**STAIRSTEP**

**INSPIRED – NSF Program**

- Computer Science
- Mathematics
- Physics
- Geology

**Lamar University’s Students Advancing through Involvement in Research Student Talent Expansion Program** is designed to increase the number of students receiving baccalaureate degrees.

**GOALS** - to engage and to develop undergraduate students through an enriched experience including research and outreach (including road shows to community colleges and high schools) for 10 hrs/week.

**STRATEGIES:**
- Early undergrad team research
- Mentoring from faculty leaders and peers
- Peer tutoring
- Participation in research conferences
- Research seminars on-campus with nationally recognized researchers
- Career forums – expose students to successful scientists and the diversity of careers in science.

**Implementation Progress**

STAIRSTEP started 1/1/2009

- Research teams and peer tutors have been established
- About 50 students participated in the Computer Science career forum
- STAIRSTEP, INSPIRED students spoke to about 50 prospective students in Open House.
- Assessment instruments have been designed and validated.
- STAIRSTEP student research poster accepted for presentation at Texas Academy of Science Meeting March 6.
- Two research seminars, a career forum, and two high school road shows are scheduled for March and April.
- Our External Advisory Committee Meeting is scheduled for March 18, 2009.
- Presentation to the conference *Education Today – Trends and Research* (March 26-27, Lamar University) has been accepted.

**Teaching and research methods implemented**

- Experimental-based learning
- Peer instruction

**Challenge**

Startup was a challenge. It took time to design and process student contracts and applications, establish procedures, create promotional materials, and advertise the program.

**Opportunities**

With the unused portion of student stipends that resulted from the delay in establishing some STAIRSTEP teams we will hire some STAIRSTEP students to help with summer outreach activities, including **New Student Orientations**, **a summer math camp and a summer computing academy for high school students**.

We promoted science and STAIRSTEP at the LU Sally Ride Science Festival in February.

Our students interacted with approximately 200 girls, teachers and parents in the street fair and two workshops: Wild About Robots and Ice Cream for Everyone: graph theory.

**Hurricane Ike** gave our Geology and Earth Science students an opportunity to collect field data related to storm surge.

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