

**Success In Algebra Added Into Education Equation:  
Hewlett Grant Funds Monterey Institute For Technology and Education's  
Innovative Online Learning Project**

MONTEREY, Calif., December 10, 2008 – Ninth graders may not think so, but learning algebra is probably the most important thing they'll do in school. Passing algebra is a critical factor in the equation that adds up to success in college and career, according to the National Mathematics Advisory Panel. Flunking algebra triggers all kinds of trouble. It is often the reason students drop out of school or are unable to reach their goals. Some 40 to 50 percent of students fail algebra. Through a recent grant from The William and Flora Hewlett Foundation (Hewlett), the Monterey Institute for Technology and Education (MITE) is launching a new project to combat the breakdown of algebra education by using cutting edge online learning methods and technologies.

"It's an urgent problem that requires an innovative solution," said Hewlett's director of Open Educational Resources (OER) and the grant's program officer Catherine Casserly.

MITE's program will utilize a web-based multi-media platform including interactive simulations, social networking and even gaming, designed to engage students and make learning easier.

"We need modern tools that work in today's world," said Gary Lopez, MITE's executive director, "We have to make algebra relevant to students, get them excited about learning it and give them ways to see how it's used in real life."

Unlike traditional classroom and textbook models, these digital technologies will give students diverse means to access and understand algebra concepts and applications.

"Motivating 25 to 30 students, who may all be at different levels, in a single classroom is challenging," said Casserly, "the power in this program is the ability to differentiate the instruction. It isn't a one-size-fits-all situation. We can create a learning environment that addresses each student's needs individually."

A shortage of qualified math teachers adds to the nation's algebra crisis, so giving teachers ways to expand their teaching skills forms another crucial component of the program. Instructional and professional development materials will be created by the people who will use them in the classroom. Teachers, administrators and students will contribute their knowledge, skills and experience to help develop the program content.

"These courses and materials won't be built in a vacuum by designers who never leave their desks," said Lopez

The courses and content will be refined through a process pioneered by MITE called social authoring. This unique online collaborative method functions within a non-profit structure to create high-quality courses for a very reasonable cost according to Lopez. Casserly said Hewlett

expects the algebra coursework produced by this project to serve as a model for developing instructional materials in other subjects.

“In the landscape of online course developers, MITE produces exemplary content. Their work on this project will push the rest of the field to a new level. Hewlett requires a superior standard of excellence and MITE has proven that it will meet our expectations,” said Casserly.

Hewlett’s OER effort is fueled by the belief that everyone is entitled to an education regardless of their financial or social circumstances. Ultimately the algebra coursework will be distributed to students, teachers and educational institutions, through MITE’s highly respected library of web-based content, the National Repository of Online Courses, which is accessible to individual learners free of charge online at [www.hippocampus.org](http://www.hippocampus.org). To receive updates about this project as it progresses, please send an email [algebra@montereyinstitute.org](mailto:algebra@montereyinstitute.org).

**The William and Flora Hewlett Foundation** makes grants to address the most serious social and environmental problems facing society, where risk capital, responsibly invested, may make a difference over time. The Foundation places a high value on sustaining and improving institutions that make positive contributions to society. Grants in the foundation’s education program promote long-term institutional or field development, reform or knowledge creation in four priority areas: improving achievement, improving educational outcomes in California, the open educational resources initiative, and opportunity. [www.Hewlett.org](http://www.Hewlett.org)

**The Monterey Institute for Technology and Education** is a non-profit educational organization committed to helping meet society’s need for access to effective, high-quality educational opportunities in an era of rapid economic, social and personal change. The Monterey Institute for Technology and Education was founded in 2003 as a 501(c)3 non-profit organization. Learn more at [www.montereyinstitute.org/nroc](http://www.montereyinstitute.org/nroc).

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