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Title of Project  
Enhancement of Mathematics Preparedness for Postsecondary Education

Abstract

Louisiana is last in the nation in the percentage of students enrolled in undergraduate math and math education programs in postsecondary institutions. Louisiana colleges produce only a fraction of the math teachers its schools need. As a result, achievement levels in mathematics are low and too few of Louisiana’s high school students are prepared to succeed in math-intensive undergraduate programs. In particular, too few become mathematics or science teachers themselves. The mathematics departments at Louisiana colleges and universities have a key role to play in breaking this cycle.

This project aims to set the stage for a statewide consortium of mathematics departments and educators that will help develop, implement, and support a vertically integrated Algebra, Advanced Mathematics and Trigonometry, and AP Calculus course sequence at all Louisiana high schools by 2009. The project will bring together mathematics educators from across Louisiana that are committed to support a large-scale, statewide, three year effort to implement such a course sequence at all Louisiana high schools by 2009.

To adequately support high schools willing to implement a rigorous mathematics course sequence for college-bound students, the project will prepare and test a first set of focused and content-rich professional development materials based on the comprehensive mathematics high school curricula presently developed by the state. In addition, the project will pilot university-based instructional course delivery and support systems that use Louisiana’s compressed video and Internet connectivity to encourage mathematics teachers to start an integrated Algebra – Advanced Math/Trig – AP Calculus course sequence at their schools.