

# On Teachers Coaching Teachers: A Conversation with Bruce Joyce

**Y**ou and Beverly Showers were among the first to use the term coaching<sup>1</sup> in connection with teachers learning new skills. How did that come about?

We were looking for a term that would capture the relationship that appears to facilitate transfer. We had strong evidence that if we combined study of the rationale of a teaching strategy or curriculum with demonstrations of it, plus lots of practice and lots of feedback, almost any teacher could learn almost any approach to teaching—and that's a very affirmative lesson.

But it turned out there was a second stage of learning—when the teacher would consolidate the strategy and adapt it to his or her own repertoire—and skill alone wasn't enough to facilitate that. What was needed was companionship, especially companionship with peers.

We didn't want to use a term like "supervised practice" because of the hierarchical connotations. And we were heavily influenced by some of the sports folks: trainers like Vic Braden, the tennis coach, who was constantly teaching people how to help each other. Braden had expert coaches, but he would also build a community of people who were studying tennis together.

**Have your experiences since that time confirmed the value of coaching for teachers?**



The senior author of *Models of Teaching* and several other books on staff development and school improvement, Bruce Joyce is an experienced trainer and advocate of peer coaching for teachers.

Where it's well used, yes. For example, we enjoy a school where the principal has organized her faculty for peer coaching. She takes over teachers' classes quite a bit so they can get together. Actually, though, the teachers don't spend a lot of time observing each other in classrooms. A team of her teachers may deal with, say, cooperative learning, and when they get the cooperative learning group going, other teachers go in for a few minutes, more to see the whole setup than to observe a particular lesson. But the main work is done when the principal gets the group together with a little wine and cheese once a week and they begin with a videotape of one of them. Or they may hold a few kids after school and somebody teaches a "live" lesson in front of the others.

#### **What general circumstances are needed to make coaching successful?**

Well, you start with lots of training—and you *continue* the training. There's an understanding that every month or so you'll come together and get more input or share experience. Building in regular times for people to think about whatever they're working on makes a big difference.

And as you might expect, it takes an active instructional leader. The cellular organization of schools makes coaching extremely difficult, and a *laissez-faire*, friendly, warm, congenial principal doesn't do much good in that regard. He or she has to unblock obstacles, to eliminate the isolation.

#### **What are these active principals like?**

Well, most of them are really good detail problem solvers. But even more important, they give a lot of attention to building the necessary shared understanding. That is, they help the group not only to take responsibility for sharing in the problem solving, but also to understand what they're about and why they're about it. If it's done mechanically, teachers simply visit each other and say, "Now we've peer coached." That really doesn't do much.

One of the most wasteful arrangements we saw of this was in a wealthy

district that hired substitutes so teachers could be free for coaching but failed to provide training or understanding about what the thing was about. They had a good administrative arrangement for getting people together, but the purpose wasn't there.

Then, of course, it's got to be affirmative. Now, there are principals who are both strong evaluators and strong facilitators, so evaluation isn't necessarily incompatible with coaching. But an evaluation procedure that is at all mechanical or inept will certainly make coaching less effective.

Principals have also got to be part therapists because, due to the isolation, teachers are like tennis players who learned to play on a squash court by themselves. For many of them it's coming out of that box and for the first time getting some sense of whether they're any good or not. Very good teachers are sometimes as anxious as very poor ones—and some who, by our standards, aren't very skilled are comfortable. They'll say, "Oh, I'll teach; it's fine." Both parties manifest the lack of a metric that comes from watching other people play. If you learn to play tennis on public courts with 40 other people around, you form some idea of where you stand.

#### **And you're saying that a good many teachers don't have that information at this point?**

They really don't, and without it the prospect of coaching can be very scary. But a trainer can get rid of that fear very quickly. When I'm working with a staff I'll do some demonstrations, and then I'll say, "Now you do it with each other." They'll say, "I'm not ready," and I'll say, "Do it anyway."

It happened with the group I was with today. A couple of days ago, when they were to peer teach the next day, the adrenalin in the air was like that in a plane about to crash. Then the griping began: "You fouled us up, you taught us wrong, you didn't prepare us." By yesterday evening there was elation, and today, when they had finished, we showed a couple of tapes of other teachers working on the same strategies—showed them more or less without comment, just "Watch these

people and reflect on what they're doing." They all paid rapt attention to those tapes, and you could see they were ready for more practice and more feedback. I'd rather do it that way than just pair teachers and say without training, "Now coach."

#### **You'd rather have it public for a while?**

Yes, with lots of people right in the training setting, where there can be support from the trainers and we can model the coaching. Actually, by the way, much of the learning from coaching is not from listening to someone who has watched you, but from *your* watching the other person work.

And we tease a lot. Relaxation and getting playful when you teach are tremendously important. I'll say, "Only three people had coronaries last week from coaching. We'll keep statistics; give you a running account." Things like that. "Take your nitro and get into your groups," and all sorts of silly things.

We learned a lot again from Braden, who brings middle-class people who are very competitive to a tennis camp experience. He just makes people laugh and laugh. He brings out a group of tennis rackets and says, "People always ask us what racket to buy. All of these rackets are engineered beyond your capability." What can they say? They just have to acknowledge that that's probably right. They have to get relaxed with their imperfections.

#### **What about after coaching has been introduced and things are moving along?**

Well, the first thing is that it won't move along unless everyone starts practicing right away. To learn any new skill, you've got to practice it a lot in the first couple of weeks immediately following training. That's why summer workshops aren't necessarily the best time. We've suggested to teachers that they go out and corral children from wherever, lasso their spouses, or shanghai their neighbors—anybody they can—but they must practice whatever they're trying to learn a bunch of times.

Let's say it's a teaching strategy. Either you're going to get it rolling or you're not. If you can get everybody practicing a thing, if a faculty of 30 people all do it five times in the two weeks following training, you'll be running. If half the people don't do it for a month, their skills are going to erode, and they're going to get more fearful.

#### **Why is it so hard to use a new teaching strategy?**

Well, for one thing, you're giving kids cognitive and social tasks you're not accustomed to giving—but that's not the main thing; if you're not used to the model, you don't know how the students are going to respond—and if you don't know how they're going to respond, you don't know what *you're* going to do.

We sometimes use a stimulated recall approach to study the process of teachers learning a new model. We play back a recording of the teacher teaching and ask, "What were you thinking at this point?" The teacher may say, "I was thinking about getting the data to the kids. We were pretty well right on task." Then they ask the kids to categorize the data and you say, "What were you thinking?" The teachers' responses are something like this, "I sure hope they come up with an idea I'm familiar with," or even more common, "I hope they come up with the idea I most want to teach; I hope they don't come up with anything weird," and so forth.

After a while, students work in groups and build categories, and then it's time to share them. Teachers have no trouble making that move; they say, "Now, let's see what you came up with." You stop the videotape and say, "What were you thinking?" and they say, "I was thinking I wished I could go home." At that moment, the first time they do it, they have no idea what the kids are going to come up with. With more experience they find that kids can be reasonably intelligent; they'll come up with most of the things the teacher would have; but even if they don't, the teacher will have developed a repertoire of moves to handle what happens.

It's the thinking parts—what we call the "invisible" skills of teaching—that are the hardest; not what we call the "syntax" of a model, or getting through the major cognitive and social tasks. Particularly tricky are the interactive parts; reacting to what students do or say as the lesson goes on.

That fear of what will happen applies, for example, to cooperative learning, even in its simplest form. About the simplest social task you can give students is to say, "Study this in pairs," but there's as much anxiety about trying that as there is for doing a highly complex strategy like the jurisprudential model, which really places tremendous demands on the teacher: "What am I going to do with these 15 pairs of kids all raising hell?" It's not until they've done it for awhile that they find out, "By George, many productive things are happening."

At this point we ask teachers simply to experiment with having kids study in pairs; not everything—we don't want them writing original personal poetry in pairs—but simple tasks: "Read this and get ready for a discussion" or "Dig up information on this."



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#### **How much time does it take for a teacher to learn a model?**

Okay, let's design a little program for a year. Let's take just a single model of medium complexity; the inductive one would be a suitable example. You'd probably want a three-day workshop or the equivalent to get started. It wouldn't have to be three solid days; it could be some other configuration. But then there should be a couple of days a few weeks later to spice it up, see how people are doing, and add a little more. Then another day a few weeks later for polishing and sharing, plus a day of advanced training later. So now you have a picture of the amount of input it takes.

Beyond that, it's going to take teachers maybe 30 trials to get reasonably good at a model, in the sense that they can use it as easily as they use their existing repertoire. To be able to look at a unit or a body of material or section of a text, see how to handle it inductively, and plan it quickly and efficiently, it's going to take them a good 30 trials.

#### **Some might say, "If that's what it takes, forget it. That's an impossible expectation."**

Of course. What we're talking about, though, is payoff in student achievement. We're in the same position as saying, "It's a lot of trouble to figure out how to control rocket fuels; let's just stick with the internal combustion engine." "It's going to be a lot of trouble to develop a battery that will operate a car efficiently, so let's just forget it." Anything worthwhile is troublesome and is worth it. But you're absolutely right; putting a system like this in place requires a social change that can ruffle some feathers.

#### **But are you sure a school would improve achievement that much? We know these models make school more interesting, but is there much evidence they do more?**

I've been familiar with many of the models in which people are currently trained for quite a number of years, and I can tell you that the research

base is much sharper now than it's ever been.

Now, there's a reason for that. If you were to compare the number of research studies of a given complexity done in the last 15 years to all the history of educational research before, I'd guess it would be four or five to one. The vast majority of our research has been done in the 1970s and '80s. Researchers have begun to engineer strategies quietly and systematically that are getting a magnitude of effect far beyond anything anticipated before. Results in the area of mnemonics are the most dramatic. Pressley and Levin<sup>2</sup> are routinely doing studies in which kids learn two, three, and four times as much as they ordinarily would in the same period of time. They're doing it in all sorts of subject areas. Experimenters with advance organizers—a way of organizing lectures—have fumbled along for years with effects of a quarter of a standard deviation. In the last seven or eight years they've reengineered the stuff and are getting effect sizes of up to two standard deviations.<sup>3</sup> In fact, they're actually using advance organizers to increase kids' levels of cognitive functioning.

We think the real payoff comes from combining educational ideas. By teaching inductively you can increase student learning as much as 30 percentile points in a given unit of study.<sup>4</sup> If you use cooperative learning properly, you can get about the same magnitude of effect.<sup>5</sup> If you put them together you won't double it, of course, but we've had some studies where we've increased learning twice as much as control groups doing only one or the other.<sup>6</sup>

I think the notion of effect size is going to have a tremendous impact. Until now, researchers have thought of significant difference, not magnitude. Someone will report, "My research shows this approach works," when it may raise achievement by about a percent. Now, the use of advance organizers is good for a *standard deviation*—and that's one of the simpler models. The memory people are now getting effect sizes *four times* the mean.<sup>7</sup> They are literally producing, in

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short-term training, four times as much as good memorizers working by themselves without the help of mnemonic devices. That kind of finding should greatly affect what educators attend to when they want to make a school more effective.

**Authors of literature reviews sometimes give the impression that there is indeed a substantial body of research on teaching, but that it rather narrowly supports direct instruction as the most effective model.**

We believe they're wrong. Bev Showers, Carol Bennett, and I are doing a meta-analysis of research on the theory-driven models of instruction, as well as the naturalistic studies of teachers and schools. We're looking at about 3,000 reports of research undergirding just the models of teaching that are in the book, *Models of Teaching*.<sup>8</sup>

Of course, not every approach to teaching that we advocate has the same depth of research base, but most have quite a lot. Cooperative learning is a good example; just having kids work in cooperative groups (if you teach kids how to do it, and do it

intensively) can often get you a standard deviation of gain.<sup>9</sup> That's a lot by standards of the past.

**So what are you saying about the "effective teaching" research?**

Those studies have definitely shown some things about teaching that make a difference. They have also begun to give us some idea about the nature of the social and instructional climate that aids learning. An affirmative climate is very important. Active instruction is also important. But the naturalistic researchers are hampered because they have to work with the existing teaching that they're able to observe. We, on the other hand, teach teachers different models because we're trying to widen their repertoires.

**What proportion of teachers in this country are currently involved in the intensive training and coaching process you've described?**

I'd say it's a very small percentage. The average teacher is still getting only about three days of staff development a year—not a lot. We're now establishing relationships with districts that are several years long and that involve 20, 30, 40 days of activity a year. Every time we begin one of these I am struck by teachers' isolation from knowledge of their craft. In the setting where we're working right now, for example, I talked yesterday with a group of teachers who had been working for four days on a very simple version of an inductive model of teaching. They were making plans to use the model in their classrooms, and they said they'd just never seen anything like it. I thought to myself, "How is it possible that they haven't seen inductive lessons?" This is as old as—well, probably the pharaohs had tutors who gave inductive lessons. So, just for fun, I asked the 100-and-some people who were there, "Let's take the five or six models you've seen here and be generous about it: how many of you have seen a variation of *a, b, c, d, e*? The number of hands that went up in any case was a handful of the group. They actually had never seen those models, even though they are regarded as

good teachers in a well-organized, strong school system in a major metropolitan area. It seems impossible, but I'm afraid it's an index of how far we have to go.

**We generally think that supervisors are responsible for helping teachers learn new skills. Do you reject the possibility of supervisors serving as coaches?**

Well, teachers are more numerous, and it's much easier for them to get together with one another. I prefer to talk not about the "supervisor" but the "trainer": someone who has really polished a given approach to teaching, curriculum, computers, or what have you; somebody who really knows the stuff. The question is: what are the roles of that person, of the building administrator, of the supervisor, and so on.

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**Or we might ask it this way: if you were going to organize a school system for a full-scale training effort, what roles would you want in order to make the most productive use of all concerned?**

Oh boy. Well, briefly, peers can follow up each other just fine. Supervisors or principals who don't practice as much as the teachers won't be able to help teachers as much as the teachers, who are practicing the skills daily, can help each other. Unless they intend to go to a very high level of competence, administrators are well advised to be facilitators of the process rather than coaches.

But your question is really about the professionalization of educators, and for that I think there are two essentials. One is that educators have to be hired full-time; there will never be a part-time profession accepted as such by other people or by the members themselves.

Second, and equally important, is to redeploy personnel. I know we've been through all the team teaching, differentiated staffing, and such, with indifferent results, but the fact is we're very awkwardly utilized. First of all, as most teachers are presently assigned, teaching is assumed to be something you can do with almost no preparation (one prep period is not enough time to prepare for five or six classes). To change that, so teachers have more time both to prepare and to analyze what students produce, students will have to spend a lot more time working independently. We can't think just of the teachers; we have to prepare the kids to take more responsibility for their own learning. That's the only way I can see for teachers to have more time to prepare and teach the kinds of lessons that will fuel longer-term learning and to analyze the results of complex assignments.

I really think that the main reason we build schools with classrooms where teachers teach individually all day is to control the students, and I think that's bad in several ways. It means that instruction is always overshadowed by the control thing. You're always with 25 people, needed or not. If we could change these things, build-

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ing administrators and supervisors could be real curriculum design people, rather than using so much of their time on clerical and trouble-shooting activities.

**If I'm a leader in a typical school or school district, how do I get started in that direction?**

First, believe it. Believe that your school can be tremendously better, and that you can invent ways to make it better. Then start inventing.

**A lot of educators feel the cards are stacked against them now. The community seems to be saying, "No innovations; just make it like good old school used to be."**

Educators have been psyched out somehow; the community is not against better education, by any means. Teachers and principals may think that parents aren't with us, but

many parents think we're not with them.

**I'm sure you'd agree there's been a conservative trend lately, but do you think we'll be seeing more openness to experimentation again?**

I think if *we're* open and *we* have confidence, if we bring people into the game, we'll get a lot more support than we might expect. □

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6. See note 4.

7. See note 2, first citation.

8. Bruce Joyce and Marsha Weil, *Models of Teaching*, 3d ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1986).

9. See note 5.

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