Enhanced math instruction proposed

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Researchers say U.S. high school pupils taking vocational classes with enhanced math instruction do better on standardized math tests than other students.

University of Minnesota scientists say their study results could have a profound impact on schools and the curriculum for vocational education classes, which are now called Career and Technical Education classes.

The experimental study was led by Professor James Stone III, director of the National Research Center for Career and Technical Education, and involved more than 3,000 students in nine states.

"The study found that schools could have a significant effect on students' grasp of mathematics without investing enormous amounts of time," Stone said, noting teachers spent about 10 percent of classroom instructional time teaching the enhanced CTE lessons.

"To learn how to enhance the embedded math, teachers spent five days in the summer at a professional development workshop to learn the pedagogy and create their lessons, then five more days during the course of the year develop new lessons and to refine existing ones," said Stone. "When we examined the test results of students in our study, the experimental kids significantly outperformed the control kids."

The U.S. Department of Education funded the study.