University of Florida

Florida Advanced Technological Education Center (FLATE)

PI: Marilyn Barger, Hillsborough Community College

Description: FLATE (Florida Advanced Technological Education Center) is partnering with FESC to develop statewide curriculum frameworks for technical A.S./A.A.S. degree programs supporting existing and new energy business sectors. FLATE will develop and have processed through the FLDOE the industry-validated student competencies of the frameworks. FLATE will also develop new courses required for each new program of study. Additionally FLATE will help state and community colleges implement the new frameworks in their institutions. To support the new curriculum, FLATE will work closely with the FESC Public Outreach and Industry Partnership programs to provide professional development opportunities for teachers and faculty to upgrade and update their knowledge base.

Budget: $300,000

Universities: Hillsborough Community College

External Collaborators:
- Brevard Community College
- Tallahassee Community College
- Daytona State College
- Central Florida Community College
- Polk State College
- Florida State College at Jacksonville
- Valencia Community College
- School District Hillsborough County
- Florida Department of Education – Division of Adult and Career Education
- West Side Technical School
- WFI Banner Center for Energy
- Advanced Technology for Energy and Environment Center (ATEEC)
- University of West Florida, Dept of Construction Technology
- WFI Banner Center for Construction
- WFI Banner Center for Alternative Energy
- USF College of Engineering
- Madison Area Technical College ATE project for Alternative Energy certifications
- Milwaukee Area Technical College Energy Conservation and Advanced Manufacturing Center (ECAM)
- Florida Energy Workforce Consortium (FEWC)
- TECO
- Progress Energy
- ISTEC (Ibero Science and Technology Education Consortium)

Progress Summary

During the current reporting period, FLATE partnered with 10 Florida community colleges and their local industry to define curriculum standards for alternative energy that support industry needs, made several presentations both within and outside of Florida, and is working with Brevard Community College for a fall implementation of the Alternative Energy Systems Certificate. In April, FLATE added Jorge Monreal to the team as Project Manager to help drive implementation of this FESC project.
Specific accomplishments during the period are:

9/29/09  Poster presentation at the 2009 FESC Summit; “Preparing the Technical Workforce to Meet Florida’s 21st Century Needs” (Tampa, FL)

9/09-10/09  Conducted two workshops for curriculum framework development with faculty at Polk State College and Valencia Community College.

10/28/09  Gave energy education focused presentation at ISTEC (Albuquerque, NM)


2/2/10  Co-presented, with Drs. Tim Anderson and Pierce Jones, to the Florida House Committee for Public Universities and Private Colleges Policy

3/10/10  Facilitated the approval by FL DOE of the new curriculum framework for Alternative Energy Technology Specialist (CIP: 0615000003) as a College Credit Certificate program under the Engineering Technology AS/AAS degree program. Brevard Community College (BCC) will adopt in Fall 2010.

4/5/10  Added Jorge Monreal as Project Manager- FESC project

4/23/10  Presented overview of FESC and its interactions with two year A.S. programs at the spring state wide Engineering Technology Forum held at FSCJ at Jacksonville.

5/7/10  Meeting with Broward College Associate Dean for A.S. programs to discuss alternate energy specialization in the state wide Engineering Technology A.S. degree program

The immediate focus is to help BCC implement the new Alternative Energy Technology Specialist program for the Fall of 2010 by helping to develop curriculum for the introductory course, as well as providing any necessary aid in other courses. Additionally, FLATE is partnering with BCC on an NSF grant to support curriculum development and outreach for college energy programs and degrees.

In the next few months, FLATE in partnership with the FLDOE will conduct a survey to assess what, if any, alternative/renewable energy courses are currently being offered at public state and community colleges, private colleges and high schools. This follow-up to the 2009 Greensforce Florida survey will focus on specific courses currently offered at public and private 2-year degree granting institutions. It will also request enrollment data in courses and programs.

A list of Florida companies with products or services in the Alternative/Renewable energy sector is in the process of being compiled. The goal is to create industry focus groups to assess workforce education needs.

FLATE has partnered with FESC public outreach to develop a professional development workshop to be offered on July 27 at the Hi-TEC conference in Orlando.