



David Berliner was director of California's Beginning Teacher Evaluation Study, the prime source of today's attention to time-on-task. In this interview with Executive Editor Ron Brandt, Berliner claims there's one best way to make teachers more effective.

Q What's been your experience in helping teachers use the research on teacher effectiveness?

Berliner: I've tried to disseminate knowledge by making presentations, but that seemed to have very little impact. The times I've gone into classrooms, though, what I did and said meant something to teachers and it made a difference. We could chart the changes. So my experience is simple: the research on teacher effectiveness gets used when somebody works with teachers in their classrooms. There's no substitute for what Bruce Joyce calls "coaching."

Q: What is that like? Exactly what do you do?

Berliner: Take the major variable of "engaged time." I asked teachers in a district near Tucson if we could send graduate students into their classrooms to take some records of their functioning and feed it back to them. The graduate students had learned how to code engaged time, transition time, wait time, and so on. They coded and graphed data from three, four, maybe five visits. Then they sat down with the teacher and had a conference, using some very precise consultation techniques developed by Professor John Bergan of the University of Arizona.¹ Bergan's approach is designed to elicit from the client both a statement of the problem and a statement of intent to change it.

When the teachers had defined their problems and solutions, the consultants—the graduate students—took some more measures. Five of the six classes showed remarkable change; they went from 40 or 50 percent on-

On Improving Teacher Effectiveness: A Conversation with David Berliner

David Berliner is Professor of Educational Psychology, University of Arizona, Tucson.

task time up to whatever goals the teachers had set—70 or 80 percent. The only exception was a mathematics teacher whose time-on-task was about 40 percent. That teacher said, "Fine, that's all I want it to be." At that point, we had nothing more to do. Teachers have to make those decisions.

Q: That indirect, consultative approach seems inconsistent with the image of direct instruction.

Berliner: It's indirect in the sense that we don't tell teachers what their problem is or how to solve it. It's coercive in that we never leave an interview without a statement of the problem and either a proposed solution or the teacher's statement that he or she doesn't want to change.

Q: How does setting a goal lead to improvement?

Berliner: Let me give you an example. I might say to the teacher, "Your time-on-task in mathematics averages 43 percent over the five days we observed. How could you bring it up?" The teacher might say, "Okay, let me think. Maybe, because I'm grading papers when they're doing their math workbooks, I'm not monitoring them enough."

"Terrific. Why don't you take some breaks from your grading of papers and wander the classroom a little bit. Let's see if that has an effect."

So we collect data as the teacher increases his or her monitoring. Well, we happen to know that works. If the teacher is roaming the classroom, attending rates are higher.

Another thing the teacher might say is, "When kids are through with their assignments, I'll have other assignments ready so they'll have something to work on."

In our consultative model, the consultants learn eliciting questions like, "What can you do to accomplish that?" "Is there any other way you can use resources?"

Q: Wouldn't it be simpler just to tell a group of teachers some of the common problems and some ways to make better use of time?

Berliner: Teachers already know these things; they've heard about them in methods courses; they've been preached to. But nothing happens until someone gets the teacher to specify what he or she is going to do, and then monitors and helps the teacher look at the effects.

Q: Considering all the things teachers need to be concerned with, how important is time management?

Berliner: Probably 50 percent of all teachers don't have to worry about time allocation. But the other 50 percent ought to look at it. And half of them—25 percent of all teachers—are probably badly under-allocating time in some areas of the curriculum. We have evidence that the actual time available for instruction in reading and math in some elementary classrooms may total less than 100 hours. That strikes me as a gross misuse of time. So I'd say that as many as one-fourth of the teachers in this country could make marked improvements in instruction by just looking at time allocations.

Beyond that, maybe 70 percent of teachers could be helped by attending to engaged time—how time is used. Whenever managers in the business world do time audits, they find ways to save minutes. And that's true of teaching. For example, when the Austin, Texas, school district took this concept seriously, they found ways to save the

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equivalent of 10–14 days of school, worth \$2–3 million.

Q: Determining engaged time involves making judgments about whether students are doing what they're supposed to be doing. How can an observer tell whether students are on-task or not?

Berliner: Young kids have no guile. To observe on-task or off-task behavior in kids third grade or under is easy. You and I could sit in the back of the room, come up with some rules in about ten minutes, and show almost perfect reliability all day long. Young kids either are or are not on-task and you can tell. If they're off-task, they're dancing, tapping their pencils, chatting with friends, and so on. They're on-task if they scrunch up their faces and hold their pens and pencils tightly. You can almost see them thinking!

As students get older, you begin to see "anticipatory graduate student behavior": head-nodding, smiling, note-taking, and other signs of attending.



You may code this as on-task, but in your heart of hearts, you know the kid's not processing anything. The opposite occurs with the kid who's looking out the window: you code him off-task even though you're pretty sure he's processing everything. Because of this, we decided that with older students, individual data may be faulty, but the means for classes or groups are still valid. There are probably as many students off-task that we coded "on" as on-task that we coded "off." So once you and I agree on some coding rules, our inter-rater reliability would be about .95 at virtually any grade level.

Q: Are you suggesting that principals and central office supervisors should concentrate their staff development efforts on in-class coaching?

Berliner: I sure am. I think they should bring in fewer speakers and instead have somebody in classrooms helping teachers make changes.

Q: But that's a very time-consuming approach. With fewer people in supervisory roles can we really expect them to do coaching?

Berliner: They won't get much change unless they do. I'm convinced that the number of people who will change by exposure to books and lectures and workshops is just too small.

Q: How would someone who's already a principal or supervisor learn more about consultation skills?

Berliner: Well, Professor Bergan's model takes time to learn because it involves asking questions that do not prompt but elicit. Becoming expert requires many practice sessions, as well as analyzing transcripts of those sessions. It's extraordinarily useful, but very technical. But there are other consultation models: Meredith Gall

and Keith Acheson² have one, and I'm sure there are others.³ The behavioral one appeals to me because it puts the responsibility on the person being counseled.

Q: How confident are you that this is what is implied by the term "coaching"?

Berliner: A precise definition isn't necessary. What's important is that somebody who knows the skills in question is in the classroom and provides feedback. Just as a batting coach might say, "Spread your legs a little farther apart," or "Hold the bat a little higher," a teaching coach might say, "You had the opportunity at that point to ask an analytic question and you didn't. Let's figure out why."

Q: That kind of statement is part of the consultative model?

Berliner: Not during the time of eliciting solutions. At that point you'd only say, "Here's the data. Is this what you want?" If the teacher says, "No, I want to change," you say, "Okay, how can you change?" The teacher might say, "I'm going to try to ask analytic questions." Then you can follow up by watching and saying, "Here was an opportunity to ask an analytic question. Why didn't you?"

What I exclude from coaching is walking into the classroom and saying, "You're deficient in analytic questions. I'm going to tell you how to do it." That strikes me as the wrong way to work with professionals.

Q: Must the consultant be an expert teacher?

Berliner: Coaches may not have to be

superior teachers themselves, but they must know good teaching. I'll use another analogy. We all marvel at the Olympics when somebody does a very complex dive and the judges hold up scores within three tenths of a point of one another. It happens because every one of those judges knows how to analyze a dive. Even though the dive takes only 1.8 seconds, they have coded 30 different aspects of it—entry into the water, where the legs were, whether the rollover was correct, and a lot of other things that experts know and novices don't. They're connoisseurs of diving. We need connoisseurs of teaching.

Q: What else besides time allocation, engagement rates, and time management do you watch for when you're observing classrooms?

Berliner: One thing is the match of the instructional materials to the goals of the school or district. For example, if the district says second grade kids should learn two-column addition, I look for whether there's two-column addition going on. I check the teacher-made materials to see if they're congruent with the expected goals, because lots of teachers work very hard making their own materials, some of which are good and some which are not. I've seen teachers put a lot of effort into producing units that are irrelevant to the goals of the district.

Another thing is classroom management and discipline. If the class is not learning because the teacher's time is being taken up by two or three kids, that has to be dealt with.

I also look for politeness and kindness. Classrooms should conform to a model of what a democratic workplace

is like: the teacher is in charge and the kids have work to do. But they should be able to talk to each other about their assignments, there should be some choices, there should be consideration.

Q: These things you look for—are they based on research or are they simply common sense and personal values?

Berliner: They're really extrapolations from research. We don't have research that says polite classes do better, but we do have research that says observers' ratings on a scale of one to ten for "How willing would you be to send your own child to this place?" correlate pretty well with school effectiveness indicators.

It takes a connoisseur of classrooms to know what that means, just as it takes a connoisseur of wine to know a full-bodied wine. You can't define an effective classroom precisely, but I can point to some things: there's laughter and the teacher doesn't bother with it, doesn't say, "Quiet." If it goes on for ten minutes, though, the teacher does; there are limits.

Kids should learn that school is fun and school is work. Classes that are high on academic engaged time do better. Classes that are high on conviviality also score higher.

Q: There's no inconsistency, then, between what you like to see and what research says you should be seeing?

Berliner: No. The only time I hit an inconsistency was on the issue of success rate. I didn't believe very high success rates were necessary for kids to learn. I thought kids should be "stretched." The data changed my mind on that. It changed Barak Rosenshine's and Jere Brophy's minds, too. Now, we're all saying—especially for young kids and slow learners—that high success rate is important.

Q: You also seem to be saying that test scores aren't the only measure of teacher effectiveness.

Berliner: Effectiveness can be defined that way, but I don't think you can avoid certain moral concerns. If a school produces achievement better than other schools but its suicide rate for teenagers is higher, is that a price you're willing to pay? We have evidence that there are schools like that.

We need at least two criteria for judging schools: we have to see them

as work places in which society expects certain things to be mastered. But schools are also places where young people spend important parts of their lives—so they should be enjoyable.

Q: But time-on-task research can be misused if educators aren't concerned with both criteria?

Berliner: Sure.

Q: Are you worried that some administrators may in fact be abusing the idea of time-on-task? That their singleminded devotion to improving test scores may be at the cost of other outcomes?

Berliner: I don't think so. I haven't heard of any real abuses. History may look back on these times and say there were some; I don't know. The administrators who adopted scientific management principles in the 1920s probably didn't feel foolish even though history says they did some of the stupidest things possible. I don't know what a Callahan⁴ would say about the current back-to-basics movement, but my feeling is that for the most part we're reasonably well-balanced.

If American schools have gone overboard, it's in the direction of an educational smorgasbord: smatterings of knowledge and low time-on-task. We ought to take more seriously the outcomes we want.

Q: Your comments seem a bit paradoxical. You've said supervisors need to recognize that teachers have goals of their own, so they can best be approached by asking, "How can I help you accomplish your goals?" Children have goals as well, but the time-on-task researchers say effective teachers don't waste time involving students in decision making. They tell kids what the goals are and get on with teaching them.

Berliner: You've tapped right into a basic educational philosophy of mine. I believe the amount of choice you should give kids in school looks like an inverted pyramid. It should be very limited in the first few grades, but maximal in the last year or two of high school. In the early grades where basic skill acquisition is taking place, we should offer whatever opportunities for choice are reasonable—because that's the way we should treat human beings—but in fact, the expected outcomes of education are quite clear at that level; there aren't a lot of choices.

We shouldn't be hypocritical about it; kids are there to learn to read and write and do math, and a school has failed if large numbers of its kids can't do that by the end of elementary school.

But schools have also failed if that's all students can do at the end of 12 grades. Once they've acquired basic literacy, students should begin making choices about their own education.

Q: There are early childhood classrooms that are very impressive in the amount of freedom children are given and the amount of self-control they develop. In some of those classrooms the kids continue to work even when the teacher leaves the room. Yet those classrooms tend not to produce the highest standardized test scores, at least in the short run. Wouldn't it be wrong for a supervisor to come into that kind of classroom and report data about how the kids are not quite as much on-task as they would be if the teacher stood up in front and said, "Everybody listen to me"?

Berliner: If the teacher has a good system working and we're talking about a few lousy items on a standardized test, I'd leave the teacher alone. If the class is at the 20th percentile but predicted to be at the 60th, the teacher has somehow missed the boat.

The kind of classroom you've described is wonderful, but among teachers who have tried it, more have failed than succeeded. You can get teachers to succeed more easily in a direct instructional model than in an open model. So if I have to make a choice, and only 10 percent of the teachers can pull off the more open kind of classroom, while 90 percent fail—and I think the rates are pretty close to that—I'm going to try to redirect some of them into a more structured situation. That way, kids won't be cheated of their education. But for the 10 percent who can pull it off, my god, hug them. **EL**

¹J. Bergan, *Behavioral Consultation* (Columbus, Ohio: Charles E. Merrill, 1977).

²Keith A. Acheson, and Meredith D. Gall, *Techniques in the Clinical Supervision of Teachers* (New York: Longman, Inc., 1980).

³See also David Champagne and R. Craig Hogan, *Consultant Supervision: Theory and Skill Development*, 1981, available from C. H. Publishing Company, 812 Irving St., Wheaton, IL 60187.

⁴Raymond E. Callahan, *Education and the Cult of Efficiency* (Chicago: University of Chicago Press, 1962).

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