



Diversity Report January 10, 2013

Response to Diversity Goals

1. List and describe the major activities that your division or college is doing related to diversity and inclusion. This will help us assess where we are as an institution.

- Collaborations with various international educational institutions for potential outreach to international students including:
 - In November, the Director of the School of CEEMS, Debbie Dawson, joined a university delegation on a visit to Yasar University in Izmir, Turkey, to discuss potential collaborations with the Energy Systems Engineering program.
 - Continued collaborations with Polytechnic Ibadan, Nigeria.
 - Hosted the faculty group for a tour of the CET facilities and laboratories from Changsha Social Work College.
 - Hosted representatives and provided a tour of facilities and laboratories from Zaozhuang University.

- Connecting with students from educational facilities in economically challenged areas. Initiatives this past year included:
 - Provided financial support for students from Detroit area public schools to travel to the Ferris State campus and visit with faculty members and administrators within their program areas of interest.
 - Hosting over one hundreds Latino students during the summer of 2013 in the College of Engineering Technology for laboratory tours and hands-on activities.
 - Faculty members and administrators participated in the recruitment activities at the Youth Engineering and Science (YES!) Expo, Michigan's premier science, technology, engineering, and mathematics (STEM) career awareness event that brings together major companies, colleges and universities, and many prominent organizations to inspire youth to pursue an education and a career in science, technology, engineering, and mathematics. This year's event, held annually at Ford Field, hosted over 19,000 junior high and high school students from Detroit area schools.
 - Partnerships with Intermediate School Districts such as the Kent Skills Center, Traverse Bay Area, Bay/Arenac, and Charm-Em that included potential student recruitment.
 - Sponsoring and hosting the Michigan *MathCounts* competition.
 - Collaborating with Humber College (Toronto, ONT) for transfer student recruitment, specifically in HVACR, Facility Management, Architecture, and Civil Engineering.
 - Actively recruiting a diverse student population during the Michigan Construction Career Days.
 - Working with Char-Em Independent School District schools and members of area industries to establish training classes that possibly include credit for courses at Ferris State University.

- Active participation in several of the state STEM hub groups. Their mission includes creating interest and opportunities for science, technology, engineering, and mathematics education and careers.
- Tom Larabel, Interim Coordinator for the Institute for Construction Education and Training (ICET), is working with the Ferris State University Center for Latin@ Studies to bring students to campus for summer camps. This is part of a larger, successful National Summer Transportation Institute, targeting non-traditional youth populations for careers in transportation and infrastructure. Professor Larabel and ICET were invited to receive this grant again for the summer of 2013. The College hosted one group of students this past year.
- School Director Debbie Dawson is certified to host Mother/Daughter TEA (Technology Engineering Aptitude) events. Mother/Daughter TEA was founded to encourage young women to take an interest in pursuing careers in the engineering field. The one-day event provides middle school girls with the opportunity to complete hands-on activities and interact with an engineering professional to learn about valuable, high-wage opportunities in the engineering industry. In April, she conducted TEA's at the Char-Em Independent School District and Boyne City Public Schools.
- Brian Craig, Director of the School of Built Environment, continues to work with members of Grand Rapids Public Schools and their Academy for Design and Construction, serving on their advisory board and developing scholarship opportunities. This specialty school focuses on student interest in careers in the built environment. The primary student demographic is minority and economically disadvantages students.
- Members of the Corporate and Professional Development Center, through the activities of the Michigan Energy Center, continues to work extensively with local and statewide affiliates of Habitat for Humanity. The faculty and students from the School of Built Environment have also had significant involvement and, along with the Michigan Energy Center, have positively impacted numerous homeowners with the following activities:
 - Continuing to offer energy analysis to assist in lowering the cost of home ownership for economically challenged individuals and families. This creates opportunities for students to have hands-on experience in the field.
 - Through funding from a Ferris Foundation grant, School of Built Environment students provided free energy analysis for homeowners in the Big Rapids and Grand Rapids area. Habitat for Humanity in Mecosta County assisted in identifying local homeowners.
 - In the field, and working with local Habitat for Humanity organizations, courses are being offered where students are able to have hands-on experience with energy efficiencies. Beginning with the design and development stage, proceeding with the actual installation, and finally energy auditing actual performance.
- In May, the Welding Engineering Technology program hosted its 10th Annual State Secondary Welding Competition. This competition brought together 161 students, along with their educators, from a record 36 technical and career centers throughout the state of Michigan. Through the generous support of industry partners, Ferris State administration, and individual donors, welding equipment and consumable materials were awarded to students.
- The College of Engineering Technology has a history of students participating in the SkillsUSA competitions at the state, national, and international levels. During 2012, three students finished in the top three positions in their respective categories and one student will be competing in Skills World in Germany in June of 2013.
- Hosted High School Regional and National Rube Goldberg competitions.

2. Identify diversity successes.

- The number of African American, Hispanic, Asian, and females enrolled in programs in the College of Engineering Technology was 7.15% in the fall of 2012. The percentage was 5.7% in the fall of 2010. Table 1, that is located at the end of this report, provides a summary of the College of Engineering Technology Enrollment by Race for 2010 – 2012.
- The National Society of Black Engineers now has a registered student organization (RSO) on the Ferris campus. The mission of this group is to *increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community.*
- Women in Technology (WIT) continues to be a successful registered student organization under the guidance of Professor Mary Brayton. The re-energized student leadership has been successful in raising awareness of the organization. They have had a presence at College of Engineering Technology events such as summer orientation/registration, the Student Welcome Back Picnic, and the Homecoming Chili Cook Off. Their continued involvement with local Girl Scout troops and the FSU Hometown Recruiter program, which introduces females to engineering and engineering technology programs, are other notable successes.
- The Association of Construction Student organization reaches out to local community members who need home repairs that are beyond their physical and/or financial ability. Three of their projects have been featured in the local news media. They also continue to participate in the Student Government sponsored *Big Event*.
- Under the organization of Director Debbie Dawson, a group of 47 young women from the Char-Em Independent School District toured the College of Engineering Technology facilities and laboratories, and visited with professors to learn about potential careers in engineering and engineering technology fields.
- According to American Society for Engineering Education (ASEE) 2002-2011 statistics, Ferris State University is ranked eighth in the nation in granting engineering technology degrees to females.

3. Identify diversity challenges. Offer solutions.

Some of the major diversity challenges that continue to exist for the College of Engineering Technology in recruiting and retaining minority students and staff are the following:

- Being located in a rural west Michigan county.
- Low numbers of diverse students selecting engineering or engineering technology educational programs nationwide.
- Creating an environment of inclusion and educating professors on inclusion.
- Budget limitations prohibit marketing opportunities to many underrepresented groups.

4. Offer a major diversity initiative to be led by your division or college.

Faculty members and administrators in the College of Engineering Technology continue to reach out to high schools and community colleges in an effort to recruit a diverse population of students including participating in activities associated with recruiting, retaining, and supporting diverse students and staff. During this past year, a request for Perkin's funding was submitted and awarded to develop university initiatives to help to increase diversity. Efforts to assist in partnerships with international collaborations will remain an important goal for the College of Engineering Technology. One example, is working with

the International Center to develop a proposed sequence of online math courses that may be taken concurrently with English courses, for incoming international students who may not be prepared to begin the sequence of required math courses for many of the programs. Without this sequence of courses the international students would have to wait until they complete their two year sequence of English courses before starting their math courses. Members of the CET will also continue to actively pursue opportunities to support the efforts and objectives of the Center for Latin@ Studies.

Race	Fall 2010 Technology		Table One. College of Engineering Technology Enrollment by Race, Fall 2010-Fall 2012		Fall 2012 Technology	
	Female	Male	Technology		Female	Male
	Female	Male	Female	Male	Female	Male
Black	5	50	7	60	2	57
Hispanic	3	34	6	49	7	47
Am Indian	0	10	1	8	0	5
Two or More Races	2	10	2	19	3	23
Native Hawaiian	0	1	0	2	0	1
Asian	5	15	2	23	0	24
Unknown	2	62	2	57	6	50
White	106	1,610	129	1,536	117	1,500
International	1	42	0	56	0	73
TOTAL	124	1,834	149	1,810	135	1,780
<u>Demographics:</u>						
% Female	6.80%		8.20%		7.60%	
% International	2.20%		2.86%		3.80%	
% Black, Hispanic, Asian	5.70%		7.50%		7.15%	