



## Meeting Summary

### **FLATE INDUSTRIAL ADVISORY COMMITTEE MEETING Thursday, September 15, 2011**

**Hillsborough Community College - Brandon Campus  
Administration Building BADM 117  
10414 E. Columbus Dr.  
Tampa, FL 33619**

#### **FLATE Participants**

Members Present: Tina Brudnicki, Idelia Phillips, Ernie Helms, Jason Pressley, Mark Ericksen, Drew Hoff, Marika Rogers, Adrienne Gould-Choquette, Ernie Friend.

Member Call-ins: Bruce Driggett, Nancy Stephens, Ron Eaglin, Alex Anzalone.

FLATE members: Marilyn Barger, Brad Jenkins, Richard Gilbert, Dave Gula, Danielly Orozco, Phil Centonze, Marie Boyette.

Guests Present: Dennis Jauch, Scott Choquette, Luis Gomez, Diane Matthews, Rob Tufts, Don Haney, Brian Hollands, James Moore, Mike Smutko,.

Members Excused: JoAnne Larsen, Denis Barrette, Ed Goolsby, Steven Meitzen, Chet Sadler, Eric Roe, Peter Straw, Ed Niespodziany, Meer Almeer, Dennis Battistella, John Debella, Sabrina Peacock, Mark Snyder, Sherry Reeves, Donat Forrest, Leigh Haller, Mark Gaudio, Mark Ennis, Gil Lugo, Tom Kennedy, Patti Gander, Roy Sweatman, Terry Warner, Denise Sanderson.

#### **HCC Brandon Campus Welcome and introduction of Committee Members and Guests:**

Tina Brudnicki, the chair of the FLATE IAC, welcomed the advisory members, the call in members, and guests to the FLATE IAC Meeting. The Adobe Connect conference call connection was provided by HCC for those members calling from around the state.

#### **Regional Consortium for an International Trade Hub:**

Tina introduced Brian Hollands from the Hillsborough Community College (HCC) Corporate Training who presented their initiative for increasing Florida's role as an international trade hub. Brian reported

that the Institute for Corporate and Continuing education at HCC and the Banner Center for Quality at the University of North Florida (UNF) have partnered to provide companies involved in exporting of goods from Florida with stipends to train employees and/or cover consulting services that will increase their export volume. Both HCC and UNF are working to create regional consortium projects which will bolster international trade and export expansion opportunities with focus on deepwater seaports, inland ports, and air cargo transportation hubs of the state.

For additional information concerning this consortium you can email Brian at [bhollands@hccfl.edu](mailto:bhollands@hccfl.edu) or phone 813-253-7074.

### **Old Business:**

Brad Jenkins reported the summary of the results from the IAC/NVC Brainstorming Sessions that were held this past spring and summer.

The three areas that were ranked the highest for Curriculum:

1. General Engineering for AA/AS programs and a pathway to the engineering degree.
2. New areas of development, not directly associated with Engineering Technology.
3. Pharmaceutical Technology – Clinical trials and development are emerging areas.

The three areas that were ranked the highest for the Outreach Activities:

1. Manufacturing Technology day with a multipurpose “expo”; tours, video and visits/interviews with companies/school industry partnerships.
2. Develop and conduct road shows for industry, economic development organizations, and colleges/universities to increase awareness of FLATE.
3. Younger job shadowing and internships.

The three areas that were ranked the highest for Professional Development:

1. Fill the Gaps in curriculum needs for teachers/faculty; partnerships for HS teachers in industry for summer work.
2. JIT Webinar series, supply chain management, RFID technology, robotics, logistics, and engineering support services; audits, inspections.
3. Train-the-Trainer (credentialing).

Brad also remarked that the state college’s advisory committees from around the state also participated in the survey.

### **FLATE Evaluator Update:**

Phil Centonze, the FLATE external evaluator, presented the 2011 FLATE Stakeholder Survey results. The survey statements were presented along with the results of 2011 and how those results compared with the 2009 survey. Phil reported that 1265 survey response requests were emailed to the FLATE stakeholders with 194 responses, a response rate of about 15%. Phil went over some of the numerical data and explained the differences between the 2009 survey responses with those of 2011. The sum of % strongly agrees and % Agree responses have increased since 2009 for every Survey Statement except for two questions. Phil also provided a summary of the comments and recommendations received including a demand for more frequent accessible professional development for educators, more outreach in the south Florida region, maintain the focus on manufactures and technical education, and build the pipeline for the enhancement of the manufacturing workforce.

### **Nancy Stephens, MAF Update:**

Nancy provided an update on the Manufacturing Association of Florida (MAF) activities including the top 5 manufacturing priorities for the year presented to Governor Scott. Those five priorities were 1) to designate a manufacturing advocate, 2) improve the climate for manufacturing, 3) continue to invest in workforce training and provide nationally recognized certificates, 4) expand the trade opportunities for export/import through the ports of Florida, and 5) work toward an energy policy. Nancy was also appreciative of the work that FLATE has accomplished. Nancy also provided information on the topics to be covered during the MAF Summit that will be held in Orlando, November 30-December 1. For additional information, the MAF website is: [www.mafmfg.com](http://www.mafmfg.com).

### **Teacher Quest Program:**

Diane Matthews and Luis Gomez gave a presentation of the Teacher Quest Program with Diane providing the background of this effort that both the Florida Department of Education and the Florida Technological Research and Development Authority (TRDA) provided for the implementation of this teacher in industry program. Diane also explained the benefits that both the teachers and industry/businesses gain from this program. Luis, from RevTech Manufacturing, talked about the success of a teacher had in writing an equipment procedure report based on his observations as he worked on the shop floor. For additional information, please contact Diane at [dmatthews@trda.org](mailto:dmatthews@trda.org).

### **Nanotechnology information activity:**

Brad Jenkins led the discussion concerning the importance of nanotechnology and the significance of this technology that are now in use in all types of manufacturing, research, and design. There has been much discussion as to how nanotechnology fits into a certificate or 2 year technology degree and what type of skills would be needed in this area. In order for us to go forward with our FLATE preliminary proposal, we need to show NSF that we are expanding into new areas and activities to support both the education initiatives as well as providing response to the industry sector.

Brad had the committee members break into six groups, including the on-line group. A five question list on nanotechnology was provided to each group for their input to the questions. Each group had a leader that was familiar with certain aspects of nanotechnology to provide guidance and technical expertise related to the questions.

The groups were asked to brainstorm with ideas, comments, thoughts, and new approaches for each of the questions.

Upon completion of this activity the following statements and answers were compiled for each question.

Question 1 – List some industry sectors that utilize nanotechnology:

Material research and development, electronics (devices and semiconductors), textiles, medical, medical device manufactures, pharmaceutical, and communications.

Question 2 – What are some products that utilize nanotechnology and how are they used?

Coatings, drug development, clothing, paint, biomedical sensors, electronics displays, electronic devices, microchip processing, lenses, fuel cells, and sun block products.

Question 3 – What are the commonalities of these nanotechnology-based products?

Concept based knowledge (physics, chemistry, mechanical and electrical , statistics, fluid dynamics, quality), process control, material science, high skilled workforce, highly specialized, high cost, high paying jobs, nano particles, high technology, largest cost to create products, small < 100 nanometers, and surface dominated products.

Question 4 – What would be the skill requirements for the workforce that makes these products or work in a facility that manufactures them?

Transferability from basic testing equipment and procedures to advanced testing equipment, design of experiment for a lab environment (note what is happening in the experiment), specialized tools (electron microscope, other instruments), how matter behaves differently at that level – unique properties, understanding that matter behaves differently at nano scale, nano could be a specialization in the ET degree, post secondary education, advanced engineering, vacuum technology, how materials work together, metrology of surfaces, materials on the job training due to secretive processes, mechanics in materials, and thermocouples.

Question 5 – What job titles would these workers have?

Process technician, engineering technician, engineering associate, senior engineer, manufacturing technician, and micro-electro mechanical (MEM) technician.

There was quite a bit of discussion concerning the usage of nanotechnology, where it is used, the type of education required, the industry using it, and the special skills required. Most agreed that nanotechnology is a very broad area. Brad will also send this survey questionnaire to the other state colleges so they can run this activity to gain additional data. All input data received from the IAC, the college's advisory committees, and the National Visiting Committee will be reviewed again at the May IAC meeting.

### **FLATE Educator and Industry Awards for 2011**

Marika Rogers reported that nominees were received in each of the three categories and that the committee had recommended the top nominees in each category to the FLATE leadership. Marilyn Barger will contact those nominees selected to be awarded at the MAF Summit in November. Industry sponsorship will cover the cost of travel to the MAF Summit.

### **FLATE Updates:**

#### **“Made in Florida” (MIF) Website:**

Marilyn reported on the new Made in Florida(MIF) website, [www.maeinflorida.org](http://www.maeinflorida.org), that now there is a section on “Hire an ET Graduate” This will help the industries know where to locate graduates with the Engineering Technology degree and all the specializations that go with that degree.

## **NEXT advertorial**

Marilyn also provided information concerning the *Florida Trend's* NEXT magazine advertorial along with the industry sponsors. The actual size of the advertorial is smaller and the distribution has been downsized, but we are still getting the same percentage interest from the HS students. The IAC members received a handout on NEXT Advertorial Performance.

### **Other Announcements:**

The Engineering Technology Forum will be held at Florida Gateway College, September 29-30, 2011.

### **Action Item:**

Brad Jenkins will compile the survey questionnaire results in the IAC summary.

### **Date for next Industrial Advisory Meeting:**

Tina stated that the next meeting will be **January 19, 2012, 4:30-6:30 pm**. The site will be determined for this meeting.

Tina adjourned the meeting at 6:50PM.

Respectively submitted,

Brad Jenkins  
CO-PI FLATE

