

**Year-2 Regional Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008**

**-Report of Findings-**



**Prepared for:**

**Workforce Florida, Inc.  
And  
Agency for Workforce Innovation**

**Prepared by:**

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**YEAR-2 REGIONAL MANUFACTURING INDUSTRY FOCUS GROUP  
HILLSBOROUGH COMMUNITY COLLEGE AT BRANDON  
-REPORT OF FINDINGS-**

**EXECUTIVE SUMMARY**

The regional manufacturing industry focus group held at Hillsborough Community College at Brandon on May 30, 2008, provided the Employ Florida Banner Center for Manufacturing, a means to explore the current and future workforce training requirements for manufacturing companies in the Greater Tampa Bay region of Florida.

In response to various (i.e., breakout group and open discussion) formats, the focus group participants provided vital data relevant to the future development of training curricula, which will address the participants' companies advanced level/emerging production workforce training needs. Highlighted findings among the data follow.

- **Manufacturing Trends** – These training curricula-related drivers include regulatory compliance, greening, energy consumption/conservation, integration of systems, training for innovation, graying of the workforce, aging facilities and related maintenance systems, local outsourcing, supply chain management, knowledge-based workforce, business knowledge for production employees, and capital expansion.
- **Occupations/Skills/Knowledge/Certifications** – These training curricula-related requirements include occupations such as, robotic programmer, tool and die technician, production supervisor, project manager, automation technician, quality assurance technician, source inspector, calibration specialist, inventory specialist, and production planner. All of the noted occupations' knowledge and skills requirements aligned directly with the technical competencies' descriptions of current industry-recognized certifications.
- **Training Format** – These training curricula-related requirements include community college-based training providers, on-site and/or technical center, off-site, train-the-trainer, English only, maximum of eight hours per week training, hybrid programs, and Webinar preferred over online/self-directed training.

**PURPOSE OF THE FOCUS GROUP**

The statewide focus groups initiative is a key element of an ongoing dialogue with the manufacturing community, where the dialogue provides an information exchange essential to addressing the significant and emerging training requirements for Florida's manufacturing workforce. The regional focus group conducted at Hillsborough Community College at Brandon was specifically for companies located in the Greater Tampa Bay region of Florida. Specific to the group activity is the gathering of opinions from the key stakeholders in the regions'

manufacturing community (e.g., representatives from regional manufacturing companies, Bay Area Manufacturers Association (BAMA), Polk Manufacturers Council (PMC), Tampa Bay Workforce Alliance, Hillsborough/Pinellas/Pasco County School Districts, Pasco Economic Development Council, Pasco-Hernando Jobs and Education Partnership Regional Board, and Hillsborough Community College, Pasco-Hernando Community College, and Polk Community College) pertaining to the industry's current, and future, workforce-training needs.

### **FOCUS GROUP TOPICS**

The Employ Florida Banner Center for Manufacturing (hereafter called "Center") employed Peter Straw, Principal of Performance Development Strategies, and Executive Director of the Sarasota-Manatee Area Manufacturers Association, to facilitate the focus group. Mr. Straw used a portfolio of approaches to ensure the industry members, comprised of experts in a wide spectrum of manufacturing and manufacturing-related occupations, adequately addressed the topics. The format of the group meeting agenda (see Appendix 1 – Focus Group Agenda) served to elicit general and specific feedback on the topics of interest.

In collaboration with the principal investigator and manager of the Center, the focus group participants (see Appendix 2 – Attendee List) addressed the following topics during the discussion forums:

- **General Discussion on Trends** – The participants explored the current and future trends in the manufacturing industry, which will drive workforce training needs for advanced level/emerging production occupations.
- **Breakout Group Discussions** – The participants explored the current and future knowledge, skills, and industry-recognized certification(s) requirements for specific occupations in the following advanced level/emerging production workforce occupational categories:
  - Production and processes
  - Maintenance
  - Quality assurance
  - Logistics and inventory control
- **General Discussion on Training Format and Delivery** – The participants explored curricula structure and delivery requirements for advanced level/emerging production workforce occupations.

As in any focus group, the meeting at Hillsborough Community College at Brandon served as a qualitative tool to gain insight and understanding into the nature of the workforce needs of the regions' manufacturing industry community. This type of research forum facilitated direct interaction with the group respondents and allowed opportunities for clarification, follow-up questioning, and probing responses. However, the focus group findings presented in this report are not survey results. Rather, the findings provide insight into manufacturing industry workforce-related issues under study, but are not for statistical inference.

This is the fourth of five focus group reports, corresponding to the Center's plan to conduct five regional focus groups throughout the state. Mr. Straw will facilitate all five groups to ensure continuity. The Center will compile the aggregate results of the five focus group meetings,

formulate them into an online survey, and offer the survey to the statewide manufacturing community for their response. This effort will serve to validate the aggregate findings of the five focus groups, after which a statistical analysis of the survey results will allow the Center to incorporate appropriate findings into training curricula – to be developed by the Center – for the manufacturing workforce in advanced level/emerging production jobs.

## **SUMMARY OF TRENDS GENERAL DISCUSSION FINDINGS**

The following is a summary of the highlights that surfaced during the Trends General Discussion:

### **What are the current and future trends in the manufacturing industry, which will drive workforce training needs for advanced level/emerging production occupations?**

- Regulatory compliance
- Greening (e.g., incorporate “green” knowledge and skills into workforce training/culture)
- Awareness of energy consumption/conservation and reducing energy footprint
- Automation and instrumentation
- Culture of change and managing change
- Business fundamentals (e.g., return on investment, understanding communication, basic mathematics of manufacturing, capacity planning, language of business, economics)
- Basic concepts of Lean manufacturing
- Employee awareness of the “Big Picture” (e.g., interdependence)
- Integration of systems (e.g., planning – production – purchasing)
- Training for innovation
- Flexibility of training for sector-specific needs
- Graying of the workforce, which presents a demographic bubble driving training of the next generation in technical skills
- Aging facilities and related maintenance systems
- Local outsourcing (e.g., to fulfill assembly needs)
- Supply chain management
- Retraining existing workforce in emerging technologies
- Mechanical systems (e.g., computer driven, electrical/mechanical, smart systems)
- More knowledge-based workforce
- Total productive maintenance, lean, Toyota Production House, and practical arts (e.g., basic tool use) pushed into secondary educational system
- Perception that manufacturing is leaving the country, keeping students from entering manufacturing education programs
- Waste reduction and elimination
- Capital expansion – more productivity with less investment

## **SUMMARY OF BREAKOUT GROUP DISCUSSION FINDINGS**

During the Breakout Group Discussion, Mr. Straw assigned the group participants to four different tables representing four different occupational categories: Production and Processes, Maintenance, Quality Assurance, and Logistics and Inventory Control. Mr. Straw instructed them in the use of a custom-designed worksheet (see Appendix 3 – Breakout Group Worksheets) for their specific Breakout Group Category.

The worksheet guided the participants in their efforts to describe their workforce training needs for advanced level/emerging production occupations by:

- Identifying specific occupations in the assigned Breakout Group Category
- Identifying immediate and future technical needs for these occupations
- Distinguishing between specific skill sets and knowledge base requirements
- Prioritizing the skill sets and knowledge base needs
- Identifying industry-recognized certifications for these occupations

At the end of the initial Breakout Group discussions, the facilitator and recorder for each group rotated to the adjacent table (e.g., Production Processes rotated to Quality Assurance) to get those participants' perspective about the new occupational category discussion. These rotations continued until the participants addressed all occupational categories. However, despite the facilitator's best efforts, some of the groups were unable to complete the assigned tasks in the allotted time. The following is a summary of the highlights that surfaced during the Breakout Group discussions.

<b>Breakout Group Category:</b> Production and Processes							
<b>Advanced Level/Emerging Occupation:</b> Robotic Programmer							
<b>Certification(s) Needed for the Occupation:</b> Six Sigma, Certified Quality Technician, Welder, and a (still unavailable) robotic certification							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
<b>1</b>	Read mechanical drawing				Mathematics		
	Troubleshooting				Statistics		
<b>3</b>	Auto CAD/CAM program				PLC programming		
	Software ladder logical				Advanced computers		
<b>2</b>	Critical thinking				Material identification		
	Problem solving/logic				Optical measuring		
	Quality control instruments				Hydraulics/pneumatics		
	SPC				Electrical controls		
	Data collection						
	Sample techniques						
	Material identification						

<b>Breakout Group Category:</b> Production and Processes							
<b>Advanced Level/Emerging Occupation:</b> Tool and Die Technician							
<b>Certification(s) Needed for the Occupation:</b> Don't know – usually internal to each specific company							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
<b>1</b>	Reading blueprints				Advanced mathematics		
<b>3</b>	Critical thinking				Materials		
	Problem solving				Tools/machines		
	Mechanical						
	Measuring/calibration						
	Quality control						
<b>2</b>	Mathematics						
	CNC programming						

<b>Breakout Group Category:</b> Production and Processes							
<b>Advanced Level/Emerging Occupation:</b> Production Supervisor							
<b>Certification(s) Needed for the Occupation:</b> Ex-military, A.S. degree							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Interpersonal				Production and processes		
	Customer service				HR laws and processes		
	Organizational				Workforce ethics		
	Multi-tasking						
	Leadership						
	Business mathematics						
	Communications						
	Computer						
	Mechanical						
	Problem solving						

<b>Breakout Group Category:</b> Production and Processes							
<b>Advanced Level/Emerging Occupation:</b> Binder/Compounder Technician							
<b>Certification(s) Needed for the Occupation:</b> Certified Quality Inspector							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Mathematics				Chemistry		
	Chemistry				Mathematics		
	Use/read gages/scales				Regulatory requirements		
	Troubleshooting						
	Problem solving						
	Quality control						
	Computers						
	Safety						
	Standard work practices						

<b>Breakout Group Category:</b> Production and Processes							
<b>Advanced Level/Emerging Occupation:</b> Project Manager							
<b>Certification(s) Needed for the Occupation:</b> PMP							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Quality methods				Production and processes		
	Documentation				Systems		
	Interpersonal				Product flow		
	Communications				Problem analysis		
	Team building				MS Project		
	Leadership				Project management		
	Business fundamentals				Computers		
	Problem solving						

<b>Breakout Group Category:</b> Maintenance							
<b>Advanced Level/Emerging Occupation:</b> Operator Mechanic							
<b>Certification(s) Needed for the Occupation:</b> Don't know							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Maintenance				Communication		
	Basic tools				Technical writing/language		
	Basic computers				ROI/economics		
	Basic electrical				Production efficiency		
	Fasteners				Inventory control		
	Pneumatics						
	Equipment inspection						
	Equipment adjustments						
	Basic PLC/automation						
	Basic machine diagnostics						
	Anomaly identification						

<b>Breakout Group Category:</b> Maintenance							
<b>Advanced Level/Emerging Occupation:</b> Maintenance Mechanic							
<b>Certification(s) Needed for the Occupation:</b>							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Welding and machining				Training		
	Hydraulics/pneumatics				Communication		
	Blueprint reading						
	Electrical and mechanical						
	PLC						
	Safety						
	Troubleshooting						
	Preventive/predictive methods						
	Electromechanical multi-level						
	CNC programming						
	Robotics						

<b>Breakout Group Category:</b> Maintenance							
<b>Advanced Level/Emerging Occupation:</b> Automation Technician							
<b>Certification(s) Needed for the Occupation:</b> Master Trainer, A.S. engineering technology, ISA certifications							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Wireless technology				Communication		
	Advance PC programming				Organization/prioritization		
	Electromechanical multi-level				Specific products		
	Instrument calibration				Manufacturing operation		
	Computer networks						
	PLC						
	Visual/optical reader/scanner						

<b>Breakout Group Category:</b> Maintenance							
<b>Advanced Level/Emerging Occupation:</b> Reliability Engineer							
<b>Certification(s) Needed for the Occupation:</b> Engineering degree							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Asset availability						
	Asset-based maintenance strategies development						
	Resource planning/scheduling						
	Trend analysis						
	SPC						
	Mechanical						
	Failure mode analysis						
	Engineering-maintenance						

<b>Breakout Group Category:</b> Quality Assurance							
<b>Advanced Level/Emerging Occupation:</b> Quality Assurance Technician							
<b>Certification(s) Needed for the Occupation:</b> Certified Quality Technician, Certified Production Technician, ATS-Problem Solving, OSHA 10-hr							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Interpersonal		Trainer		Computers		Mechanical drawings
	Problem solving		Automation		Mathematics		Blueprints
	Read blueprints		Computers		Measurements		Quality management process
	Tools/instruments use		Quality assurance analysis				GP II recommendations
	Tolerancing		Measuring instruments				Chemistry
	Product information		Failure mode analysis				USDA
	Documentation processes		Samples' reading				HACCP

<b>Breakout Group Category:</b> Quality Assurance							
<b>Advanced Level/Emerging Occupation:</b> Source Inspector							
<b>Certification(s) Needed for the Occupation:</b> ISO, Certified Quality Auditor							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Measuring devices		Analytical		Sampling methods		Sampling methods
	Mathematics		Documentation		Statistical analysis		Systems
	Computers		Report writing		Systems analysis		Automation
	Computer-controlled measure						System set up

<b>Breakout Group Category:</b> Quality Assurance							
<b>Advanced Level/Emerging Occupation:</b> Calibration Specialist							
<b>Certification(s) Needed for the Occupation:</b> OSHA, MSSC, ISO 9000							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Quality control				Mathematics		Mathematics
	Materials				Blueprint reading		Blueprint reading
	Statistics				Measuring equipment		Measuring equipment
	State and federal laws				Computers		
	ISO 9000				Documentation		
	Recordkeeping						
	Computers						
	Calibration equipment						
	Safety						

<b>Breakout Group Category:</b> Logistics and Inventory Control							
<b>Advanced Level/Emerging Occupation:</b> Material Handler							
<b>Certification(s) Needed for the Occupation:</b> OSHA, Forklift, MSSC							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Computer				Forklift operations		
	Reading/mathematics				RFID and bar coding		
	Standard work practices				HAZMAT awareness-MSDS		
	Documentation				Warehouse management systems		
	Inventory control				Trade/transport regulations		
	Loss prevention						
	Material tracking						

<b>Breakout Group Category:</b> Logistics and Inventory Control							
<b>Advanced Level/Emerging Occupation:</b> Inventory Specialist							
<b>Certification(s) Needed for the Occupation:</b> Forklift, Lean, Six Sigma Black/Green Belt, APICS, HAZMAT, OSHA, PPF							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Communications/math				MRP systems		RFID systems
	Waste management				Barcode technology		
	Forecasting				Automated material handling		
	Computers/programming				Mathematics		
	MS Office				Inventory control		
	Business economics				Scheduling/production plan		
	Loss prevention				Quality systems		
	MSDS				Outsourcing		
					Transport manifests		
					Hazardous materials		

<b>Breakout Group Category:</b> Logistics and Inventory Control							
<b>Advanced Level/Emerging Occupation:</b> Buyer/Purchaser							
<b>Certification(s) Needed for the Occupation:</b> APICS, CPM, Certified Purchasing Associate							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Negotiation				Value vs price		Supply chain
	Financials				Total cost of ownership		Quality systems
	Supplier analysis				Quality product		
	Contracts				Global economics		
	Quality vendor				Outsourcing		
	Sourcing				Creating local partnerships		
	Quality analysis				Inventory systems		
	Currency conversion				Production planning		
	Marketing				Inventory cost		
	Computer				Integrated supply		
	Business economics				Transportation systems/cost		

<b>Breakout Group Category:</b> Logistics and Inventory Control							
<b>Advanced Level/Emerging Occupation:</b> Production Planner							
<b>Certification(s) Needed for the Occupation:</b> Lean, APICS							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Lean				MRP		
	Scheduling				Inventory tracking		
	Productive management				Quality systems		
	Communications				Machine capacities		
	Business basics				Equipment		
	Capacity analysis						
	Production processes						
	Customer relations manage						

<b>Breakout Group Category:</b> Logistics and Inventory Control							
<b>Advanced Level/Emerging Occupation:</b> Import/Export Specialist							
<b>Certification(s) Needed for the Occupation:</b> APICS, Sales/Supply Chain, CPM, Microsoft database certifications							
<b>Skill Sets</b>				<b>Knowledge Base</b>			
<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>	<b>P</b>	<b>Immediate</b>	<b>P</b>	<b>Future</b>
	Conflict resolution				Currency conversion		
	Mathematics				Multinational cultures		
	Communications				International shipping laws		
	Supply chain				I/E regulations		
	Computers				Contracts		
	Multilingual				Multilingual		
	Negotiation				Geography (time zones)		
					Trade resources		
					I/E packaging & purchasing		
					Transportation principles		

## **SUMMARY OF TRAINING FORMAT AND DELIVERY GENERAL DISCUSSION FINDINGS**

### **What format and delivery methods work for you in training your advanced level/emerging production workforce?**

- Academic partners (e.g., community college-based classroom)
- On-site and/or technical center, especially if the need is for equipment-specific training
- Off-site
- Consortia (i.e., multi-company) type of learning environment
- Train-the-trainer so production staff can deliver the training
- English only
- ESL needed for multi-cultural workforce
- Flexible training load
- Maximum of eight (8) hours per week
- Company pays of training fees, but not for employee's time
- Hybrid program – combination of off-site (employee time) and on-site (employer time), facilitated online and classroom
- Modular basis, adaptable at educational institutions vice academic calendar, open entry/open exit
- Webinar with facilitated online content is preferred over online/self-directed
- Onsite, crossing shift changes

### **POST-FOCUS GROUP ASSESSMENT**

With continuous improvement a primary objective for future focus groups, at the end of the focus group, the group facilitator distributed questionnaires (see Appendix 4 – How Did We Do?) to the participants. The facilitator and Center principal investigator and manager also conducted a closed session meeting where they performed a post-focus group assessment. They discussed, analyzed, and developed solutions to group process and material findings. The Center will implement the solutions during the one remaining Year-2 regional focus group.



**Year-2 Regional Manufacturing Industry Focus Group**  
**Hillsborough Community College at Brandon**  
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**Appendix 1**

## **Focus Group Agenda**



### Meeting Agenda

- 8:30-8:45 a.m. Welcome and Introductions (Peter Straw, Focus Group Facilitator)
- Dr. Carlos Soto, Campus President, Hillsborough Community College at Brandon
  - Dr. Eric A. Roe, Principal Investigator, Employ Florida Banner Center for Manufacturing
- 8:45-9:05 a.m. Employ Florida Banner Center Introduction (Edward Allen, Manager, Employ Florida Banner Center for Manufacturing)
- 9:05-9:50 a.m. General Discussion: Trends and Certifications (Peter Straw)
- Trends – What are the current and future trends in the manufacturing industry, which will drive workforce training needs for advanced level/emerging production occupations?
- 9:50-10:00 a.m. Break
- 10:00-10:10 a.m. Focus Group Orientation (Peter Straw)
- Introduction
  - Role, context, and flow of the Focus Group
- 10:10-10:55 a.m. Breakout Groups Round I
- Advanced Level/Emerging Production Occupations
  - Knowledge/Skills Sets
  - Certifications
- 10:55-11:40 a.m. Breakout Groups Round II
- 11:40-11:50 a.m. Overview of Breakout Group Results
- 11:50 a.m.-12:00 p.m. General Discussion: Training Format (Peter Straw)
- Training Format – What formats for module development and delivery are of use to your company?
  - What are the barriers to online, self-directed training?
- 12:00-12:30 p.m. Open Discussion, Meeting Recap, and Working Lunch



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## **Attendance List**

**Employ Florida Banner Center for Manufacturing  
Year-2 Regional Manufacturing Focus Group  
Hillsborough Community College at Brandon - May 30, 2008  
Attendance List**

<b>Last Name</b>	<b>First Name</b>	<b>Company</b>
Abbey	Richard	BIC Graphic USA
Aguis	Rob	District School Board-Pasco Cty
Allen	Edward	Banner Center for Manufacturing
Buczynsky	Peter	Micron PharmaWorks, Inc.
Butler	Stacee	Bausch & Lomb
Crew	Mary	Pasco-Hernando CC
Dearolf	Casey	Pasco EDC
Ditty	Jerry	Pinellas County Schools
Durbin	Teresa	Cutrale Citrus Juices USA, Inc.
Furbay	Scott	Goodwill Industries - Suncoast
Gaidosh	Mike	Sun Hydraulics
Gander	Patti	AquaCal
Gaudio	Mark	Jaeger Corp
Gooding	Jeri	SMT
Haynie	Charles	Sun Hydraulics
Helms	Ernie	PCC Corporate College
Jaeger	Rod	Jaeger Corp
Kinsey	Kirk	Tampa Bay Workforce Alliance
Kullberg	Steve	Florida Natural Growers
Latchford	Robert	PCC Corporate College
Lloyd	Kenneth	Traviss Career Center
Lopez	Ruly	Rockwell Automation
Lurz	Bruce	PTEC
Massey	Kyle	Micron PharmaWorks, Inc.
McCafferty	Larry	Goodrich
Mukhia	Janice	FLATE
Niebel	Duane	Aparicio-Levy
Rains	Dan	DRS Surveillance
Rains	Jennifer	Advantage Workplace Solutions
Rivera-Salvador	Joel	HCC at Brandon
Robinson	Fran	Banner Center for Manufacturing
Rodriguez	Miriam	Goodwill Industries - Suncoast
Roe	Eric	Banner Center for Manufacturing
Roth	Jeff	HCC TCTC
Sanderson	Denise	Pasco EDC
Segovia	Ana	Pasco Hernando JEP
Smith	Alonzo	Bausch & Lomb
Straw	Peter	SAMA
Tortarelli	Carol	PRIDE Enterprises
Trangata	Joe	Florida MEP
Wilson	Steve	Pasco Hernando JEP
Wolfgram	Mark	Technology Performance Group



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## **Breakout Group Worksheets**











**Year-2 Regional Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008  
Report of Findings  
Appendix 4**

## **Focus Group Assessment**



## **Manufacturing Focus Group** *How Did We Do?*

Please assist us in improving the quality of our future focus groups and service to the manufacturing community by responding to the following questions.

**Focus Group Location/Date:**  
**Hillsborough Community**  
**College at Brandon**  
**May 30, 2008**

### **What sector do you represent?**

Mfg: 13

Mfg Support: 2

Educ: 6

WIB: 1

EDO: 3

Govt: 1

### **How many employees do you have in your company/organization?**

1-10: 3

11-25: 2

26-100: 5

101-500: 9

>500: 5

### **What worked at today's focus group**

- Identified areas of training needed
- Great communication and information
- The team breakouts and how you were expected to work with people from other companies rather than your own
- Great networking
- Open discussions and breakout groups
- Excellent facilitation and interaction with/between attendees
- Good setup for brainstorming
- The process (as updated and compared to earlier focus groups) worked well
- Diversity of industries present
- Kept to schedule
- Variety of participants
- Presentation outlining trends, delivery methods, and purpose of meeting
- Wrap-up discussion
- Identifying short and long-term needs
- Creation and gathering of ideas
- Round robin brainstorming session
- Open room brainstorming session
- Identifying needs in the manufacturing community
- Round/revolving discussions were very effective
- Rotating group sessions worked well
- Great discussion and interaction
- Rotational subject matter experts



## **Manufacturing Focus Group** *How Did We Do?*

Please assist us in improving the quality of our future focus groups and service to the manufacturing community by responding to the following questions.

**Focus Group Location/Date:**  
**Hillsborough Community**  
**College at Brandon**  
**May 30, 2008**

- Learning the needs of manufacturers
- Rotations and different groups providing/updating information on manufacturing processes
- Revolving discussion group format
- Defining the different job titles
- Group discussions
- Identifying skills and knowledge
- Everything was beneficial
- Brainstorming about the future
- Great mix of materials and participants (e.g., managers, HR, directors, etc.)
- The people (Eric, Peter, and Ed) running the focus group were very well prepared and insightful
- Good discussions on what the needs are
- The facilitators kept the conversation going
- Real-life examples/practical
- Subject matter expert and scribe moving to each breakout group table

### **What did not work at today's focus group?**

- N/A
- Too narrow of a focus
- Last two sessions were too fast
- The start of the breakout group brainstorming started slow, so the group facilitator should provide a better explanation
- Not enough time for group discussions
- As rotations continued, timeframe shortened
- Not enough time for each topic
- Most people were stuck in the present and could not see the job changes coming
- The open discussions were too short – let the participants dig a little deeper
- One participant did not want to hear what was being said, making others believe that everything was already solved by Banner
- Last two groups did not have enough time to digest and contribute

### **How could we improve the focus group?**

- N/A
- Continue doing what you are doing
- Stay on strict schedule
- Quit the meeting as advertised – we have appointments and things set for the afternoon
- Could have told the attendees what the two Banner Center curricula cover pertaining to the fundamental/formative skills needed by manufacturing



## **Manufacturing Focus Group** *How Did We Do?*

Please assist us in improving the quality of our future focus groups and service to the manufacturing community by responding to the following questions.

**Focus Group Location/Date:**  
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**College at Brandon**  
**May 30, 2008**

- Provide list of skills and knowledge base list so that participants could pick appropriate areas for occupational categories
- Make last two sessions longer
- Distribute the participants' contact list
- Need more manufacturing representatives present
- Make the focus group a full day
- Give equal time to rotations
- It was good – no change
- Don't exclude web-based training from the delivery options
- Instruct facilitators on how to deflect over-bearing individuals
- Need more physical distance between breakout group tables to reduce noise/crosstalk
- Need equal time for each breakout group rotation

### **What did I learn at today's focus group?**

- Our company needs to do more training
- That my needs are similar to others no matter what specific industry they came from
- Picked up some things others are doing that would be helpful to my company
- There is more of a need for manufacturing around the state
- Better understanding of the needs of the workforce (baby boomers)
- There are similar needs across many types of businesses
- There is a need for manufacturers to speak up and be involved
- We were underrepresented at this meeting today
- Lots of new contacts
- Networking is always a plus
- The model we use is working well (i.e., community college partnering with manufacturers, workforce boards, economic development organizations, and private training vendors/using them as adjuncts at institutional pricing)
- Similarity of concerns across the wide spectrum
- N/A
- There is a new, flexible resource available for training/recruiting
- Banner/HCC/Training connects with other training institutions
- Other manufacturers in different sectors have common issues
- Need for training of existing employees
- Educational opportunities which currently exist
- Now more familiar with other area manufacturers' needs and problems
- Manufacturing needs of others
- Networking is great
- Job skills/knowledge needed for tomorrow's workforce



**Manufacturing Focus Group**  
*How Did We Do?*

Please assist us in improving the quality of our future focus groups and service to the manufacturing community by responding to the following questions.

**Focus Group Location/Date:**  
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**May 30, 2008**

- Different types of certifications and training needs
- About the diverse group of manufacturing companies and institutions that are located in Florida
- Made aware of some of the problems that employers deal with when the labor force is under qualified and how much it is under qualified
- The need for manufacturing training can be varied and it is not unique to one region
- Industry's need for training, need for future employees, and the methods in which industry would like to see training delivered
- Need information about on-site training
- Future manufacturing opportunities
- Many different views of where the future workforce is headed
- A lot about private sector, processes of other companies, etc.
- Ideas to return and present to my companies leaders
- Production needs a focus on mathematics, pertaining to production mathematics return on investment, capacity, and demands
- Programs that others use for training
- Good discussions and multiple viewpoints



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## **Focus Group Announcements**



For Immediate Release

## Hillsborough Community College Hosts Regional Advanced Manufacturing Industry Focus Group on May 30

**Tampa, FL (April 30, 2008)** – Leading manufacturing representatives from throughout the Tampa Bay region are invited to participate in a half-day focus group session on Friday, May 30, 2008. Hillsborough Community College (HCC) Brandon will host the meeting in their Student Services Building, Room BSSB 206 starting at 8:30 a.m. The focus group will explore and develop new training standards for the sustained development of Florida's advanced manufacturing workforce.

The focus group, conducted in partnership with the Employ Florida Banner Center for Manufacturing, a Workforce Florida-funded initiative, will give participating manufacturers an opportunity to provide input for advanced-level/emerging production workforce training programs.

"Talent remains a priority and we want to ensure that through their skills that Florida manufacturing employees continue to offer the competitive advantage businesses need to thrive in the global marketplace," Chris Hart, president of Workforce Florida, said.

Peter Straw, executive director of the Sarasota-Manatee Area Manufacturers Association (SAMA), will facilitate the focus group. "Input from manufacturers during the Banner Center's focus groups in 2006 was the basis for developing entry-level and incumbent production employee training programs that prepare the graduates to earn the nationally recognized MSSC Production Technician certification," Straw remarked. "It is critical that the manufacturing employers take part in this discussion so they can play a vital role in the design of the next level of curriculum to train their career employees of the future."

"The promise of sustaining and growing Florida's manufacturing industry presents us with an exciting challenge," Dr. Eric Roe, principal investigator for the Banner Center, said. "The people working in the industry's advanced level and emerging production jobs must continue to meet the evolving knowledge/skill and industry certification needs of the advanced manufacturing workplace. The Banner Center is developing new curricula to satisfy these needs. And there's no faster and more efficient way to accomplish this task than with the cooperation of an industry-based focus group."

Topics that will be explored at the focus group include:

- Current and future trends in the manufacturing industry, which will drive workforce training needs for advanced level/emerging production occupations;
- Advanced-level/emerging production occupations in need by your company;
- Industry certifications in need by your company that align with the occupations;
- Current and future technical knowledge/skills sets needs for the occupations;
- The curriculum and training format that best meets your company's needs.

For further information about the Employ Florida Banner Center for Manufacturing, and how to attend the focus group, please contact: Fran Robinson, Sr. Staff Assistant, (813) 253-7000 ext 5518 or at [frobinson5@hccfl.edu](mailto:frobinson5@hccfl.edu).

**Contact:** Ernie Helms  
813-657-6466  
--or--  
Rob Clancey  
863-669-2321

**For Immediate Release**

## **Polk Manufacturers Invited to Participate in Regional Advanced Manufacturing Focus Group on May 30 at Hillsborough CC**

**LAKELAND, FL (May 12, 2008)** – Manufacturers from Polk County and elsewhere in the Tampa Bay region are invited to participate in a half-day focus group designed to explore and develop new training standards for the sustained development of Florida’s advanced manufacturing workforce starting at 8:30 am on Friday, May 30 at Hillsborough Community College (HCC) in Brandon. The session will be conducted in the Student Services Building, Room BSSB 206.

The focus group, held in partnership with the Employ Florida BANNER Center for Manufacturing, a Workforce Florida-funded initiative, will give participating manufacturers an opportunity to provide input for advanced-level/emerging production workforce training programs.

“Talent remains a priority and we want to ensure that Florida manufacturing employees gain the skills that will enable them to continue offering the competitive advantage businesses need in order to thrive in the global marketplace,” said Rob Clancey, director of the Corporate College at Polk Community College (PCC) in encouraging Polk County manufacturers to participate in the focus group. The PCC Corporate College hosted a similar focus group in the fall of 2006.

Peter Straw, executive director of the Sarasota-Manatee Area Manufacturers Association (SAMA), will facilitate the May 30 focus group. Topics to be explored include the following:

- Current and future trends in the manufacturing industry that will drive workforce training needs for advanced level/emerging production occupations;
- Advanced-level/emerging production occupations needed by manufacturers;
- Industry certifications for occupations required by manufacturers;
- Current and future technical knowledge/skills sets needed for various occupations;
- The curriculum and training format that best meets a company’s needs.

“Input from manufacturers during the Banner Center’s focus groups in 2006 was the basis for developing entry level and incumbent production employee training programs that prepare the graduates



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to earn the nationally recognized MSSC Production Technician certification,” Straw said. “It is critical that manufacturing employers take part in this discussion so they can play a vital role in the design of the next level of curriculum to train their career employees of the future.”

Clancey said the PCC Corporate College looks forward to being involved in the latest focus group, noting that the institution played a key role in obtaining a Workforce Florida grant to fund the Florida BANNER Center. He added that the PCC Corporate College has also trained thousands of workers in advanced manufacturing skill sets.

“We are delighted to see the Florida BANNER Center for Manufacturing investing so much energy and real dollars in a program that will upgrade the education of Florida’s manufacturing employees,” Clancey said. “The focus group will give Polk County manufacturers a chance to lend their ideas to an education program that will greatly influence the caliber of their future employees.”

For more information about the focus group at HCC, call Ernie Helms of the PCC Corporate College at 813-657-6466 or send an email to [eehelms@yahoo.com](mailto:eehelms@yahoo.com). Information on the Employ Florida BANNER Center for Manufacturing can be obtained by contacting Fran Robinson, senior staff assistant, at 813-253-7000 ext 5518.

The PCC Corporate College specializes in developing workforce training programs for business and providing direct training for students desiring to pursue business careers. In a typical year, the PCC Corporate College trains 12,000 students at its campuses in Lakeland and Winter Haven.

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**To:** All Tampa Bay Region Manufacturers and Workforce Advocates

**Date:** May 16, 2008

**From:** Dr. Eric A. Roe, Principal Investigator – Employ Florida Banner Center for Manufacturing  
Edward Allen, Manager – Employ Florida Banner Center for Manufacturing

**Subject:** SAVE THE DATE – May 30 – Regional Manufacturing Focus Group

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**TAKE ADVANTAGE OF THIS OPPORTUNITY TO HELP SOLVE YOUR WORKFORCE TRAINING NEEDS!**

Manufacturers across the nation have consistently expressed their need for solutions on how to fill the skills-gap in their production workforce, and to do so with the greatest return on investment. The Employ Florida Banner Center for Manufacturing, supported by Workforce Florida, has stepped forward with cost-effective solutions.

In 2007, the Banner Center, with help from Florida's manufacturers, created training programs for your entry-level and incumbent production workforce. These programs not only target portable production knowledge/skills development but also align with the Florida's unified educational system for manufacturing. The programs do this by preparing program graduates to meet nationally and industry-recognized standards and obtain the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) certification.

Now the Banner Center is taking the next step to create training programs for your workforce in advanced level/emerging production jobs. The Banner Center, in league with the Tampa Bay region's manufacturers associations, economic development organizations, workforce boards, and Hillsborough Community College (HCC) invite you to participate in a regional manufacturing focus group that will provide you a platform to express, first hand, your critical workforce training needs.

**PUT THE REGIONAL MANUFACTURING FOCUS GROUP DATE ON YOUR CALENDAR**  
**MAY 30, 2008 – HCC AT BRANDON – BSSB, ROOM 206 – 8:30 A.M. to 12:30 P.M.**  
**(WORKING LUNCH PROVIDED – RSVP NEEDED)**

The region's operations directors, logistics managers, production managers, HR directors, manufacturing program educators, and workforce advocates are welcomed to take part in this dynamic, hands-on forum, which will help shape the future of your workforce and the competitive advantage that your companies need to thrive in the global marketplace.

**RSVP by May 26 to Fran Robinson, at (813) 253-7000 ext 5518 or [frobinson5@hccfl.edu](mailto:frobinson5@hccfl.edu).**  
**Please find Focus Group Meeting Agenda information attached.**



**Year-2 Regional Manufacturing Industry Focus Group  
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## **Introduction to the Banner Center Slide Show**

**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008



**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008

### Employ Florida Banner Center for Manufacturing

- About the Center
- Mission
- Long-term Initiatives
- Year-2 Activities
- Training Curriculum Development and Focus Group Role
- Conclusion

**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008

### About the Center

- Governor Bush's Strategic Roadmap for Florida's Future
  - Part of a \$6.2 million strategic initiative of the state workforce system to meet the employee-training needs of industries that help diversify the state's economy
- Public-private consortium strengthens workforce system
  - Community colleges
  - Regional manufacturers associations/workforce boards
  - Economic development organizations
  - Manufacturers
- Received a Year-1 (2006-2007) \$500,000 contract award from Workforce Florida
- Year-2 (2007-2008) contract at \$200,000

**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008

### Mission

- Provide curriculum and training, as well as certification resources and support for the continuation and expansion of Florida's manufacturing industries

**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008

### Long-term Initiatives

- Train Florida's high-performance manufacturing workforce
- Develop training curriculum/curriculum standards
- Formalize industry skill standards and workforce credentialing
- Conduct educational research
- Provide technical support to the manufacturing industry cluster

**EMPLOY FLORIDA**  
**BANNER Center**  
Manufacturing

Year-2 Manufacturing Industry Focus Group  
Hillsborough Community College at Brandon  
May 30, 2008

### Year-2 Activities

- Conduct industry-based focus groups
- Develop new industry-driven training curricula
- Serve as a focal point for manufacturing training
- Disseminate education and training information
- Assist Florida's community with manufacturing-related education and training programs and information

**Year 2-Activities (Cont'd)**

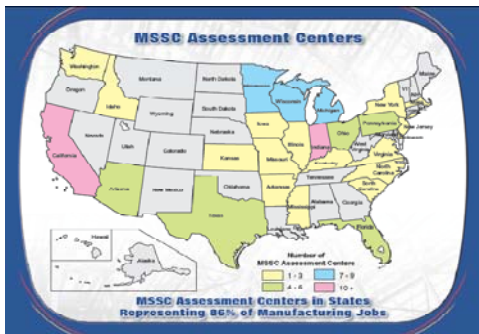
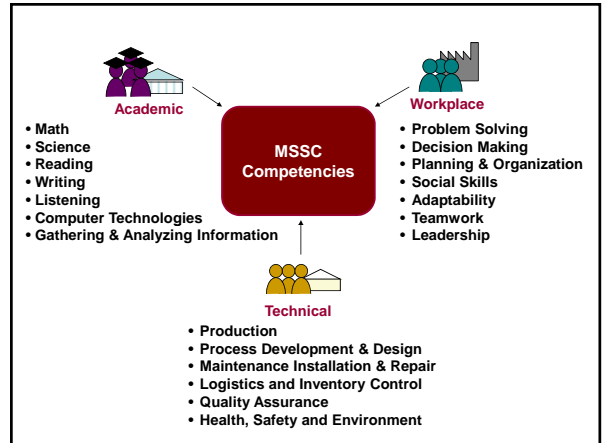
- Support school districts implementing CAPE Act
  - Improve secondary school performance by providing rigorous and relevant career-themed curriculum that articulates to post-secondary level coursework and leads to industry certifications
- Beta test and deploy "Manufacturing Essentials" training curriculum
- Promote industry certification awareness

**Employ Florida Banner Center for Manufacturing – Industry Certifications –**



**MSSC Certification**

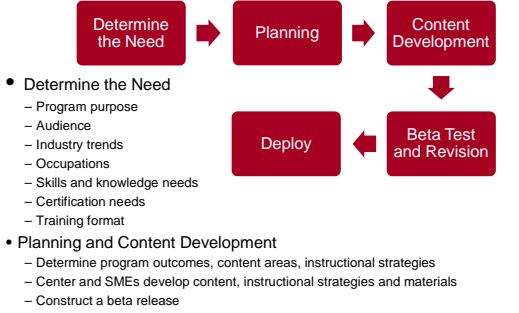
- Nationally recognized certification program for skilled "production technicians"
- Certification awarded to students and employees who pass testing in four areas:
  - Production and Processes
  - Quality Assurance
  - Maintenance Awareness
  - Safety
- Portable skills applicable to all sectors of manufacturing
- Center's training products
  - Manufacturing Fundamentals (entry-level technician)
  - Manufacturing Essentials (incumbent technician)



**MSSC Assessment Centers in Florida**

- Broward Community College
- Central Florida Community College
- Florida Community College at Jacksonville
- Hillsborough Community College at Brandon
- Manatee Community College
- Manatee Technical Institute
- Mid Florida Tech
- Pasco-Hernando Community College
- Pinellas Technical Education Center
- Polk Community College
- Tallahassee Community College
- Treasure Coast High School

Training Curriculum Development and Focus Group Role



Conclusion

- Center provides high-tech training programs and support for the continuation and expansion of Florida's manufacturing industries
- Advanced level/emerging workforce training curricula aligned with industry-recognized certifications
- Focus group participation vital to addressing manufacturing industry needs



Contacts:

Dr. Eric A. Roe – Principal Investigator – 813.259.6579 – eroe@hccfl.edu  
 Edward Allen – Manager – 813.259.6574 – eallen6@hccfl.edu  
[www.banner-mfg.org](http://www.banner-mfg.org)



**Year-2 Regional Manufacturing Industry Focus Group  
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## **Focus Group Facilitator Summary**

## FACILITATOR SUMMARY

Employ Florida Banner Center for Manufacturing – Regional Manufacturing Industry Focus Group – Hillsborough Community College – Tampa, FL – 5/30/2008.

The group consisted of manufacturing employers, educators, and workforce development personnel. While only 40% of the attendees are current manufacturers, many have private sector manufacturing experience and now work with manufacturers in manufacturing support enterprises. Represented were large companies (100-plus employees) and small and medium manufacturers.

Dr. Carlos Soto welcomed the participants to the HCC Campus and stressed the importance of the manufacturing sector to the Greater Tampa Bay area and challenges in creating a skilled workforce to serve it. The first part of presentation gave a background and history of Banner Center for Manufacturing and created the context for the rest of the conversations. Some of the participants were involved in the first round of the Banner Center focus groups. Some questions were posed by the group as to how to attain existing Banner Center training programs/curriculum. Several comments were made as to value of first round curriculum.

The “Future Trends” conversation began with reference to Florida Ready to Work programs, to make group aware of existing programs in place to address current concerns as to quality of workforce and employability skills. This kept the conversation from drifting toward complaints about status of current workforce.

During the Breakout Session, each of four work groups was assigned a subject matter expert and a recorder. The assignment was to prioritize the occupations in each of four disciplines that would result from the trends we had discussed earlier. The top occupation was to be fleshed out in detail, including any certifications or formal training that would provide support. After the top priority occupation was completed, the group was to move onto second and third priority occupations. Slide displayed during this session helped define flow of work to be done. This segment was very productive. Workgroups were instructed to evaluate progression from Operator to Technician to Engineer. This kept the focus on technical skills for which the Banner Center is equipped to design curriculum. Specific briefing of the subject matter experts and the recorders in advance proved quite valuable.

Wrap-up conversation was on delivery systems for training, this session opened several new areas/models not revealed at earlier focus groups. The group was cognizant of the diversity of today’s workforce. Providing training modules that could be delivered in house without interrupting employee work appeared to be important. There was little to no interest in self-directed online training. All felt that hands-on activities were essential to communicate technical skills. There was little interest in multilingual training.

Submitted 6/03/08

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Performance Development Strategies, LLC

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