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Video

FULL DETAILS AND TRANSCRIPT

Adapting Instruction to Improve Student Outcomes

Steven M. Ross, Ph.D. • September 2009

Topic: Increased Learning Time: Beyond the Regular School Day
Practice: Organize Instruction

Highlights

- What is good for a group is not necessarily what an individual student needs to progress academically. Individualized instruction will achieve more successful results.
- Technology, small-group instruction by ability level, and tutoring are some of the ways instructors can individualize instruction.
- Engaging instruction does not necessarily involve a lot of gadgetry or expense. Presentations, competitions, cooperative learning, events, and field trips are some of the ways in which educators can engage students in academic learning.

About the Interviewee

Steven M. Ross is currently a professor at the Center for Research and Reform in Education at Johns Hopkins University. From 1985 to 2008, he was a professor of educational psychology at the University of Memphis. Dr. Ross is the author of six textbooks and more than 120 journal articles in the areas of educational

technology and instructional design, at-risk learners, educational reform, computer-based instruction, and research and evaluation. He is the editor of the research section of the *Educational Technology Research and Development* journal and a member of the editorial board for two other professional journals. In 1993, he was the first faculty recipient of the University of Memphis Eminent Faculty Award for Teaching, Research, and Service and recently held the Lillian and Morrie Moss Chair of Excellence in Urban Education and a Faudree Professorship at the University of Memphis. Dr. Ross is a technical advisor and researcher on current state and national initiatives regarding the evaluation of school leadership, technology usage, supplemental educational services, charter schools, Reading First, and Comprehensive School Reform. He received his doctorate in educational psychology from the Pennsylvania State University.

Full Transcript

My name is Steven Ross. I am a senior research scientist and professor at Johns Hopkins University.

Adaptive instruction is very important because what's good for the group is not necessarily what that student needs. So picture a situation where we have out-of-school-time learning and there are 25 middle school students sitting in a class and listening to a lecture—and they are tired to begin with—on mathematics. Well, probably two-thirds of those children have already mastered that material or are at a different level where they are not ready to master that material. So it's the extent that we can individualize instruction, we are likely to achieve more successful results.

There are many computer-based programs that are available that do adapt instruction so that while the out-of-school teacher is dealing with the larger group an individual student could be working with the program and then maybe work with the teacher later. So technology is one way of helping to individualize instruction.

Grouping students together who have similar needs, and having small-group instruction where a teacher is dealing with three to five students at a time, is a way of adapting instruction, and then may be dealing with individual students as the tutor or provider has time later. Research shows that cooperative learning can be very effective because where you have high-achieving students or higher-achieving students working with lower-achieving students, in essence that lower-achieving student is getting much individualized attention where the teacher is not available.

How do we make students, many of whom may be reluctant learners during the day, struggling learners, how do we make them interested and motivated? Well, there is no key solution, but in my opinion it doesn't involve necessarily a lot of gadgetry or expense. I have personally seen classrooms with very challenged, at-risk learners where they have had an opportunity to do a group activity on the Internet, where they are given a list of questions to answer and safe websites to access. And as a group they access the website, look for the information, have an assignment to download information, make a presentation to the other group; a

little bit of a competition is brought in. The students are very engaged. And I certainly wouldn't rule out for certain types of student populations in certain types of situations for an out-of-school-time program to have events, like museum trips or a trip to a sporting event or a guest speaker that comes in from the community who would be interesting. Those types of activities can not only motivate students but they can serve as an incentive. "Hey, let's do really good work this week with our program, and if we do, two weeks from today we are going to arrange to go to the museum."

As an evaluator of out-of-school-time programs, I have seen many of them. There is one example that stands out in my mind. It was an inner-city middle school. I walked into one of the classrooms. A number of students were on the computer. A number of other students were working on a project involving some science theme and didn't even look up to watch me. Other students were completing their homework. Everybody was totally engaged, and I hung around for a while, talked to some students. And then a very interesting thing happened. It was five o'clock. It had already been a tremendously long day. The bell rang, signaling the end of the extended school day, and no one got up. They all continued to do what they were doing and didn't want to leave. To me, this was clearly a situation where learning was engaging.