IOWA STATE UNIVERSITY

College of Engineering • College of Human Sciences • College of Liberal Arts and Sciences

Overall Grant Objectives

Increase College of Engineering graduates by approximately 120 per year. The percentage of women and minority graduates will approach 20% and 10%, respectively.

Activities

- community colleges.
- student development modules through learning communities.





Grant No. 0653236, July 2007—July 2012 This material is based upon work supported by the National Science Foundation under Grant No. 0653236. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.





STEM Student Enrollment and Engagement through Connections

Logic Model Planning



SEEC Team Principal Investigators Diane Rover Harry McMaken

Co-principal Investigators Monica Bruning Frankie Santos Laanan **Steven Mickelson** Mack Shelley

> **Senior Personnel** R.M. Cooper Mary Darrow Mary Goodwin Mani Mina **Derrick Rollins** Loren Zachary Karen Zunkel

Other Personnel Gloria Hill

Team Members Ahmed Agyeman Doug Beck Paul Castleberry Lora Leigh Chrystal Laura Doering **Randy Gabriel Jennifer Garrett Doug Gruenewald Carol Heaverlo** Ann Howsare Randall Jedele Michael Lentsch **Randy Mead** Ted Millen Les Pearey Sokish Sands **Kevin Saunders Randy Smith** Jay Staker Vicky Thorland-Oster Loren Zachary

Advisory Boards ISU Institutional Advisory Board Chair: Elizabeth Hoffman Sandra Gahn **Doug Gruenewald Connie Hargrave Thomas Hill Mary Holz-Clause** Gary Mirka

DMACC Institutional **Advisory Board Chair: Robert Denson** Kim Linduska **Randy Mead** Mark Steffen **James Stick** Frank Trumpy David VanderLinden Laurie Wolf

External Advisory Board Chair: James Melsa Kimberly Douglas-Mankin Robert Driggs Leigh Hagenson Thompson Ken Maguire

Communications

Sharing information and engaging stakeholders through various mediums paves the way for effective partnering and

advancement of project goals. E-APP Brochure

- E2020 Scholars Program with
- Scholarship E-TEC Program with Scholarship
- Facebook presence
- **Advisory Board Newsletter**
- **Recruitment Brochure**
- College of Engineering Alumni
- Newsletter
- College of Engineering Newsletter **Conference Presentations and**
- Workshops
 - ASEE
 - NASPA
 - Iowa State's PWSE Taking the **Road Less Traveled Career** Conference
 - **E-TEC Summit**
 - Iowa Community College Summit
- 4-H Leadership Conference **Reports Mentioning SEEC**
- IMSEP
 - Iowa Board of Regents Annual **Report on Student Retention** and Graduation

Voices of the Project



'The Admissions Partnership Program was a really good experience. It helped make my transfer from DMACC to ISU a success. My advisors from both schools were a big help. They guided me to take only classes that would transfer, so I wasn't wasting my time. I also took ENG 160 and ENG 170 through the dual-enrollment program, which was also a big help."

Andrew Smith—Junior, Agricultural and Biosystems Engineering, DMACC Transfer, Peer Mentor for EGR 100



"Peer mentors help with the peer connection because they are examples of successful transfer students. They understand the struggles transfer students have and serve as another 'bridge' between ISU and DMACC. Peer mentors are a big key in making student connections. Each peer mentor is assigned several transfer students and they are required to interact weekly – usually this happens electronically. Being a peer mentor is a good leadership opportunity." Jacqulyn Baughman—Graduate Assistant and Doctoral Student, Agricultural and Biosystems Engineering, EGR 100 Instructor



"The E-APP program is a great idea for community college students who want to be engineers. It makes them think longer-term and gets them prepared to transfer to ISU. It gives the students an opportunity to have advisors on both campuses who can guide the students to take the 'right' classes so they don't waste time or money. Additionally, the ross-enrollment program allows students to get their feet on the ISU campus and interact with ISU professors and students." Sue Ziegenbusch—Academic Advisor, Agricultural and Biosystems Engineering



"I speak to students in EGR 100 about the E-APP program, Career Fair, course sequence and other services that are available to preengineering students. I help students schedule appointments with ISU advisors on the DMACC campus so they can better plan their transfer sequence. In general, I work with faculty and staff at both DMACC and ISU to help better connect DMACC pre-engineering students to ISU." Ahmed Onwona-Agyeman—SEEC Advising Contact, DMACC



www.engineering.iastate.edu

NATIONAL SCIENCE FOUNDATION STEM Talent Expansion Program (STEP)

www.eng.iastate.edu/seec

DMACC EGR 100 Students

"I went to the Program for Women in Science and Engineering conference and got to know a lot of the counselors and different people and that helped me. I even keep in contact with some of the girls I met there. We talk about different classes we're taking and when we're transferring and stuff like that, so it makes me feel a little bit more comfortable about the transfer process."

"We had a couple professors who came down and did demonstrations. I was very surprised that at least two of them came down and said, "If you have any questions e-mail or call me." Although we're not technically *Iowa State students, they were very* willing to help through the E-APP. I was very surprised at just how helpful the advisors have been."

"I've actually been in the E-APP" since last fall and I've contacted my advisor at Iowa State several times and he's been incredibly prompt at returning my e-mails. I've gotten responses within hours and not days, and I've been very impressed with that. He's given me some advice on a list of classes I thought I would take this semester and he recommended some changes and that was very helpful to me."