From his experience teaching at a historically black university, James L. Ellenson says that interactive technology can help engage minority students. Mr. Ellenson, an adjunct associate professor of chemistry at North Carolina Central University, will deliver a lecture on the topic on Saturday at the “Teaching the Millennial Student” conference at Spelman College. He thinks that using “clickers,” the handheld devices that let students key in answers to multiple-choice questions, has particular advantages. The answers are displayed, without the students’ names, at the front of the classroom.

Q. You say minority students are often hesitant to speak up in class. Why?

A. You don’t want to either admit your ignorance on the subject or you don’t want to take the risk of being wrong, because you’ll suffer some social consequences for that. Even more insidious is the fear of being right.

The social pressures are such that standing out as an academic performer is apparently not as admired as, let’s say, athletics or something like that.

I’ve spoken with students who have been ostracized because they have spoken out with intelligence in class. One example is this student, who when he first came here, would vocalize very intelligent questions. After a while he got quieter and quieter, until one of his professors asked, “What is going on?” He said, “I’ve lost all my friends. They keep saying, ‘Quit acting so smart.’” These things happen all the time.

Q. Many minority students are also first-generation college students. Is that a factor too?

A. In their homes, which is probably the most important place for developing academic habits, they’ve had less direction from their parents with respect to the study skills that are needed in a collegiate environment. Everybody has had the high-school environment, but when it comes to college, that’s a step higher.

Q. How has using clickers helped?

A. When we use technology that allows anonymity, whatever those constraints might be ... you finally get to a point where the responses are devoid of the social-interaction factor, whatever it might be.

Q. Does that change with experience?

A. In the beginning, it can be somewhat anonymous, but as time goes on, students begin to own the responses that they put up.

Q. What do you students think of your approach?

A. Surveys have shown that about 80 percent of students agree that they are more aware and alert in the classroom when I use the clickers or [response software on] tablet PCs. They appreciate the anonymity of the devices. They appreciate the fact that other students, like themselves, may sometimes provide erroneous information, but there’s no stigma to having presented that information. So they’re comforted by the sense that there’s sort of a community of people who learn differently, and they belong to one of those groups. They’re not isolated and feeling alone in the way that they think.