Persistence of Under-Represented Students in STEM Utilizing Cohort Model

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General Information

- Bishop State has 4 campuses with 6 off-campus sites
- Founded in 1927, originally as the Branch Campus of Alabama State University
- Historically Black Two-Year College
- Enrollment: 3,900 students
- President: Dr. James Lowe
• Member of the Alabama Community College System
• 100% transferability of courses (STARS)
• Serves the largest public school district in Alabama
Mobile

• The population within the city limits was 195,111 as of the 2010 United States Census, making it the third most populous city in the U.S. State of Alabama

• Alabama's only saltwater port, Mobile is located at the head of the Mobile Bay and the north-central Gulf Coast
The EPECS Program is a two-phase Scientific Leadership Program created to enhance student learning and influence their success in areas related to STEM (Science, Technology, Engineering, and Mathematics) discipline.
Phase 1

A year long mentoring and awareness program for high school juniors and seniors

• Assigned to teams that emulate actual emergency response teams.
• Guided through mock natural disaster scenarios by their mentors.
• Introduced to careers, industry vocabulary, and various roles played in the emergency management and response industry.
Phase 2

Scholarship program designed to expose and to develop students in becoming leaders in HS-STEM research. Students awarded scholarships
Qualifications

Students must have a 3.2 GPA in Math and Science related courses, a cumulative GPA of 3.0, and a score of 21 or greater on the Math, English, and Science portions of the ACT.
Students selected for the EPECS Scholars program will be required to attend a 2-week summer bridge program that begins in early July.
Cohort Model

Students take all courses together!
Management

- President
- Dean or Vice President
- Faculty Advisor
- Faculty
- Academic Support
- Community Involvement
Partnerships

• Department of Homeland Security
• Bishop State’s Foundation
• Bedsole Foundation
• Universities
• Business and Industry
• Mobile Housing Board
• Mobile Airport Authority
• Emergency Management Association
Recruit Students

- Compete with colleges and universities for the best and brightest students
- Build relationships with students and parents
- Invite students and parents to your campus
- Engage students in activities on and off campus
- Expose students to careers
- Benefits of attending a community college
- Continuous communication
Persistence

- Academic Integration
- Faculty Interaction
- Social System
- Peer Interaction
Students participating in the program enroll into the General Education Associates Program and take higher level Math and Science Courses.
Faculty Mentor

- Identify a highly skilled faculty person with STEM background
- Pleasant personality
- Relate to students
- Organizational skills
- Advising skills
- Understand curriculum
- Community involvement
Derek:

I will be transferring to my four year college having all my courses out the way. She made sure of that.

Stephen:

She is our number one mom. We will call her auntie. She really took on the role of our mom from home.
• Hire competent faculty
• Share faculty with higher education partners
• Faculty development
• Faculty-Student engagement
• Utilize and integrate technology
• Implement best practices
• Utilize textbooks and syllabi from university partners
Malcolm:

You can say we have a personal relationship because they would always help me. In school, if I did not know the answer, they would help me.

Jasmine:

Interaction with faculty is really good. It is one-on-one. Instructors give one-on-one to me when I need it. My advisor is like a second parent or guardian.
Social System

• Engage in classroom activities
• Extracurricular activities
• Volunteer
• Tutor
Malcolm:

I am involved in a lot around campus. I am a part of EPECS – a STEM program, Phi Theta Kappa Honor Society, voted Mr. Sophomore, member of SGA, and the Black Male Initiative

Justin:

I am a drummer in the jazz band, member of the Black Male Initiative, vice-president of SGA, student orientation series, Phi Theta Kappa Honor Society, Kappa Delta Gamma, and I am a peer tutor on campus
Peer Interaction

- Classroom
- Group Projects
- Online
- Social media
- Trips
Stephen:

We are brothers and sisters that make up the family. Being brothers and sisters we make sure everybody gets their work done. We have become each other’s family.

Derek:

We are definitely brothers and sisters now. I am always with them. Pretty much siblings now.
Persistence Rate

Cohort 1
- Initial enrollment: 12 students
- Final enrollment: 10 students
- Graduation date: May 7, 2014

Cohort 2
- Initial enrollment: 10 students
- Proposed graduation date: May 2015
Challenges

- Housing
- Family
- Transportation
- Finances
• Institutional Commitment
• Foundations
• Partnerships
• Additional Grant Funding
• Parents
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