite high to quite low. In schools where participation was high there were regular opportunities for collaboration with other school and department leaders. In addition, such schools strongly adhered to the idea of team management and departmental priorities were crafted in close association with school-wide improvement efforts.

In sum, the restraints imposed on department heads by many teachers, some unions, some senior leaders, and some heads themselves prevent heads from adopting a proactive and relatively comprehensive leadership role for improving the quality of teaching in their departments. These restraints help account for the features associated with relatively ineffective departments (see Harris, 1998; Black, 2005) found to be the features of relatively ineffective departments.

At the heart of these features, the study suggested, was a lack of attention to "the quality of teaching, teaching relationships and professional development" (Jarvis, 2008, p. 29).

Effective department-head leadership and most relevant evidence enabled

This section of the review summarizes evidence about effective department-head leadership practices, offers more detail, for illustrative purposes, about a selection of those studies providing such evidence, and outlines what is known about how to enable effective department-head leadership.

Effective department-head leadership practices

Table 1 summarizes those effective department-head leadership practices identified in the 32 studies included in the review which provide relevant evidence.[6] callout, Table 1 The five dimensions of effective leadership,[7] as well as the personal leadership resources[8] found in the Ontario Leadership Framework (OLF) (Leithwood, 2012) and a series of related articles (e.g., Leithwood & Jantzi, 2005; Leithwood & Riehl, 2005; Leithwood & Sun, 2012), have been used as a framework to organize this summary. Research used to develop the OLF was largely about effective school-level leadership—the practices enacted by principals and vice principals, for the most part, with demonstrable direct and indirect effects on student learning, along with their underlying traits and dispositions.

The left column of Table 1 identifies those dimensions and personal leadership resources, along with the more specific practices and dispositions

Table 1. Effective department head leadership practices.

Ontario Leadership Framework[a]	Department Head Leadership Practices
Setting Directions	
Builds a shared vision	Has a clear, shared, vision for the department which is evident in the constant and ongoing professional talk at both formal and informal levels;
	Seeks and accepts input from others to formulate this vision and sets high standards and expectations for realizing the vision;
	Develops and implements a set of shared values with staff;
	Collaborates with colleagues to arrive at agreement about desired policies and practices aimed at helping realize the department vision;
	Has a clear view of the importance and relevance of the department's discipline for students' lives
Identifies short-term goals	Sets targets for student achievement in collaboration with department colleagues
Creates high performance expectations	Ensures decisions and problem solving are focused on improving teaching and the learning of all students;
	Works with teachers to set performance appraisal goals and plans that relate to department and school goals;
	Provides constant, subtle pressure for change and improvement in student outcomes;
	Has, as a prime concern, students and their learning conceived broadly to include intellectual and social development
Communicates the organization's vision and goals	Helps teachers understand how their classroom work contributes to the department and school goals;
	Communicates effectively;
	Helps connect the goals of the department to the goals of the school;
	Serves as a communication liaison: fosters communication both downward from senior school leaders and upward from department staff
Building Relationships and Developing People	
Provides support and demonstrates consideration	Works collaboratively with staff to implement actions agreed on by department
Stimulates professional growth	Supports staff in a wide variety of both in-house and wider professional learning aimed at broadening and deepening their skills and knowledge, thereby building department capacity;
	Helps staff identify and address their strengths and weaknesses;
	Mentors staff and encourage professional learning and development
Models values and practices	Models what it means to be an "expert practitioner," a successful teacher who is up-to- date with developments in the disciplinary fields;
	Models professional, collegial, and cooperative ways of working;
	Models the importance of continuous professional learning
Builds trusting relationships	Collaborates with others on department and school matters;
	Is viewed as democratic and empowering
Developing the Organization	
Builds collaborative cultures and distributes leadership	Fosters a climate for improvement which encourages staff to change existing practices;
	Is highly organized and works collaboratively to generate detailed and collectively agreed on schemes of work;

(*Continued*)

Table 1. (Continued).

Ontario Leadership Framework[a]	Department Head Leadership Practices
	Sets regular meetings with agenda and time allocated to support the achievement of priority teaching and learning goals; Enacts a caring leadership style which empowers others; Encourages the sharing of best practices
Structures the organization to facilitate collaboration	Participates in whole school collaborative decision making in schools; Encourages sharing of effective practices and resources
Builds productive relations with families and communities	Deals with students who flout school rules and contacts parents because of this
Connects the department to its wider environment	Negotiates with colleagues in other departments; Is an effective, politically astute advocate for the department, providing a collegial bridge between the department and the school; Is well connected and networked externally to other subject and/or industry experts whose expertise could support the work of the department; Plays a significant role in development of the whole school; Communicates to the community about local school and district initiatives
Is strongly involved in own professional development	Participates in and contributes to professional development across school and with professional associations
Maintains a safe and healthy environment	Ensures that student discipline is effectively managed and any conflict in the department is quickly and efficiently resolved; Ensures that the personal and social needs of students are met in order to underpin their academic success; Helps provide a safe, supportive, and well-organized environment for teaching and learning
Allocates resources in support of school vision and goals	Coordinates the department's work by performing common administrative work and developing centralized management systems; Manages resources equitably to the mutual enhancement of the whole department and to advantage the students; Ensures that teaching and learning processes are organized in an optimal way; Aligns the department budget with priority teaching goals; Provides staff with equitable access to department resources; Varies the assignment of classes to teachers to as a means of further developing teachers' practices; Selects texts for use in classes
Develops and uses department policies to help ensure high standards of practice	Develops department policies jointly with senior school leaders and department members, then uses those policies to help ensure high standards of practice; Is sensitive to the need for flexibility in applying policies; Facilitates development, communication, and implementation of clear policies and procedures
Improving the Instructional Program	
Staffs the instructional program	Works with senior leaders to ensures the hiring of skilled teachers and the quick resolution of staffing shortages;

(*Continued*)

Table 1. (Continued).

Ontario Leadership Framework[a]	Department Head Leadership Practices
	Inducts newly hired staff, provides mentoring for them, and monitors their instruction
Monitors student learning and improvement progress	Develops effective and systematic mechanisms for evaluating department and teacher performance while monitoring student progress; information is collected through a variety of means and includes solicitation of the views of students;
	Assists teachers to implement in their classrooms what they learn through their professional development;
	Ensures that students receive high-quality feedback;
	Observes lessons and provides constructive feedback to teachers;
	Monitors the use and quality of teaching resources;
	Helps staff interpret assessment results and adapt instruction based on those results;
	Ensures quick and effective management of student discipline
Buffers staff from distractions to their work	Defends colleagues against senior-management prejudices and policies;
	Protects teachers from erosion of instructional time
Stays grounded in classroom teaching	Continues to improve their own skills for classroom teaching;
	Stays informed about new trends and programs in their subject field
Provides teaching resources	Creates action plans and schemes of work to support effective classroom practice;
	Encourages use of department lesson plans
Securing Accountability	
Builds staff members sense of internal accountability	Insists on improved student learning as the main priority of the department
Meets the demands for external accountability	Involves department members in the shaping of departmental policies that are in line with the goals of the school;
	Translates the perspectives and policies of senior staff into individual classrooms;
	Liaises with, and seeks information from, other important areas of the school and represents the views of the department to the senior administrators;
	Assists in the development and implementation of both district and local curriculum improvement efforts
Personal Leadership Resources	
Cognitive	Has extensive pedagogical content knowledge;
	Adopts a whole-school perspective on responsibilities, a form of systems thinking;
	Is well organized and pays attention to detail
Social	Is inclusive in dealing with staff and students;
	Establishes good relationships across the department, school and with parents and community members.
Psychological	Is willing to use responsibilities associated with the role;
	Demonstrates commitment, energy, dedication and enthusiasm for teaching which motivates those around them (for example, tends to work harder than anyone else in department);
	Is flexible, open to new ideas and receptive to suggestions from others;
	Treats colleagues with care and consideration

Note. [a]Leithwood (2012)

associated with each, as they appear in the OLF. The right hand column of Table 1 describes parallel practices and resources enacted by those department heads who, according to the 32 studies included in the review, provide significant leadership to their departments and schools.

As Table 1 indicates, in sum, effective department-head leadership practices and personal leadership resources are closely aligned to those practices and resources included in the OLF. Most of the differences are a reflection of the "middle leader" position of the department head in the school. This position creates a unique need to build productive relationships with individual teacher colleagues and heads of other departments, and to forge a significant school-wide decision making role for themselves in collaboration with school-level leaders who have considerable discretion in determining how much authority to award their department heads.

Illustrative studies about effective department-head leadership

Four studies providing some of the most robust evidence available about significant department-head leadership are summarized in this section, along with a set of standards for department-head leadership developed in the UK. Two of the studies are relatively recent large-scale quantitative studies—one conducted in the U.S. and one in New Zealand. The other two studies are qualitative—one conducted in the U.S., the other in the UK.

Reported by Printy (2008), the first of the quantitative studies aimed to unpack the influence of both secondary-school principals and department heads on math and science teachers' formation of productive communities of practice, as well as their sense of instructional efficacy and skill. The teacher data file from a national data base[9] provided evidence for part of this study. From survey items already developed for a broader set of purposes, separate measures were created for principal and department-head leadership based on proximity to teachers and scope of responsibility in the school. This resulted in admittedly restricted measures of both principal and department-head leadership (one of the downsides of doing secondary analyses of large-scale data bases).

Principal leadership practices measured in this study included communicating a school vision, buffering staff from outside practices, knowledge of staff problems, and recognition of good work by staff. Department-head practices included establishing goals, securing resources, carrying out plans of work, promoting innovation, and encouraging other teachers toward full community participation. From a sophisticated statistical analysis of this large data set, Printy (2008) concluded that:

> Departmental leadership [practices] is the most influential factor in determining the quality of teachers' participation in communities of practice. The extent of mathematics and science teachers' participation in productive communities is, on

average, more strongly related to the strength of the department chair's leadership than to subject differences...This is an important finding, one that highlights the important role that chairs play in shaping the agenda for learning, brokering knowledge and learning opportunities, and motivating teachers for learning work (pp. 214–15).

Highfield (2012) conducted the second illustrative study in New Zealand secondary schools. As mentioned earlier, this study collected quantitative data from staff and students in a sample of 10 secondary schools and 30 departments (science, English, math) within those schools. A much more comprehensive measure of department-head leadership was used in this study, as compared with Printy (2008). The foundation for this measure was the six dimensions of effective school leadership practice identified in a widely known meta-analysis of leadership practices,[10] including: establishing goals and expectations; strategic resourcing; planning, coordinating and evaluating teaching and curriculum; promoting and participating in teacher learning and development; ensuring an orderly and supportive environment; and collegially focusing on staff and students. Some close version of the three to five more specific practices associated with each dimension (24 in total) are included in Table 1.

Six department-head "leadership strategies" were identified in a third illustrative study remarkable for its collection of both interview evidence and observation data generated through job shadowing (Wettersten, 1993). Although completed in the early 1990s with a sample of only four reputedly effective department heads in one U.S. state, the portrayal of department heads' work in this study is exceptionally rich. The context for this study was schools in which department heads were awarded considerable discretion. These department heads were reported to be in consistent communication with teachers and administrators. Such communication, though time consuming, kept heads informed of concerns and issues; it was often spontaneous and informal and contributed to the fragmented and relatively intense nature of their workload. Department heads in this study also stressed service to others: they consistently worked at delivering the services and rewards that members of their department and administration needed. In today's context, they would be labeled "servant leaders" This service included assistance in solving problems and keeping relationships in their departments productive. These heads demonstrated an ethic of care for their colleagues.

Engaging in collegial decision making was a further practice of these heads who exercised a collaborative and consultative approach to governing their departments. They were typically included in most school-level decision making by principals and acknowledged and respected the expertise of their teaching colleagues. These chairs also buffered their teaching colleagues from distractions to their instructional work and possessed credibility as

excellent teachers, widely respected not only for their scholarship and instructional skill but also for their organizational and political skills.

Chairs in this study usually had some teaching responsibilities which contributed to the perception of their colleagues that the heads were "one of them." They were politically flexible as middle managers, and demonstrated sensitivity to individual goals in professional growth and development; such sensitivity included taking a personal interest in the professional development of individual teachers. They recognized individual strengths and weaknesses and responded in helpful ways. Sometimes this included helping veteran teachers find assignments which kept them fresh and interested in their work. They supported their new teachers in trying out new ideas and developing new ways of inspiring their students.

Carried out in the UK in the mid-1990s, the final illustrative study was reported by Harris et al. (1995). This was a small qualitative study which relied primarily on interview data from department heads, teachers, students, and members of the senior management team in six departments located in six schools identified as high performing before detailed data were collected. The aim of the study was to identify what, if anything, these effective departments had in common. While the authors of the study frame their results as department characteristics, they are mostly about what department heads in effective departments do. These common department-head practices include, in sum:

- a "collegiate management style;
- a strong vision of the subject effectively translated down to the level of theclassroom [created in collaboration with staff];
- good organization in terms of assessment, record keeping, homework, etc.;
- good resource management;
- an effective system for monitoring and evaluating;
- structured lessons and regular feedback;
- clear routines and practices within lessons;
- a syllabus matching the needs and abilities of pupils;
- a strong pupil-centered ethos that systematically rewards pupils;
- opportunities for autonomous pupil learning; and
- a central focus on teaching and learning" (Harris et al., 1995, p. 247).

This understanding of effective departments or department heads influenced a significant number of subsequent UK studies.

In sum, four illustrative studies aimed at identifying effective department-head leadership practices have been summarized in this section. Practices uncovered in each of these studies overlap with one another, to some extent, but all such practices are included in some form in Table 1.

Conditions which enable significant department-head leadership

A large handful of studies point to conditions in the school that seem to foster significant leadership on the part of department heads (Black, 2005; Harris et al., 1995; James & Aubrey-Hopkins, 2003; McCartney & Schrag, 1990; Wyeth, 1992). In combination, these conditions included a collegial, school-wide culture, an unusually strong school-wide emphasis on teaching and learning, as well as widespread agreement on the importance of students, their learning and well-being. Also among these conditions was a significant voice for students in the life of the school, including a voice in running the school as a whole and systematic use of student assessment data for purposes of instructional improvement. Department-head leadership is fostered, in addition, by access to adequate opportunities to acquire needed leadership capacities along with a clear description of the department head's duties in written form; this statement should not overwhelm heads with small administrative or clerical tasks.

Evidence suggests that significant department-head leadership depends on having adequate time within the school day to provide significant leadership, as well as to carry out their teaching duties; Black (2005) found Alberta department heads teaching about 75% of the day. A much earlier study (Lucy, 1986) reported a negative correlation between time spent teaching and the quality of leadership provided to the department by heads. Adequate financial compensation for the job fosters leadership by department heads.

Principals working closely with their department-head leadership fosters heads' leadership and this typically means providing formally structured arrangements for sharing decision making with department heads, as well as delegating considerable responsibility to department. In some contexts, the leadership of heads includes evaluating or supervising teachers. Teachers often are involved in selecting their department heads and the position has status and enjoys broad constituent support.

Since this set of conditions combines evidence from multiple studies, it is not clear which are the most important conditions or how many of these conditions might need to be in place before department heads are able to exercise significant leadership without unreasonable effort.

Conclusion

This article was prompted by a concern that, at least in a significant number of secondary schools, department heads are an underutilized source of significant instructional leadership for school improvement. Empirical evidence from 42 studies found using conventional literature search techniques was examined in an effort to determine the extent to which departments and department-head leadership influences student learning, how departments compare with schools as drivers of change,

and the challenges to significant department-head leadership. The review also inquired about practices and underlying dispositions that especially effective department heads enact, along with conditions that enable the use of such practices.

Results of the review suggest that the influence of departments and department heads has a greater influence on student learning than the influence of schools, as a whole, and school-level leaders. Furthermore, well-functioning departments are also powerful centers for improvement work and less dependent on the work of school-level leaders than might be expected, although a supportive school-wide context makes it much more likely that departments will function effectively. Departments, it seems from this evidence, are more effective units for improving teaching and learning than are secondary schools, as a whole, and the contribution of department-head leadership is likely greater than the contribution of principal leadership to the improvement of teaching and learning.

Results of the review also uncovered a number of complex challenges preventing many department heads from adopting a proactive and relatively comprehensive leadership role in their departments and across their schools. These are challenges imposed by some teachers and teacher unions, some senior leaders, and some heads themselves. Nonetheless, the review also found considerable evidence identifying effective department leadership practices and personal leadership resources. These practices and resources align themselves quite closely with the nature of effective school-level leadership included in a well-established conception of effective leadership practices.

Implications for policy and practice

While the total amount of evidence available for this review is modest by most social science standards, it does make a compelling case that instructional leadership by department heads has considerable potential for improving secondary schools. Such leadership needs to be enacted with the full support of—and in collaboration with—school-level leaders; it is not a matter of choosing one or the other. Rather, each level of leadership has unique opportunities and restraints. The synergies possible through such a distributed and largely collegial model of leadership offers secondary schools a much more potent improvement resource than is the case when either level of leadership is missing.

In many educational jurisdictions that, through changes to contracts and minimization of the time allocations, clearly do not now expect significant leadership from department heads, acting on the central message in this article would not be easy. But secondary-school improvement has long been considered the central school reform challenge. And building

department leadership capacity at least starts with structures already in place; efforts to develop new "teacher leadership" structures have proven exceptionally difficult (Murphy, 2007).

One key point of departure for realizing the potential of significant department-head leadership is to begin the task of substituting the largely rational and bureaucratic norms, values, and expectations underlying secondary-school organization with the norms, values, and expectations associated with community.[11] Fully developing this conception is beyond the scope of this article. Suffice to say that a "learning community" view of secondary schools and departments provides considerable purchase on the challenges facing significant department-head leadership: heads become lead learners; instructional practices are widely shared among all members of the department; mutual goals focused on improving student achievement and well-being drive the department's work; the school's mission and goals bubble up from the goals and priorities of departments; responsibility for school-wide improvement efforts is distributed across middle and school-level leaders; and responsibility for department improvement efforts is shared by all department members.

Moving toward community norms, values and, expectations in secondary schools is "soft" but essential and extremely challenging work. It does not depend primarily on changing contracts and formal agreements by stakeholder representatives or creating new policies from the center, although some of those changes would likely help. Much more of the move toward community norms, values and, expectations depends on building (or rebuilding) trusting relationships at the local school and department level based on authentically shared and deeply held commitments about students' futures.

Implications for theory and research

Instructional and transformational models of school leadership dominate the empirical and normative literature about successful school leadership (Hallinger, 2003; Robinson et al., 2009). And while each model assumes an ambitious set of practices on the part of leaders, recent calls for an integration of the two sets of capacities (Printy, Marks, & Bowers, 2010) raise the bar much further. The distribution of responsibility for enacting these ambitious sets of practices seems much more realistic than expecting individual leaders to do it all (Harris, Leithwood, Day, Sammons, & Hopkins, 2007; Leithwood, Mascall, & Strauss, 2009).

Evidence reviewed in this article suggests that secondary-school principals and department heads, acting in concert, may be especially well-situated to provide both instructional and transformational leadership practices and, as a consequence, make powerful contributions to secondary-school improvement. However, the body of evidence supporting this hypothesis is relatively

small (42 studies located for this review) and dominated by a one set of research methods (29 of the 42 studies used qualitative methods). In general, greater confidence in the results of this review will depend on more research using quantitative methods.

Of particular value would be studies which begin by distinguishing the two quite different policy contexts in which department heads and principals work. In one of these policy contexts, department heads are expected and permitted to exercise middle-management functions including the evaluation and supervision of teachers. In the second policy context, department heads are restricted to offering collegial support and guidance. Within each of these contexts, research is needed about the alternative patterns of leadership distribution that occur among principals and department heads and the relative contributions to school improvement associated with each alternative.

Funding

Notes

1. A table summarizing the sources, methodological features, and focus of the empirical evidence included in the review is available from the author.
2. See Sammons, Anders, and Hall (2013) for this general argument applied to early-years education.
3. These estimates depended on the age of the students. Effects were more significant with older students.
4. Measured by 1992/1996 NAEP Assessments.
5. Per-pupil expenditures had weaker but still significant relationships, but this was not the case for the other school-level variables measured, including pupil-teacher ratios, class sizes, and the proportion of all school staff who are teachers.
6. Some of the studies providing evidence for this summary did not attempt to distinguish effective practices from those typically carried out by department heads. But those typical practices were usually required by the role; they were "necessary" but not "sufficient" for exercising significant leadership. So the "necessary" as well as the "sufficient" practices have been included in the Table 1 summary but with a strong emphasis on what practices add value to the "necessary" ones.
7. The five categories or dimensions include aetting directions, building relationships and developing people, developing the organization, improving the instructional program, and securing accountability.
8. These are the cognitive, social, and psychological attributes that underlie the enactment of successful leadership practices.
9. National Educational Longitudinal Study of 1988 (NELS:88)
10. Robinson et al. (2009)

11. The absence of a community conception of secondary-school organizations has, at its worst, seemed to place us between the veritable rock and hard place; the rock is bureaucratic micromanagement, the hard place is unaccountable individual autonomy.

References

Bestard, G. (1996). *The work of secondary school department heads* (Unpublished master's thesis). University of Western Ontario, London, Canada.

Bennett, N., Newton, W., Wise, C., Woods, P. A. & Economou, A. (2003). *The role and purpose of middle leaders in schools* (Summary report summer 2003). Nottingham: NCSL.

Black, L. (2005). *The role of department head as a change agent in the implementation of the newest Alberta English program of studies* (Unpublished doctoral dissertation). University of Alberta, Edmonton, Canada

Brown, M., & Rutherford, D. (1999). A re-appraisal of the role of the head of department in UK secondary schools. *Journal of Educational Administration*, 37(3), 229–242. doi:10.1108/09578239910275472

Busher, H., & Harris, A. (1999). Leadership of school subject areas: Tensions and dimensions of managing in the middle. *School Leadership & Management*, 19(3), 305–317. doi:10.1080/13632439969069

Chingos, M., Whitehurst, G., & Gallaher, M. (2013). *School districts and student achievement*. Washington, DC: Brookings Institute.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Dinham, S. (2007). The secondary head of department and the achievement of exceptional student outcomes. *Journal of Educational Administration*, 45(1), 62–79. doi:10.1108/09578230710722458

Earley, P., & Fletcher-Campbell, F. (1989). *The time to manage*. Windsor, England: NFER-Nelson.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329–352. doi:10.1080/0305764032000122005

Hallinger, P., & Heck, R. (2011). Exploring the journey of school improvement: Classifying and analyzing patterns of change in school improvement processes and learning outcomes. *School Effectiveness and School Improvement*, 22(1), 1–27.

Hannay, L. (1992). *Secondary school change: Current practices, future possibilities (Technical report)*. Kitchener, Canada: Ontario Institute for Studies in Education, University of Toronto.

Harris, A. (1998). Improving ineffective departments in secondary schools: Strategies for change and development. *Educational Management & Administration*, 26(3), 269–279.

Harris, A., Jamieson, I., & Russ, J. (1995). A study of effective departments in secondary schools. *School Organization*, 15(3), 283–299.

Harris, A., Leithwood, K., Day, C., Sammons, P., & Hopkins, D. (2007). Distributed leadership and organizational change: Reviewing the evidence. *Journal of Educational Change*, 8(4), 337–347. doi:10.1007/s10833-007-9048-4

Highfield, C. (2012). *The impact of middle leadership practices on student academic outcomes in New Zealand secondary schools* (Unpublished doctoral dissertation). University of Auckland, Auckland, New Zealand.

Hord, S., & Murphy, S. (1985, March). *The high school department head: Powerful or power-less in guiding change?* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

James, C., & Aubrey-Hopkins, J. (2003). The leadership authority of educational middle managers: The case of subject leaders in secondary schools in Wales. *International Studies in Educational Administration*, 31(1), 50–64.

Jarvis, A. (2008). Leadership lost: A case study in three selective secondary schools. *Management in Education*, 22(1), 24–30. doi:10.1177/0892020607085627

Kinsella, S. (2011). *Independent school department heads: The influence of role ambiguity, relationships, and professional development on career aspirations* (Unpublished doctoral dissertation). Fordham University, New York, NY.

Lee, V., Bryk, A., & Smith, J. (1993). The organization of effective secondary schools. *Review of Research in Education*, 19, 171–267.

Leithwood, K. (2012). *The Ontario leadership framework 2012 with a discussion of the research foundations*. Toronto, Canada: Institute for Educational Leadership.

Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership & Management*, 28(1), 27–42. doi:10.1080/13632430701800060

Leithwood, K., & Jantzi, D. (2005). A Review of Transformational School Leadership Research 1996–2005. *Leadership and Policy in Schools*, 4(3), 177–199. doi:10.1080/15700760500244769

Leithwood, K., Mascall, B., & Strauss, T. (Eds.). (2009). *Distributed leadership according to the evidence*. New York, NY: Routledge.

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

Leithwood, K., & Seashore Louis, K. (2012). *Linking leadership to student learning*. San Francisco, CA: Jossey-Bass.

Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48 (3), 387–423. doi:10.1177/0013161X11436268

Lucy, J. R. (1986). Curriculum revision: Who will provide the leadership? *NASSP Bulletin*, 70 (493), 85–87. doi:10.1177/019263658607049320

Luyten, H. (2003). The size of school effects compared to teacher effects: An overview of the research literature. *School Effectiveness and School Improvement*, 14(1), 31–51. doi:10.1076/sesi.14.1.31.13865

McCartney, C., & Schrag, F. (1990). Departmental and school leadership in promoting higher-order thinking. *Journal of Curriculum Studies*, 22(6), 529–543. doi:10.1080/0022027900220602

Murphy, J. (2007). Teacher leadership: Barriers and supports. In T. Townsend (Ed.), *International handbook of school effectiveness and school improvement* (pp. 681–705). Dordrecht, The Netherlands: Springer.

Printy, S. (2008). Leadership for teacher learning: A community of practice perspective. *Educational Administration Quarterly*, 44(2), 187–226. doi:10.1177/0013161X07312958

Printy, S., Marks, H., & Bowers, A. (2010). *Integrated leadership: How principals and teachers share transformational and instructional influences*. East Lansing, MI: Michigan State University.

Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why*. Auckland, NZ: University of Auckland and the New Zealand Ministry of Education.

Sammons, P., Anders, Y., & Hall, J. (2013). Editorial: Educational effectiveness approaches in early childhood research across Europe. *School Effectiveness and School Improvement*, *24* (2), 131–137. doi:10.1080/09243453.2012.749790

Seashore Louis, K., & Wahlstrom, K. (2012). Shared and instructional leadership: When principals and teachers successfully lead together. In K. Leithwood, & K. Seashore Louis (Eds.), *Linking leadership to student learning* (pp. 25–41). San Francisco, CA: Jossey-Bass.

Shulman, L. S. (2000). Teacher development: Roles of domain expertise and pedagogical knowledge. *Journal of Applied Developmental Psychology*, *21*(1), 129–135. doi:10.1016/S0193-3973(99)00057-X

Siskin, L. S. (1991). Departments as different worlds: Subject subcultures in secondary schools. *Educational Administration Quarterly*, *27*(2), 134–160. doi:10.1177/0013161X91027002003

Siskin, L. S. (1997). The Challenge of Leadership in Comprehensive High Schools: School Vision and Departmental Divisions. *Educational Administration Quarterly*, *33*(1 Suppl), 604–623. doi:10.1177/0013161X970331005

Tschannen Moran, M. (2013). *Trust matters: Leadership for successful schools* (2nd ed.). San Francisco, CA: Jossey Bass.

Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on pupil achievement. A working paper.* Aurora, CO: Mid-continent Research for Education and Learning.

Weller, D. (2001). Department heads: The most underutilized leadership position. *NASSP Bulletin*, *85*(625), 73–81. doi:10.1177/019263650108562508

Wettersten, J. (1993). *Leadership strategies of exemplary high school department heads: Four case studies* (Unpublished doctoral dissertation). University of Wisconsin, Madison, WI.

Wise, C. (2001). The monitoring role of the academic middle manager in secondary schools. *Educational Management Administration & Leadership*, *29*(3), 333–341. doi:10.1177/0263211X010293007

Worner, W., & Brown, G. (1993). The instructional leadership team: A new role for the department head. *NASSP Bulletin*, *77*(553), 37–45. doi:10.1177/019263659307755307

Wyeth, T. A. (1992). *The department head and high school leadership* (Unpublished doctoral dissertation). Harvard University, Boston MA.