Iberian Partnership for Technician Excellence

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Overview

Study abroad programs are common within the 4-year bachelor degree programs in the United States but such program opportunities are not often available to students enrolled in 2-year Associate of Science (A.S.) degree programs. The Florida Advanced Technological Education Center of Excellence-FLATE, as Florida’s National Science Foundation Center of Excellence for Advanced Technological Education, is aware of this situation and recognizes the importance for faculty and students to keep current with advances in their technology and manufacturing and the importance to expand their expertise. As a result FLATE together with TKNiKA, an innovation institute for vocational training established by the Vice Ministry of Education of the Basque government, developed the “Iberian Partnership for Technician Excellence” project.

This is an international educational exchange program in the two year A.S. degree in engineering technology and is one of eight NSF OISE pilot projects awarded to NSF Advanced Technological Education (ATE) Centers, to support high educational experience to community college students.

This paper summarizes the construction and development of the “Iberian Partnership for Technician Excellence” program, with a focus on the lessons learned from faculty and students experiences in creating a capstone course in a vocational college of Spain.

Phase 1 - Exploratory

- 7 Mentors-AS Florida ET Colleges and industry visited the Basque region of Spain and worked together with the host institution TKNiKA to develop the course
- Special Topics in Modern Manufacturing
- July 9 – 16, 2012

Phase 2 - Technical Training

Student Training at Hillsborough Community College, U.S.A. and IEPS USURBIL GBLHI, Spain

- Course: Special Topics in Modern Manufacturing, ETI-1931
- Students Enrolled in 3 credit hour course @ HCC
- 8 Students-Second year AS ET from 4 Florida colleges
- Age range: 20’s – 50’s
- Working students: 2 FT and 6 PT
- 7 Mentors-AS Florida ET Colleges
- Three week training in Spain: May 12 – June 02, 2012
- Daily Journal required

Training Schedule

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<tr>
<th>WK 1</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
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<tbody>
<tr>
<td>10 am</td>
<td>Welcome</td>
<td>Biomass</td>
<td>Solar Thermal</td>
<td>Biomass</td>
<td>Solar Thermal</td>
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<td>Solar Thermal</td>
<td>Biomass</td>
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<tr>
<td>1-2 pm</td>
<td>Break for lunch</td>
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<tr>
<td>2-4 pm</td>
<td>Automated Controls Systems</td>
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<td>TKNiKA</td>
<td>Site visits</td>
<td>Spanish</td>
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<tr>
<td>10-1 pm</td>
<td>Site visits</td>
<td>TKNiKA</td>
<td>Site visits</td>
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<tr>
<td>1-2 pm</td>
<td>Site visits</td>
<td>TKNiKA</td>
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<tr>
<td>2-4 pm</td>
<td>Site visits</td>
<td>TKNiKA</td>
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<th>Fri</th>
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<td>Final presentations &amp; Closure</td>
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<td>Solar Thermal</td>
<td>Site visits</td>
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<tr>
<td>1-2 pm</td>
<td>Break for lunch</td>
<td>Site visits</td>
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<td></td>
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<tr>
<td>2-4 pm</td>
<td>Final Project</td>
<td>Site visits</td>
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Here's what they say...

"I consider myself to be a more well-rounded person after having completed this overseas training. The academic knowledge I gained was first-class, and the cultural knowledge was something that I don't think I could have ever gotten to experience on my own." - Andrew Soda

"It has been a priceless experience that cannot be duplicated. This opportunity was not only very educational academically but in all forms and very insightful. Thank you for giving this opportunity. I hope this is just the beginning...as many futures will be paved by it."

"This has been a great experience. From the learning from this experience I will improve my career and job opportunities. Appreciate and respect more cultural differences."

"I will encourage a more hands-on approach in my studies. I will seek to apply and spread more alternative energies back home. Thank You! To the mentors, for making this trip happen! To our instructors, for your patience guidance and time. To the students, for sharing this experience and making it a great trip."

Lessons learned and benchmarking of outcomes
- Metric system immersed at commercial and professional level.
- Different but equally effective work schedule.
- Common mission (TKNKA/FLATE)
  - Both Centers work with regional industry to advocate/advance incumbent skills-set certifications.
  - Both centers service OEM manufacturing infrastructure with increased equipment automation requirements.
- Expanded appreciation for cultural similarities and differences.
- Opportunity to create cooperative system as an economically and socially viable way to support both centers’ manufacturing community.
- Unique/delicious Basque diet with interesting dining hours.

Phase 3 - Evaluation

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