A Unified Approach Toward Success in Calculus

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The Department of Mathematics at The College of Charleston is conducting an NSF project using equipment funded through an ILI grant for a Macintosh computer classroom/lab and Mathematica software in a three-course calculus sequence followed by a linear algebra course. The interactive learning capabilities, along with the symbolic, numeric and graphical capabilities of Mathematica is being used in the computer classroom/lab in conjunction with structured tutoring provided by the mathematics tutoring lab. The focus group is African American students guided toward the two sections of calculus which will be participating in the program. The goals of the project are to

1. increase traditionally underrepresented minority participation in the mathematics major and provide access to other science majors by increasing the ratio of success in calculus and linear algebra;

2. serve as a lead program to guide other institutions to similar goals;

3. prepare students for the technology of the twenty-first century workplace;

4. increase the participation of more faculty in using computer technology for their courses.