
ten discourage playful curiosity and experimentation and insist on the existence of the one right answer. Those who espouse such conventional practices are impatient with techniques that may lead to unconventional thinking, preferring common knowledge to uncommon knowledge and often denying the existence of fully valid alternative perspectives.

Traditional thinking would have people believe that certain theories and beliefs match an independent reality that exists "out there." Constructivism suggests, instead, that for every theory, there is the possibility of multiple alternatives to it. Thus constructivism recognizes the possibility of constructing the world in many different ways. For example, my husband and I have taken our sailboat out of Old Mission Harbor many times. Each time, we have managed to maneuver the boat successfully to the open water of Lake Michigan, avoiding shallows, rocks, and other boats. Yet our success tells us only that the route we chose fit the constraints of the harbor at that time, not that we had discovered the "one true route." It requires no great leap of imagination to see that numerous, different routes exist that would probably be just as successful.

Constructivism suggests that people find the world as they do because they have made it so. Accepting the idea that their view of the world is only a *fit* for a particular moment in space and time makes it difficult to condemn the views of others who see the world differently. Those who espouse constructivism can claim no more "truth" for their experience (in the sense of its correspondence to some mythical reality) than, for example, those who believed that the Earth was flat. For them, it was. People believed that, if they sailed too near the edge, their ship would fall into oblivion, so they stayed in their own little harbor until someone tested the limits of that construction of reality and broke it down. Ernst von Glasersfeld noted that, just as the environment places limits on living organisms and eliminates all variants that in some way transgress the limits within which they are viable, so the experiential world acts as a testing ground for ideas. "Regularities, rules of thumb, and theories either prove reliable or they don't, and in the history of ideas, 'natural selection' . . . simply lets go under whatever does not pass the test."²

Constructivism suggests that teachers

need to help students become active inquirers who, when they fail to find the meaning they seek, do not give up hope, but conclude that they have not looked in the right place. It is the teacher's job to help students see that there are an infinite number of "right" places. Teachers need to coach students in the process of construction to help them become aware, deliberate, and responsible participants in the seeming chaos and disorder of the postmodern world and to help them develop a comfort with *uncertainty* in order to thrive in an environment where the only certainty is change. What teachers must help their students understand is that knowledge of the conventional wisdom is not the end of their seeking; rather, it is the process of divergence, of noticing critical differences, that

leads to unconventional wisdom and uncommon sense.

In freeing themselves from the "comfort" of conventional wisdom, students must also realize that they become answerable for the choices they make in constructing the world as they do. When things go wrong, they cannot escape complicity and place the blame elsewhere. But they may find comfort in knowing, along with T. S. Eliot in *Little Gidding*, that "the end of all [their] exploring will be to arrive where [they] started and know the place for the first time."

1. Jerome Bruner, *Going Beyond the Information Given* (New York: Norton, 1973), p. 428.

2. Ernst von Glasersfeld, "An Introduction to Radical Constructivism" in Paul Watzlawick, ed., *The Invented Reality* (New York: Norton, 1984), p. 7. ■

At Odds *Constructivism and the Role of the Teacher*

We Still Want To See the Teacher

A master teacher can have a profound influence on the life of a child. Mr. Baines and Mr. Stanley respond. This is no time to tell the teacher to sit down and shut up.

BY LAWRENCE A. BAINES AND GREGORY STANLEY

HAD Lynn Chrenka presented a body of research that clearly demonstrated the superiority of constructivism as a teaching philosophy, we would have been more impressed. Instead, she tries to reconstruct history so that a litany of comments from dead geniuses can be claimed to support constructivism. Unfortunately, a solid body of research support does not

exist, nor has it ever existed.

As it is practiced in institutions of higher education, constructivism has become a kind of intolerant religious order, replete with an accompanying doctrine, a mandate to evangelize and convert (apparently, even the dead), and an interminable list of commandments. Of the many sins one can commit against constructivism, none is more egregious than for the teacher to act as expert. Although a teacher might possess rare breadth and depth of knowledge, a charismatic personality, a masterly command of language, and a brilliance in leading discussions, constructivists have decreed, "Thou shalt not lecture." In many schools of education, the prejudice against lecturing as a method of instruction has reached as-

LAWRENCE A. BAINES holds the J. Leland Green Chair in Education in the Charter School of Education and Human Sciences, Berry College, Mount Berry, Ga. GREGORY STANLEY teaches history at Rome High School, Rome, Ga.

tounding new heights.

One letter we received in response to our December article came from a doctoral student who lamented that schools of education seem to focus only on the theoretical dimensions of constructivism, "with little concern for knowledge." Over the course of her academic career, this student had attended New York University, Pace University, Columbia University, and a state school in Florida. She wrote that, "in these institutions, I was surrounded by theorists and professionals who thought 'teaching nothing' was okay because it allowed for student self-discovery." Recently, student teachers interning at a local high school told us that they were admonished not to lecture by their supervising professor. The professor told them, "If I ever catch you lecturing, you will receive an instant F for the term."

Perhaps it is not surprising, then, that "sages" who speak with enthusiasm and authority about a subject they love are increasingly rare in public schools. An expert does not try to stamp out intellectual inquiry but helps guide it. Because the 21st century promises to bombard students with unprecedented amounts of data, misinformation, and propaganda, they will need a sage with a wealth of experience to help them distinguish between the authentic and the forged, between truth and quackery.

Sometimes, telling students to find their own answers is tantamount to leaving them stranded in a dark forest without a compass.

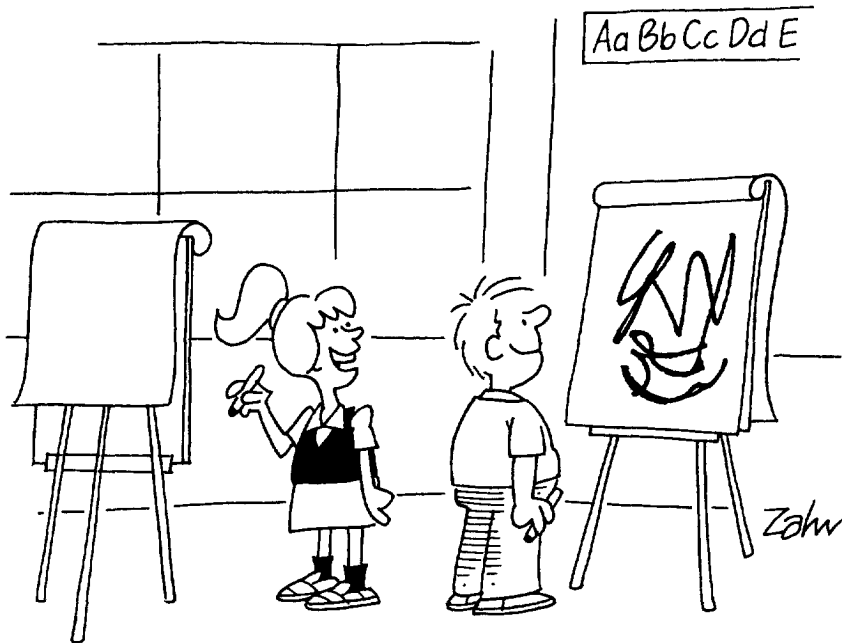
The radical proposal put forth in our article was that a teacher should have the right to choose among instructional methodologies based on goals, his or her particular talents, and the characteristics of the students who make up the class. Lecturing is not the subterfuge of the wicked; it is a teaching methodology, like cooperative learning or simulation. At times, a lecture can be stimulating and highly effective. Even Plato (probably before he shifted his allegiance to constructivism) was known to engage in lecture and discussion upon occasion. To proclaim the "guide on the side" model of teaching as the "one, true way" for now and all times is ludicrous. If Aristotle shows up, you don't forbid him to speak of virtue. You don't admonish Mary Cassatt to keep her hands off the blue paints, and you don't forbid Beethoven to dictate where the sharps and flats go. These individuals understood their talents and shortcomings. They did not need some stranger in a cozy campus office a couple thousand miles away to tell them what to do and how to do it.

A second iniquity in the religion of constructivism is the sin of memorization, or, as it is often labeled, "rote learning," "drill-

and-kill," or even "regurgitation." Despite the protestations against it, memorization has the advantage of *automatizing* aspects of problem solving and so freeing the mind for more abstract thoughts. For example, a student who has memorized multiplication tables can tackle a complex algebraic equation more readily than a student who must think deliberately about each individual operation. Similarly, a student who has memorized the meanings of certain vocabulary words can read and understand an essay better than the student who must continually stop and shuffle through the dictionary. While it is understandable that we want to go beyond memorization to more challenging activities, a student must start somewhere. Another powerful aspect of memorization is that, in some ways, what you commit to memory gets under your skin and becomes a part of you. When a student memorizes a song or poem, that student understands it in ways that someone who reads it only once cannot hope to match.

As we noted in our article, constructivism, as a theory, has definite merit. Students who are active and involved probably learn more than students who are passive and bored. However, as it is practiced and preached, constructivism has become an all-encompassing theory that many academics attempt to apply to every learning situation, irrespective of the subject matter, the teachers, or the students involved. The constructivist model of teacher as benign helper — ever ready to preach the gospel of "social justice" — has become, for true believers, not a way to teach but *the only way*. If professors of education who have not taught in a public school since Watergate do not think that this "one instructional approach fits all" theory is a problem, then they need to quit playing racquetball at lunch and start teaching some classes in their local public schools.

When students ask, "Who was the first President of the United States?" or "What does 12×12 equal?" or "Who wrote *The Catcher in the Rye*?" they deserve straight answers. When students ask, "Is my composition any good?" they deserve to know the paper's strengths and weaknesses, as well as some ways to improve it. A master teacher can have a profound influence on the life of a child. Rather than tell the teacher to sit down and shut up, we think, now more than ever, that students want to see the teacher. **K**



"I think it's the best thing you've ever done!"