

**U.S. Department of Education, Office of Postsecondary Education,
Title III, Part A, Strengthening Institutions Program**
(<http://www2.ed.gov/programs/iduestitle3a/awards.html>)

P031A080102 – Delta State University, Mississippi

Project Title: “Increasing Student Success and Retention through the Transformation of Laboratory Science Instruction.”

Institution: Delta State University is a four-year, public institution located in Cleveland, Mississippi. Delta State University provides a comprehensive undergraduate curriculum, offering twelve baccalaureate degrees in 42 majors. The three disciplines with the highest undergraduate enrollments at DSU as of fall 2006 were nursing (306 students), elementary education (274 students) and biology (207 students).

Student Characteristics: Total enrollment for fall 2006 was 4,217 (IPEDS). Eighty-one percent (n = 3,427) of total enrollments were undergraduate. Sixty-one percent of undergraduate students are female; 39 percent are male. Eighty-three percent of undergraduate students attend full-time. Of DSU’s undergraduate students 60 percent are White, 38 percent are Black, one percent are Hispanic, and one percent are Asian/Pacific Islander.

Faculty Characteristics: As of fall 2006, DSU employed 175 full-time faculty and 73 adjunct faculty. Among full-time faculty, 51 percent are male and 49 percent are female. Eighty-nine percent are White, seven percent are Black, and four percent fall into other categories. Seventy-five percent of the faculty holds terminal degrees. The student-to-faculty ratio is 16:1 and the average class size is 22.

Activity Description: Delta State University’s activity, “Increasing Student Success and Retention through the Transformation of Laboratory Science Instruction,” involves multiple strategies. The overarching strategies that comprise this activity include: (1) redesign of 12 high-enrollment laboratory science courses to include best practices in science education, effective use of educational technology, and applied use of instrumentation; (2) intensive faculty development in best practices in incorporating educational technology into the curriculum and in discipline-specific best practices; (3) equipping 10 biology laboratory/classrooms, four chemistry laboratory/classrooms, one shared science computer lab and one physics lab/planetarium with current educational technology tools (smart classroom packages); and (4) replacing obsolete instrumentation in 20 science classrooms/laboratories with current instrumentation with digital interfaces and data collection capabilities.

Key Overall Objectives: Among the key objectives of the activity are: (1) to increase student success in 12 identified high-enrollment laboratory science courses by five percent over the baseline; (2) to increase the retention rate of students enrolled in laboratory science courses by five percent over the baseline; (3) equip 20 classrooms/laboratories with educational technology tools and upgraded instrumentation; (4) increase faculty professional development; and (5) increase headcount enrollment at DSU by seven percent.

Budget: A total of \$1,988,289 is requested over the five-year grant period. Of this amount, 28 percent is allocated for personnel, including the Title III Project Coordinator/Activity Director and an Administrative Assistant to help manage the grant; two percent is allocated for travel/faculty professional development; 27 percent is allocated for equipment and instrumentation for science laboratories; 20 percent is allocated for supplies, including scientific instruments and library resources; 23 percent is allocated for contracted services/other, including external evaluation of the activity.