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## A Tech-Happy Professor Reboots After Hearing His Teaching Advice Isn't Working

By Jeffrey R. Young

Michael Wesch has been on the lecture circuit for years touting new models of active teaching with technology. The associate professor of cultural anthropology at Kansas State University has given TED talks. *Wired* magazine gave him a Rave Award. The Carnegie Foundation for the Advancement of Teaching once named him a national professor of the year. But now Mr. Wesch finds himself rethinking the fundamentals of teaching—and questioning his own advice.

The professor's popular talks have detailed his experiments teaching with Twitter, YouTube videos, collaborative Google Docs—and they present a general critique of the chalk-and-talk lecture as outmoded. To get a sense of his teaching style, check out a video he made about one of his anthropology courses. In it, some 200 students designed their own imaginary cultures and ran a world-history simulation by sending updates via Twitter and a voice-to-text application called Jott.

To be fair, Mr. Wesch always pointed to the downsides of technology (it can be a classroom distraction, for instance). But he saw tech-infused methods as a way to upgrade teaching.

Then a frustrated colleague approached him after one of his talks: "I implemented your idea, and it just didn't work," Mr. Wesch was told. "The students thought it was chaos."

It was not an isolated incident. As other professors he met described their plans to follow his example, he suspected their classes would also flop. "They would just be inspired to use blogs and Twitter and technology, but the No. 1 thing that was missing from it was a sense of purpose."

Mr. Wesch is not swearing off technology—he still believes you can teach well with YouTube and Twitter. But at a time when using more interactive tools to replace the lecture appears to be gaining widespread acceptance, he has a new message. It doesn't matter

what method you use if you do not first focus on one intangible factor: the bond between professor and student.

Learning From an 'Old Fogy'

Christopher Sorensen also teaches at Kansas State University, and he too has been named a national teacher of the year. But Mr. Sorensen, a physics professor, is decidedly old-school in his methods.

"You could say I'm an old fogy," he tells me sheepishly. "I worry about that a little bit."

He has avoided "clickers," those remote-control-like gadgets that let students ring in answers, out of concern that they would take up too much class time and limit the amount of material he could cover. And Mr. Sorensen has a hunch that PowerPoint—which he finds valuable at professional conferences—would get in the way of his teaching. "PowerPoint takes away, I think, from a true engagement," is how he put it.

Exactly how he connects with a roomful of students is unclear to him, but he senses that it happens. "I walk into the classroom, and I get into a fifth gear, you might say. My voice goes up and down. It's almost like being an actor. But don't get me wrong, I've never been an actor or anything."

Even though he has been teaching for some 34 years, he still spends the morning before each class preparing—rehearsing the material in his mind. When I spoke with him one morning last week, he was reading over his notes before teaching a lesson on Copernicus for an astronomy course. "It's sort of like running laps before you compete in a true race. You have to get warmed up," he says.

Mr. Sorensen has heard increasing questions about whether the lecture—his preferred method—is an effective way to teach. One study he saw found that students in after-class interviews remember only 20 percent of the material. Yet he still champions the approach.

"The way I look at it is, I've plowed the ground," he says. "Now they're susceptible the next time they see the material. And you'll give them an assignment, and that forces them to look at the material in a new way."

As he sees it, his job is less about being an expert imparting facts and figures, and more about being a salesman convincing students that his material is worth their attention. "The messenger, ironically enough, is more important than the message," he says. "If the messenger is excited and passionate about what they have to say, it

leaves a good impression. It stimulates students to see what all this excitement is about."

The things that make a good teacher are difficult—if not impossible—to teach, he thinks. Which is why technology may be so attractive to some teaching reformers. Blogging, Twitter, and other digital tools involve step-by-step processes that can be taught.

Meanwhile, when Mr. Sorensen recently met a job candidate who appeared warm and friendly, he felt immediately that he would be a good teacher. "I said, you seem like a good guy—you'll make a great teacher," he remembers saying. "Be a good guy with your students, and you'll be a great professor."

## Searching for 'Wonder'

As Mr. Wesch began to rethink his teaching, he visited Mr. Sorensen's class and was impressed by how the low-tech professor connected with students: "He's a lecturer. He's not breaking them up into small groups or having them make videos. That's my thing, right? But he's totally in tune with where they are and the struggle it takes to understand physics concepts. He is right there by their side, walking them through the forest of physics."

At its best, Mr. Wesch believes that interactive technology—and other methods to create more active experiences in the classroom—can be used to forge that kind of relationship between teachers and students where professors nurture rather than talk down to students.

In one of his courses, he teamed up with students to produce an ethnography of YouTube users. The project helped the students feel more like collaborators because the technology allowed them to immediately publish their work online.

But Mr. Wesch has also found that a high-tech method like asking students to write blogs can actually reinforce what he sees as an "authoritarian" tendency of lectures.

One example he has seen: a professor whose first comment on a student's blog is, "Hey, great ideas here, but just so you know, there are a few typos there in your first line." To Mr. Wesch, that sends the message that the blog is just another spot watched by the grammar police, rather than a new arena to explore. "Students can all sniff out an inauthentic place of learning," the professor argues. "They think, If it's a game, fine, I'll play it for the grade, but I'm not going to learn anything."

Technology rarely plays more than a passing role in the work of

teacher-of-the-year winners, says Mary Huber, a consulting scholar at the Carnegie Foundation for the Advancement of Teaching who has overseen the judging process since 1991. "We see people making interesting use of technology without it being the star player," she told me.

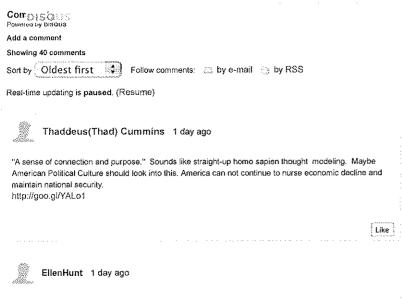
She said it is not too surprising that others have had trouble replicating what Mr. Wesch did. "None of this work is off-the-shelf," she said, noting that the group promotes a "scholarly approach" to teaching. "That means you aren't just picking something and plopping it in there, but you're really thinking through what its value is and what you would have to do to change it."

This semester Mr. Wesch is on sabbatical, working on a book about teaching that will sum up his latest thinking.

He is still giving talks, and the titles now all include the word "wonder." Whatever tool professors can find to conjure that—curiosity and a sense of amazing possibilities—is what they should use, he says. Like any good lecture, his point may be more inspirational than instructive.

"Students and faculty have to have this sense that they can truly connect with each other," he concludes. "Only through that sense of connection do you have this sense of community."

College 2.0 covers how new technologies are changing colleges. Please send ideas to jeff.young@chronicle.com or @jryoung on Twitter.



Edward Tufte plowed most of this ground before Wesch. I will never forget, "The overhead foil is the lowest bandwidth communication device ever devised by man." His advice to always engage in a socratic dialogue, allow for the lecture to deviate, and yet still cover the ground, and to have a short handout that summarizes the socratic discussion is the best I have ever gotten.