On Leadership and Student Achievement: A Conversation with Richard Andrews

Gains and losses in students' test scores are directly related to teachers' perceptions of their principal's leadership.

We've known for a long time that good schools had good principals, but we didn't know what that really meant.

And now you do?
If we define the good principal as someone who provides instructional leadership for the school, yes. One of the reasons earlier researchers didn't discover as much as they might have was that they weren't asking the ones who supposedly were being led: the teachers. Our research has focused on teachers' perceptions of the leadership of their principals—and we've found some interesting things.

But how do you know the teachers' perceptions are accurate?
Because they correlate with incremental growth in student academic achievement.
So you've got both professional judgment and data?
That's correct, and they're both valid. Researchers may mistrust perceptions, but in a sense the only reality is perceived reality—and people's perceptions of their surroundings have a powerful influence on what they do.

How does your research relate to the literature on effective schools?
The foundation of our work is Ronald Edmonds' hypothesis that school characteristics are related to student achievement and that they can be observed ex post facto. Ron's work, of course, was mostly observational: first locate schools with high achievement, then look to see what you find in those schools that correlates with the achievement. We've gone about it by systematically gathering data from 100 schools over a three-year period, measuring the growth in achievement of individual kids within those schools. Another difference is that Ron was oriented to the equity issue, so he focused almost exclusively on socio-economic status. He didn't deal with black kids as such, for example.

Our research includes both the socioeconomic and the ethnic factors—but it also goes beyond them to look at the incremental growth of all kids. We certainly want traditionally underachieving kids to achieve at a faster rate than those who have traditionally achieved well, but we're also finding schools where students from all groups do better than they ordinarily would.

How is that related to principal leadership?
First I should explain that, based on teacher perceptions and other data, we have identified three different kinds of schools. One group, which we call 'high profile' schools, have principals who in the perceptions of teachers are strong instructional leaders. According to teachers' reports, the schools are also characterized by having high expectations, frequent monitoring of student progress, a positive learning climate, and goal clarity. There's another group of schools where teachers say those things are not present. We call them 'low profile' schools. The third group of schools is in between, or the average school.

When we first analyzed the achievement scores of the 100 schools, we found similar patterns in all of them. White kids were generally at about the 62nd percentile in mathematics, while on the average black kids were at about the 47th or 48th percentile. But when we analyzed their incremental growth two years later, we could see changes for students from both groups in both reading and mathematics. We plotted where each child had been in the spring of '82 and where he or she was in the spring of '84— and we've done that in two succeeding years: spring of '83, spring of '85. If a student began at the 60th percentile in mathematics and if two years later his score was still at the 60th percentile, that was zero incremental growth. If it was at the 62nd percentile, that was two percentile points of incremental growth, which divided by two is one point per year. We did that for all kids within every ethnic and socioeconomic group in the school.

We found highly significant differences in achievement between students in high, average, and low profile schools. For example, in the high pro-

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file schools, the incremental growth for black kids' achievement in math was over three percentile points for the two-year period, while in the low profile schools they actually lost ground at nearly the same rate. White kids in the high profile schools were going forward at nearly one-and-a-half times what would ordinarily be expected, but in the low profile schools the white kids were going backward in mathematics just as the black kids were.

Your design seems unusual. Haven't most researchers tended to look at group, rather than individual, growth?

In general, yes. The one segment of education that has looked at incremental growth over specific time periods is special education. For a special education student, teachers gather baseline data and compare subsequent evaluations against the baseline data. It's not a question of what other kids are doing, in a multihandicapped child it may be the flicker of an eyelid that's the first step of incremental growth. I think general education needs to learn something from that.

In fact, the schools in your study probably don't keep their records that way.

They don't. As in most districts, they track the average level of achievement, they get the number and percentage of kids in the upper three, middle three, and lower three stanines; they get normal curve equivalent scores on each student, but they do not get incremental growth scores.

Let's be clear about this. You are saying that in schools with strong instructional leadership, individual student scores go up over time.

That is correct. Remember that our characterization of these schools as "high profile" is based directly on teachers' perceptions of the quality of their workplace. We might say that where teachers have very positive perceptions of the quality of their workplace, they are more productive, so we see incremental growth in student achievement.

We might think that extraneous variables, such as whether the school building is new or old, or whether the district spends $2,500 or $4,000 per pupil, would be the primary determinant. Those things may play a part, but what is far more important is the quality of the relationships with other human beings in that environment. And since the principal is in the best position to influence that, we would expect his or her leadership to be an important variable, and sure enough it is.

Would you explain how you assessed teachers' perceptions of their principals?

We began with an effective schools questionnaire that measures nine characteristics of the school. We asked collaborative teams of practicing teachers, principals, and college professors at the University of Washington to read the literature on a particular characteristic, such as strong leadership. Then we asked them, from their experience in schools and from the literature, to generate a measure: we

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didn't tell them how. We did a factor analysis on all the items they came up with. We ended up with 96 items, of which 18 measure the instructional leadership of the principal (see sidebar). We have field-tested those items in urban, suburban, and rural districts and found them to be extremely consistent and reliable. For example, with 125 teachers rating 61 principals in the spring of 1984 and then a year later, the test-retest reliability for the strong leader factor was .72, so we're dealing with very stable perceptions in the minds of teachers concerning the leadership of the principal.

What do these items deal with? What is it that teachers perceive as instructional leadership?

I can even tell you what teachers consider highest priority because we've identified 21 outstanding principals through a triangulation process—that is, they not only score high in teachers' perceptions, but they're also regarded as leaders by their peers and by their superintendents. We've then gone to the teachers who work with those principals and asked them to select from our 18 items the characteristics that are most important and state why. The results surprised me.
First is being a visible presence in the school. Now, that is contrary to what has been found in exemplary studies such as John Goodlad's Study of Schooling. The conclusion from these studies has been that in the typical school, teachers don’t want their principal in the classroom. I think this shows the difference between the typical school and schools with principals who are exceptionally strong instructional leaders. In these schools, 78 percent of the teachers say they go to the principal with instructional matters or concerns. They seek these principals out; they want them in their classrooms.

The second most important thing their principals do, according to these teachers, is set a vision for the school. These principals don’t sit around waiting for someone to tell them what their school is supposed to do; they have a definite idea about the purpose of their school.

And they get the resources to help their teachers deliver. Teachers tell us that when they go to their principal with an idea, he or she knows about resources, is well versed in the literature, and knows people who can provide staff assistance and development. The principal’s response is, “That’s a good idea. I’ve heard about a program,” or “I know so and so. I’ll put you in touch with her. We’ll find a way for you to do that.” One thing these principals do is arrange for their staff members to be staff developers for others in their school.

How can one individual—even the appointed leader—have so much influence? One of the criticisms of the early effective schools research was that other factors might not have been taken into consideration. Maybe in certain schools circumstances permitted the principal to be a leader while in others they did not. In other words, the school may make the leader rather than the leader making the school.

We have schools that are good even though they don’t have a principal who is a strong instructional leader; however, we do not have any which have attained excellence. One school, for example, has such a strong staff that it has in the last four years spawned three principals: teachers who have gone on to become principals in other schools. And all three have come close to being strong instructional leaders in their first one or two years as principal in a new school, which is tough to attain. We’re talking about a very potent group of teachers—but the school was unable to become a high profile school until it was assigned a principal whom the teachers perceived was an instructional leader.

We have some examples where a principal is regarded as a strong instructional leader, moves to another school, and in two consecutive measurements is reported as a strong instructional leader by the teachers in the new school: the school moves into the high profile category. That tells me not that the principal makes the school, but that the school was unable to achieve excellence without that kind of principal.

By “strong leader,” are you implying an autocratic style?

Not at all. The leaders we’re talking about know how to empower people and yell, “Charge.” They are both generals and shepherders. The ones I call shepherders collect around them a group of people that is in some ways like a sheepherder and his dogs. I don’t mean to imply that teachers are sheep or that the principal trains the dogs and calls all the shots—it’s not a perfect metaphor—but there’s a team that works closely together that “guides” the rest of the staff. In my analogy, the dogs do much of the work of keeping the whole group together and moving in the same direction, but the sheepherder is crucial to the process. The principal has to be the keeper of the dream and shepherd, if you will, the direction.

Now, in the case of the new principal who made such a difference, if you talk to teachers in the school, some
will say that the new principal didn’t do anything; they did it all themselves. Others, though, will say they were trying to do it themselves before, but they couldn’t pull it off. What was needed was for the right principal to provide that facilitative force.

Some researchers—I think of Russell Gersten and Doug Carnine—contend that while schools do need instructional leadership, it doesn’t necessarily have to be provided by the principal. Some people are good at getting others to do what they’re not good at. I guess you’re saying that in itself is a form of leadership?

The point is that the principal who simply sits back and says, “Okay, I’ll let you do it” is not providing leadership. That’s a leadership vacuum the teachers are having to fill.

How about the notion advanced by Albert Shanker and others that schools should be run by lead teachers rather than by principals?

I think that unfortunately Mr. Shanker is arguing from circumstances rather than from ideas. As near as I can determine from listening to him, his position has been arrived at strictly from a monetary standpoint. He says we can’t afford to increase every teacher’s salary by $10–20,000 a year, so we’re going to have to increase teachers’ salaries selectively. To get around the merit pay issue, he would increase the responsibility of some teachers, call them lead teachers, and pay them for the increased responsibility. Well, it’s a nice idea, but if teachers’ perceptions of the quality of principal leadership is the single greatest predictor of incremental growth in student achievement, that approach could depress student achievement for the sake of increasing a few teachers’ salaries.

But of course you’re talking about the way schools are organized now. A different model could work quite differently.

Yes, there’s the hospital model, for example. You know: you have the administrator, and then you have the professionals who make the professional decisions. But in that model, there is not just a leaderless group; there is a lead doctor. Well, in most schools we already have a person who can run the building; we call that person the head secretary. So let the head secretary run the management...
functions of the school and have the person who sits in the principal's chair be the lead teacher. The principals we see who are strong instructional leaders are already lead teachers. They have a keen understanding of curriculum and instruction, and they are respected for their ability to communicate at three different levels: one to one, in small groups, and beyond that to the district, the public, the educational community, and so on. I see no difference between that and the lead teacher concept.

Furthermore, we run the risk of creating a more bureaucratic form of governance and organization in elementary schools. High schools already have a problem because of their bureaucratic structure: the principal, assistant principals, department heads, and teachers. Appointing lead teachers in elementary schools creates similar layers of bureaucracy that will diminish productivity and inhibit change.

Are you saying you are skeptical about the whole idea of differentiated levels of responsibility within the teaching profession?

Yes. I am convinced that we have to improve teachers' perceptions of the quality of their workplace, but I'm not convinced that the solution is to create lead teachers. Instead, let's create exemplary sites staffed by highly qualified professionals where teachers and principals from other schools can go for inservice training and development—where we put future teachers, and future principals, to do their internships.

Let me ask about it a different way. Does leadership by the principal prevent teachers from being leaders?

Quite the opposite. Having visited all these principals, having been in their schools, I am quite confident that whenever the spark of leadership emerges within their teachers they see it and nurture it. Ann Lieberman calls it "expanding the leadership team." I predict that when we get more good qualitative research, we'll find that strong instructional leaders expand teachers' roles in two ways: first by their leadership within their own classroom, which is their primary responsibility; and second, by using their creative ideas, their experience, and their enthusiasm to bring the larger organization to its ultimate level of efficacy.

Let's talk about how to use this research knowledge. Maybe we should start with how it's already being used.

One exemplary application is the Mercer Island, Washington, school district, where Wilma Smith, the superintendent, has implemented a clinical supervision model for principals. (See Smith and Andrews, pp. 54-57.) Clinical supervision of the principal means the principal's supervisor does clinical observations of the principal in the school, the most important of which is clinically observing the principal at the same time the principal does a clinical observation of a teacher.

It sounds like an interesting program. How does it reflect your research?

The research identifies four subdimensions of leadership: principal as resource provider, instructional resource, communicator, and visible presence. The communicator category includes both creating the mission, or vision, of the school, and communicating clearly with teachers about classroom instruction. If a supervisor never observes the principal interacting at this level, the supervisor has no knowledge about the instructional leadership capability of the principal.

What are some other ways of using this research?

We're currently working with 64 school districts in the state of Washington who are using a self-study process we developed. The effective schools instruments are used to gather baseline data. Staff members at each school use these data to develop a three- to five-year school improvement plan and then use the instruments again each year to get formative information about how they're doing. The instrument includes the 18 items that mea-
sured the instructional leadership of the principal.

Including perceptions of teachers?
That’s right. In each of these 64 school districts the data are being fed directly back to the school. The principal sits down with the teachers to look at a profile showing the teachers’ perceptions of his or her leadership, along with eight other effective schools characteristics.

That must make some principals pretty uneasy.

It does. It’s interesting that many principals believe they are better instructional leaders than their followers think they are. The exciting thing for us is to see a principal—who has found out what teachers really think—get beyond that initial level of anxiety and say, “Okay, what am I gonna do?” Our first suggestion is to find out why the teachers feel that way. “They say you don’t communicate criteria clearly in judging their performance. The only way to find out what that means is to go out and talk with them. If you don’t want to talk with all of them, get the ones you feel most comfortable with and have a real heart-to-heart chat. When you’ve cataloged what they tell you, you’ve got your growth objectives. Later you go back and get feedback. How am I doing?”

A self-help process like that isn’t totally new, but it’s unusual for it to be tied directly to student achievement. That’s a good reason for principals to pay attention to it.

Yes, except that some are afraid that high profile schools may be preoccupied with student academic achievement. “Is it just thump, thump, basic skills, basic skills?” Jerry Bamberg and I have been exploring that question, and we’re finding that the answer is no. In regard to the four basic purposes of schooling, the high profile and low profile schools are much alike. They all say the first priority is basic skills; they all say the second goal is citizenship; the third is self-concept; and the fourth is meeting the individual needs of each child.

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Beyond that, though, are differences in four important areas. One is higher-order thinking skills: nearly twice the number of staff members in high profile as in low profile schools say that’s one of their goals. Another is learning to learn for life. And the third is academic excellence: not just recycling the basic skills but moving on to broader aspects of education. The fourth is a stronger commitment to multicultural education in high profile schools. The low profile schools are the ones preoccupied with basic skills because their students are not mastering them.

You say high profile schools want to go beyond basic skills to academic excellence, but you research is still based on standardized test scores.

That’s correct.

Because you don’t have any other accepted measures?

But also because we use the test scores differently. As I mentioned, we use residualized gain scores, and that’s how we’ve found that instructional leadership is especially important for low-income and black students. If we look at students as a whole, the greatest single predictor of future achievement is prior achievement, but for black kids in our study schools the greatest predictor of future achievement is not prior achievement but strong leadership of the principal.

Suppose I’m a principal in Iowa or Arkansas. It’s fine that you’re doing all this in the state of Washington, but what can I do with what you’ve learned about leadership?

The first thing I’d suggest is to pick up the challenge that Ron Edmonds gave: disaggregate your student achievement data by ethnic group and socioeconomic status. Otherwise you can’t know whether you have an effective school or not.

A second step is to start measuring incremental growth of individual students within each school, not across all schools. I don’t care what measures you use. If you say, “Basic skills aren’t all that important to me,” how about critical thinking skills? There are measures for that—measure it!

But how about feedback? How can principals find out about teachers’ perceptions of their leadership?

Our instrument is not copyrighted; it was developed with state funds and by working with the public schools, particularly, the Seattle School District, so anyone can use it. If they want us to do the statistical analysis, we offer an assessment service for what it costs us to do it. But they can hand score it, if they wish. Let’s improve schools; that’s our objective.

Frankly, I never anticipated that we would find such a powerful relationship between leadership of the principal and student outcomes. After all, the principal is one step removed from the direct instruction process. But what we found is that the teachers’ perception of their work environment is so important, the power of the principal’s leadership so pervasive, that it has a measurable impact on student learning.

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