

# Principal's Research Review

Supporting the Principal's Data-Informed Decisions

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## How Do Secondary Principals Influence Teaching and Learning?

By James Sebastian and Elaine Allensworth

School leaders have complex roles and carry out a wide range of functions that are necessary to support and develop a strong school organization where students are engaged and learning. Ultimately, everything they do is intended to support student achievement. But their effects on students are largely indirect ([Hallinger & Heck, 1996](#); [Supovitz, 2013](#)). School leaders set the goals and mission of the school, promote trust and collaboration, and actively support instruction ([Supovitz, Sirinides, & May, 2010](#)). Their efforts can also lead to stronger organizational processes—such as better parental involvement, curricular coherence, and behavior policies—that lead to stronger classroom instruction, which, in turn, affects student achievement. Because their influence is indirect and there are many potential processes

through which they can affect instruction and achievement, it is difficult to discern what it is that ultimately has the greatest effect on students.

Currently, principals are first and foremost expected to be instructional leaders. But there are so many aspects to ensuring that a school has effective instruction that it is hard to determine where school leaders should put their efforts. Principals are asked to coach and model good instruction, enable professional development for teachers, hire effective teachers and fire ineffective ones, manage relationships among staff members, facilitate collaboration around instruction and student support, set the vision for the building, create ties with families and communities, and maintain order and safety in the building so that instruction can occur. Given limited energy

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### Just the Facts

- School leaders set the goals and mission of the school, promote trust and collaboration, and actively support instruction ([Supovitz, Sirinides, & May, 2010](#)).
- [Bryk, Sebring, Allensworth, Luppescu, and Easton](#) (2010) classified school processes into four broad areas—instructional guidance, the professional capacity of staff members, family and community involvement, and the learning climate of the school.
- Studies of classroom instruction have shown that classroom management (routines, order, and student behavior) and expectations (challenge and academic press) are perhaps the most important elements of the classroom for student learning ([Bill & Melinda Gates Foundation](#), 2010; Kane, Taylor, Tyler, & Wooten, 2010).
- Even students who have very qualified teachers are unlikely to show high learning gains in schools that are disorderly and unsafe ([DeAngelis & Presley](#), 2011).

and time and the impossibility of focusing on all of these roles at once, which is the most important role to play?

Studies on leadership have pointed to a wide array of school processes through which leadership affects student learning. [Bryk, Sebring, Allensworth, Luppescu, and Easton \(2010\)](#) classified school processes into four broad areas—instructional guidance, the professional capacity of staff members, family and community involvement, and the learning climate of the school. (See figure 1). Leadership works primarily to develop those four organizational supports. For our analysis, professional capacity of staff members includes qualifications; professional development quality; and the extent of teacher collaboration, innovation, and teacher socialization, all of which have been associated with higher student achievement ([Bryk, Camburn, & Louis, 1999](#); [Kruse, Louis, & Bryk, 1995](#)). Parent-community ties refer to the degree to which schools foster relationships with parents and the community and include an element of how the school involves parents in their child’s academic progress. The learning climate of the school encompasses the basic elements of student and teacher safety and the more complex aspects of school culture that foster student development (for e.g., by promoting high expectations for student success).

### Instructional Guidance

We analyzed the pathways described in the [Bryk et al. \(2010\)](#) model (see figure 1) to determine which of them showed the largest influence on classroom instruction and student learning in high schools in Chicago ([Sebastian & Allensworth, 2012](#)). The analysis also looked at principals’ scope of work—the fact that principals sometimes work with teachers individually while at other times they work more broadly with the whole faculty. Principals typically use a combination of personalized versus whole-faculty approaches in their everyday work ([May & Supovitz, 2011](#)). We wanted to know whether principal leadership could account for differences in instructional practices and student achievement from

teacher to teacher within a school, as well as for differences in instructional quality and student achievement across schools. That area of inquiry is particularly important in high schools, where there may be well over 100 teachers in the school and multiple disciplinary departments. School leaders might focus their efforts on improving instruction in a few key areas, strengthen collaboration in particular departments, and focus on developing processes that affect the whole school equally. How they divide their time has implications for the overall quality of instruction in the school.

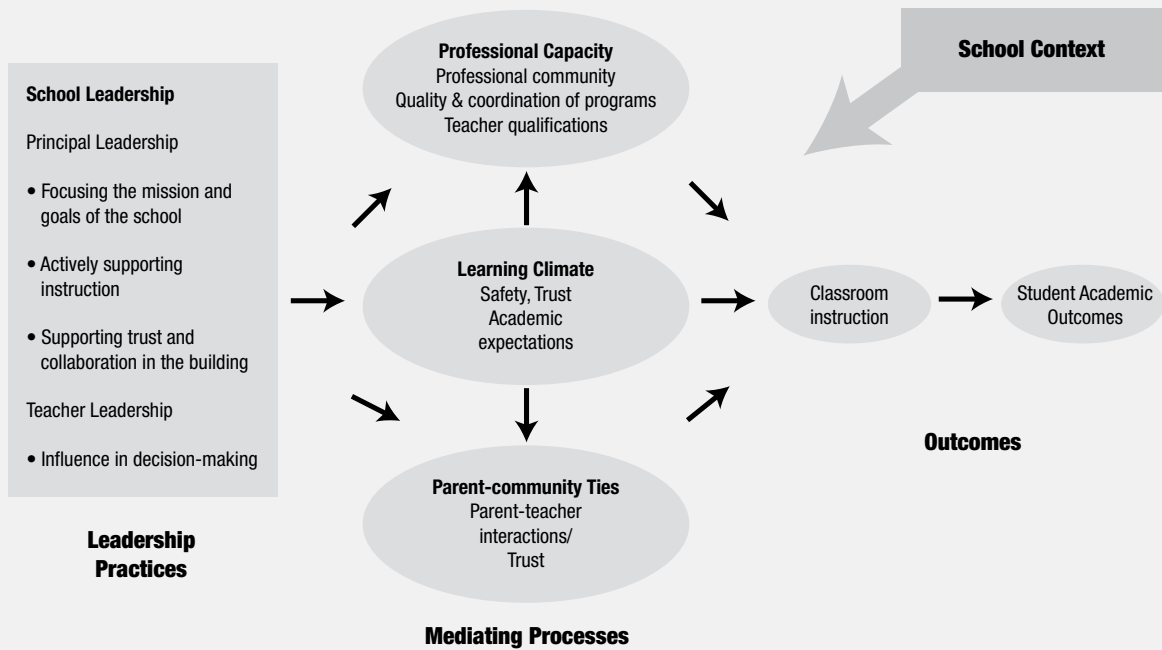
To examine the ways in which leadership influences instruction and achievement, we used a large array of administrative and survey data collected from high schools in Chicago in the 2006–07 school year. Student achievement was measured through gains made on standardized tests ([ACT’s Educational Planning and Assessment System](#)), and students’ grade point averages (GPA). Administrative data was also used to take into account the contextual characteristics of schools, including school size, incoming achievement levels, and student demographic characteristics.

Leadership and school organization were measured with data from 3,529 teachers from 99 high schools. We examined leadership only in the context of the principal; the role of teacher leadership remains to be examined. Classroom instruction was measured through surveys of teachers and included measures of the extent of critical thinking, assignment demands, the quality of classroom discussions, classroom disruptions, and students’ active participation in learning. We examined the pathways from leadership to instruction and learning within a school (comparing teachers), and across schools (comparing one school to another).

### Culture and Climate

Of all the school processes, high school leaders had the largest influence on school achievement through school culture and climate. The degree to which they facilitated a college-going culture and a safe, orderly, climate was by far the strongest mechanism through

**Figure 1. Conceptual model of school leadership, mediating processes, instruction, and student learning.**



**Source:** Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). [Organizing schools for improvement lessons from Chicago](#). Chicago, IL: University of Chicago Press.

which leadership was associated with better classroom instruction and higher student achievement across the entire school. In fact, school learning climate was the only process through which high school leadership accounted for differences across schools in instructional quality and student achievement.

It makes sense that principal leadership has the greatest association with the overall quality of instruction and student achievement through school climate. School climate affects all classrooms, so it may have the broadest reach across the many different classes in a school, particularly in large high schools. Other research has shown the importance of an orderly climate for student learning. Studies of classroom instruction have shown that classroom management (routines, order, and student behavior) and expectations (challenge and academic press) are perhaps the most important elements of the classroom for student learning ([Bill & Melinda Gates Foundation, 2010](#); [Kane, Taylor, Tyler, & Woo-](#)

[ten, 2010](#)). Even students who have very qualified teachers are unlikely to show high learning gains in schools that are disorderly and unsafe ([DeAngelis & Presley, 2011](#)).

Further, efforts to improve climate do not rely on subject-specific skills or understanding. Principals at the secondary level may not have the skills to direct instructional practice in all subjects, but they can create a climate in which teachers in all subjects can be successful. This is especially true in urban districts, such as Chicago, where there is considerable variation across schools' learning climates. Principal leadership can have a strong impact by making sure the school is safe and orderly and focused on academics, which has major implications for how high school principals organize their work. If the primary mechanism for improving student achievement comes through the school learning climate, then principals need to make school climate the priority in their school improvement efforts.

## Instructional Support

The importance of climate does not mean that other aspects of leaders' work to improve instruction are irrelevant for improving student achievement. With more than 100 teachers in a typical high school, not all teachers within the same school will be influenced in the same way by leaders' practices. There are differences among individual teachers' instruction that can be attributed to school leaders through other mechanisms. In particular, teachers who report better professional development and perceptions of curricular coherence have better instructional practices than other teachers in their school. This suggests that principal leadership is important for helping individual teachers improve their performance. Because those efforts affect only individual teachers or subsets of teachers in a school, their overall influence on instruction and student achievement across the entire school is small. For example, efforts that affect five teachers out of 100 will only have a 5% total effect. Better professional development and coherence in a given subject area can benefit individual teachers, but has limited influence on schoolwide achievement because only a fraction of the students in the school will be affected.

There are indications, however, that certain leadership practices can have a negative influence on classroom instruction. High school principals' direct involvement with instruction—over and above their work to improve parent involvement, school climate, professional community, or program quality—showed no benefits and even some detriments for the quality of instruction, particularly at the level of classroom academic demands. Perhaps that occurred because principals take more time to work with teachers who have poor instructional skills. But it may also mean that at the high school level principals' direct interaction with classroom instruction may be perceived as unhelpful by teachers. At

the very least, it suggests caution to leaders who may consider reducing the time they spend building a strong school organization to spend more time as instructional coaches.

These findings have implications for the ways in which principals organize their work, and for training new leaders. If the primary mechanism for improving student achievement in high schools comes through the school learning climate, then principals must make school climate the priority in their school improvement efforts, and training programs that prepare principals to lead urban schools must also recognize it. But such shifts must be incorporated in a way that balances principals' other roles.

Principal leadership is important for helping individual teachers improve their performance through sustained quality professional development. They also have a role in ensuring coherent instructional programming across teachers and departments in the school.

## Clear Direction

With the current emphasis on principals being instructional leaders, it is easy to confuse the role of instructional leadership with that of being an instructional coach. As instructional leaders, principals set the stage for good instruction by making sure their school is organized to support teachers and classroom instruction—with a safe, orderly and academically-focused climate, opportunities for high-quality professional development, and collaboration among teachers and with parents. [PRR](#)

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## Breaking Ranks Connection

The culture of the school must support and be supported by attitudes, values, and behaviors that promote high expectations and a belief that each student is capable of achieving personal and academic success. Creating a culture of high expectations and accountability often requires fundamental changes in the schools exiting culture, an undertaking that can only be achieved and sustained with reflection and a well-defined and implemented process.

—*Breaking Ranks: The Comprehensive Framework for School Improvement*, p. 29

Use the free tool "[How Well Does Your School Serve Each Student](#)" to examine practices that affect your school's climate and culture.