

FLATE

Florida Advanced Technological Center

**2009 Annual Report
(07/08 – 06/09)**

**NSF FastLane
Grant #0802436**

Section 1: Project Participants

Marilyn Barger	Executive Director/Principal Investigator	FLATE
Richard Gilbert	Co-Principal Investigator	University of South Florida
Bradley Jenkins	Co-Principal Investigator	St. Petersburg College
William Miller	Senior Personnel	University of South Florida
Andrew Hoff	Senior Personnel	University of South Florida
Wilfrido Moreno	Senior Personnel	University of South Florida
Ali Yalcin	Senior Personnel	University of South Florida
Diana Scroggie	Ambassador	Central Florida CC
Cheryl Miller	Ambassador	
David Gula	Outreach Manager	FLATE
Jodi Sutton	Curriculum Coordinator	FLATE
Lourdes Fleurima	Senior Staff Assistant	FLATE
Kim Wilson	BITT Project Manager	FLATE
Janice Mukhia	Media Relations	FLATE
Wayne Chin	Graphic Artist	FLATE
Colin Miller	Webmaster MIF + FLATE	FLATE
Phil Centonze	External Evaluator	FLATE
Constantine Stefanakos	Videographer	FLATE
Jackie Voulgaris	Outreach Specialist	FLATE
Henry Cabra	Graduate Student	FLATE
Teja Burri	Undergraduate Student	FLATE

Organizational Partners

❖ Financial Support

Bay Area Manufacturing Assoc.	Capital Region Manufacturers Assoc.	Employ Florida Banner Center for Manufacturing
Florida Atlantic Marine	Florida High Tech Corridor Council	Harris Corporation
Hoerbiger Corporation	Jaeger Corporation	Linvatec
Lockheed Martin	Manufacturing Association of Central Florida	Manufacturing Association of Florida
MILEO & Association	Polk Manufacturers Assoc.	Sarasota-Manatee Mfg. Assoc.
Society of Manufacturing Engineers	South Florida Manufacturers Association	Southwest Florida Manufacturers Association
Sun Hydraulics	Tropicana Products, Inc.	Volusia Manufacturers Assoc.

❖ Partner Community Colleges, participating in curriculum reform activities

Brevard Community College	Central Florida CC	Chipola Community College
Daytona Beach State College	Florida College at Jacksonville	Indian River State College
Manatee State College of FL	Miami Dade College – Kendall Campus	Palm Beach Community College
Pensacola Junior College	Polk State College	Pasco-Hernando Community College
	Valencia Community College	

❖ Industry partner, participating in curriculum reform

Aponte Tool and Manufacturing	Custom Manufacturing and Engineering	Ditek
Honeywell Inc.	Lear Corporation	MicroMo Electronics Inc.
Raytheon Corporation	Schneller Inc.	Smith and Nephew
	Smiths Industries	

❖ **Partner with the center on outreach activities, supports curriculum development activities, and serve on advisory boards**

.Decimal	Featherlite	ABB Inc.
Siemens Energy & Automation	CAE USA	Aladdin Equipment Co.
Mercury Marine	G&T Conveyor Co.	Ven-Tel Plastics
Workforce Florida	Universal Microwave Corp.	VX Corporation
Accuform Signs	Chapman Tool & Mold, Inc.	Emery Thompson Machine & Supply
Hi Tek Truss	Composite Motors	Cross Match Technologies, Inc.
Constellation Technologies	Jabil Circuit	Norris Precision Manufacturing
Metal Essence	Nature's Products	R.L. Schrieber, Inc.
Gerdau Ameristeel	The Mosaic Company	Port of Tampa
Tampa Armature Works	Vulcan Machine	Conimar Corporation
Signature Brands	Oxbrands & Idlebusters	Goodheart-Wilcox Publisher
VLOC Incorporated	Florida's Natural	AMATROL
SMC Corporation of America	Dean Foods	Biomet 3i
Senninger Irrigation	Agilent Technologies	Central Florida Box, Inc.
Datamax, Inc.	Mitsubishi Power Systems	R.C. Stevens, Inc.
Somec, Inc.	Sypris Test & Measurement	WinDoor Incorporated
Aso LLC	Black Diamond Strings	New England Machinery
PGT Industries	PPI Technologies Global	Knight Armaments
Genesis Electronics Mfg.	Cellynne Corporation	Promedia, Inc.
Clark Western Building Systems	Teltronics Sarasota	Pierce Manufacturing
Tervis Tumblers	Corolla Engineering	Polypack, Inc.
Aqua Cal	Bausch & Lomb	Canyon Bay Boats
Cost Cast, Inc.	H&S Swansons' Tool Comp.	Intezyne Technologies
EEl Manufacturing Services	CTC Tamba Bay	NDH Medical Inc.
Pall Aeropower	Rockwell	Southern Powder Coat LLC
Coastal Caisson	Micron Pharmaworks	Combs Welding Design, Inc.
EMI Industries	Honeycomb Company of America	Machining Solutions
TECO	Valpak (Cox Target Media, Inc.)	



❖ **Government**

FL Dept of Education	Enterprise Florida	Tallahassee Economic Devp. Committee
	Tampa Chamber of Commerce	

❖ **K-12**

Nature Coast High School	School District Hillsborough County
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❖ **Other**

Florida Energy Systems Consortium (FESC)	Biomolecular Identification and Targeted Therapeutics (BITT)
Employ Florida Banner Center for Biotech	Museum of Science and Industry (MOSI)

Collaborators & Contacts

Grant Partner Institutions: FLATE partners with other academic and non academic units with its leadership institutions HCC, SPC and USF-COE.

- * Dr. Carlos Soto, President, Brandon Campus HCC
- * Sabrina Peacock, Dean A.S. Programs Brandon Campus HCC
- * Dr. Adrienne Garcia, Director, HCC Foundation
- * Brian Mann, USF College of Education (2007–Present)
- * Tracey Barnes, Program Manager Electronics Technology, HCC
- * Elizabeth McCullough, Chemistry Professor, HCC
- * Yolanda Williams, Director of The Corporate Training Center (HCC)
- * Dr. Ginger Clark, Director of Technical Education, HCC
- * Dr. Wally Borman, Professor Organizational Psychology, USF
- * Dr. Michael Kovac, Electical Engineering Professor, USF
- * Dr. Jose Zayas-Casto, Industrial Management & Systems Engineering, USF
- * Dr. Michael Brannick, Professor Organizational Psychology, USF
- * Dr. Rod Casto, VP Economic Development, USF
- * Dr. Sylvia Thomas, USF COE Associate Dean of Diversity
- * Mr. Stan Vittetoe, VP Administration, SPC
- * Dr. John Wiencek, Dean USF College of Engineering
- * Dr. Raphael Perez, Dean of Undergraduate Studies, USF COE
- * Dr. Suzanne Lee, Assistant Professor IMSE, USF
- * Dr. Kingsly Reeves, Assistant Professor IMSE, USF
- * Dr. Tim Anderson, Director FESC, UF
- * Dr. Anne Donnally, Assoc. Director FESC, UF
- * Dr. Sam Phillips, Dean Technology and NSF Mediac Grant, SPC
- * Dr. Ellen Cangì, Dean of A.A. Programs, Brandon Campus HCC



- * Joe Bentrevario, Dean of Student Services, Brandon Campus HCC
- * Gloriana F. Rhodes, Enrollment Coordinator, HCC

Industry and Professional Associations: FLATE has formal and informal partnerships with many state, regional organizations for outreach, dissemination, and subject matter expertise.

- * Nancy Stevens, Executive Director, Manufacturing Assoc. of Florida
- * Peter Straw, Executive Director, Sarasota Area Mfg. Assoc.
- * Sherrie Reeves, Executive Director, Mfg. Assoc. of Central Florida
- * Leigh Haller, President, Bay Area Mfg. Assoc.
- * Gerri Foote, Director, Marion Regional Mfg Assoc.
- * June Wolfe, Executive Director, South Florida Mfg Assoc.
- * Lad Daniels, Executive Director, First Coast Mfg. Assoc.
- * Dick Pellegrini, Pilgram Assoc's & Polk Mfg. Council
- * Marsan Carr, Exec. Director, Florida Assoc. of Career and Tech. Ed.
- * Dr. Robert McCabe, Exec. Director, NACTC
- * Carl Miller, Exec. Director, Florida Skills USA
- * Travis Yelverton, Capital Region Manufacturers Association
- * Jayne Fifer, Volusia Manufacturers Association
- * Chet Sadler, Southwest Florida Manufacturers Association
- * Jennifer McNeely, NAM Manufacturing Institute
- * DonPats, Chairman SME Chapt. 159

Industry: FLATE partners with industry for its many outreach and curriculum activities and projects.

- * Al Stimac, President Metal Essence & MAF, NAM Board Member
- * John Boyle, Manager, Hunter Douglas Corp
- * Allen Carlson, President and CEO, Sun Hydraulics
- * Bob Kennedy, Marion County EDC and Lockheed Martin
- * Rheb Harbison, Sr. Govt. Consultant, Carlton Fields
- * Anthony Fedd, Site Manager, BASF
- * Stefan Kraemer, Site Manager, Siemens
- * Mark Berg, Dir. of Mfg., Implant Innovations Inc.
- * Steve Lezman, Dir. of Govt. Affairs, Tropicana Products, Inc.
- * Phil Centonze, Principle - Poz Impact, Florida Sterling Council
- * Jonathan Bull, Quality Engineering Manager, Smith and Nephew, Largo, FL
- * Tina Brudnicki, SME Regional Manager, Largo, FL
- * Marcus Heilner, VP Manufacturing and Engineering, MicroMo Electronics, Clearwater, FL
- * Mary Anne Letteri, Manager Quality, Honeywell, Clearwater, FL
- * Lisa Maciolek, Materials Supervisor, Raytheon, Largo, FL
- * Keith Matthews, Quality Assurance Manager, Smith and Nephew, Largo, FL
- * Steve Askew, Supervisor Instrumentation Services, Honeywell, Clearwater, FL
- * Frank Cain, Manager Quality, Honeywell, Clearwater, FL
- * John Debella, General Manager, Bioderm, Largo, FL
- * Clinton Mells, Manager IT Operations, St. Petersburg Times, St. Petersburg, FL

- * Greg Seay, Senior Engineering Technician, Bionetics, St. Petersburg, FL
- * Matthew Smith, Manufacturing Engineer, Lear Corporation, Tampa, FL
- * Mark Snyder, VP Manufacturing, Linvatec, Largo, FL
- * William Venz, Systems Engineer, Raytheon, Largo, FL
- * Jim Bittner, Manager Manufacturing, Schneller, Pinellas Park, FL
- * Ken Conforti, Manufacturing Engineer, Raytheon, Largo, FL
- * William Erdmann, Manager Engineering and Electronics, EnviroTec, Largo, FL
- * David Reese, Electronics Instructor, Hillsborough School System, Tampa, FL
- * Ed Homan, Electrical Engineer, Baxter Healthcare, Largo, FL
- * Patti Gander, Manufacturing Manager, AquaCal
- * Mark Gaudio, Regional Manager, Jaeger, Inc.
- * Don Gugliuzza, Managing Director, Mileo and Associates, Inc.
- * Geary A. Havran, President, NDH Medical, Inc.
- * Ruly Lopez, Area Manager- Services Tampa, Rockwell Automation
- * Steven Meitzen, Corporate Sales, H & S Swanson Tool Company
- * Brian O'Connor, Director, Lockheed Martin Missiles & Fire Control
- * Steve Park, Director – Network Centric Systems Engineering
- * Peter D. Straw, Executive Director, SAMA
- * Robert Arthur, Arthur Machinery, Inc.
- * Donna Brooks, Intersil
- * Vincent Burns, MC Assembly
- * John Casco, Northrop Grumman
- * Tony Crosthwaite, Nokia
- * Jim Davis, Dictaphone
- * Charles Dixon, Lear Corporation, Tampa
- * Mark Edwards, InDyne, Inc. – CAPPs
- * Mike Ennis, Harris Corp – GCSD
- * Bill Erdmann, Johnson Controls
- * Tom Falanga, Lockheed Martin
- * Richard Foster, GE
- * Cole Fry, AeC, Inc.
- * Louis Grilli, Syniverse Technologies
- * Mike Haethorn, Brighthouse Networks
- * Charles Haynie, Sun Hydraulics Corporation
- * Anthony Hicks, DRS Optronics
- * Robbie Home, Rockwell Collins, Inc.
- * Donald R. Houdek, MetLife
- * Randy Karl, Sunneclear Corp
- * Mike Kelly, DRS Optronics
- * Dave Mager, Rockwell Collins, Inc.
- * Julia Markardt, Harris Corp.
- * Jerry McCollum, Industry Consultant
- * Karla Micka, Dictaphone
- * Marshall Moore, TAW Custom Equipment
- * Phil Moore, Quality Electronic Manufacturing
- * Brain Morevecky, Sunneclear Corp.

- * Wanda Morici, Nokia
- * Eric Nakamura, Brevard Job Link
- * Bill Perelin, DRS Optronics
- * Maricka Rogers, Lockheed Martin
- * Robert Sanders, Sypris Electronics
- * Bill Satterfield, Intersil
- * Kevin Shaw, Sea Ray Boats
- * James Swanson, H&S Swanson's Tool Co
- * Ben Thomas, MC Assembly
- * Jason Thorp, E-One, Inc.
- * Bob Tortolano, MC Assembly

ATE Centers & Projects: FLATE partners with NSF ATE projects and centers for projects and activities that draw on other expertise or collaborate on joint projects.

- * Frank Margiotta, PI SPACETEC
- * Steve Wendel, NCME
- * Meer Almeer, SPACETEC and Brevard Community College
- * Beverly Hilderbrand, Director CARCAM Center
- * Kelly Blackwell, CARCAM NSF ATE Center
- * Denise Faber, PI TIME Center
- * Karen Birch, Director and PI, NextGeneration Mfg Center
- * Jack Weintraub, Director, NJCATE
- * Mike Lesiecki, Director, MATEC
- * Dr. Andrew Hoff, USF - HSTI Project
- * Robert Decker, Industrial Faculty, Mohawk Valley Community College
- * Gilah Pomeranz, NCME
- * Mel Cossettee, Principal Investigator, MatEd
- * Jeff Armstrong, ATEEC
- * Tom McGlew, P.I. Systems Engineer

Post Secondary Education: FLATE partners with schools and districts for outreach, recruitment, articulations and curriculum.

- * Mark Erikson, Pinellas Technical Education Center
- * Russel Shubert, Dean Roane State College, Roane County
- * Gary Goff, President Roane County College, Roane TN
- * Ernie Friend, Florida Community College at Jacksonville
- * Claude Mott, Gulf Coast Community College
- * Ron Tinkham, Santa Fe Community College
- * Stan Sidor, Program Manager, Daytona Beach Community College ATC
- * Joanne Hutton, Curriculum Specialist, Brevard Community College
- * Sheryl Awtonomow, Brevard Community College
- * Bob Williams, VP Econ Development, Daytona Beach Community College
- * Chrys Panayiotou, Faculty, Indian River Community College
- * Jose Farino, Dean, Indian River Community College

- * Gary Koser, Faculty, Indian River Community College
- * Lance Wallace, Florida Community College at Jacksonville
- * Cheryl Fante, VP Business Development Central Florida Community College
- * Idelia Phillips, Manatee Community College
- * Jim Simpson, VP Econ Dev, FCCJ
- * Ed Niespode, Faculty, Central Florida Community College
- * Sheriz Khan, Faculty, Central Florida Community College
- * Robert Frank, Faculty Central Florida Community College
- * Ernie Helms, Mfg. Manager, Polk C.C. - Corporate College
- * Ken McMannaway, Pinellas Technical Education Center
- * Clide Cassity, Pinellas Technical Education Center
- * Beth Mann Pace, Tallahassee Community College
- * Rick Frazier, TCC

Secondary Education: FLATE partners with schools and districts for outreach, recruitment, articulations and curriculum.

- * Kathie Schmidt, Director C&TE, St. Lucie Co. Public Schools
- * Doug Wagner, Director C&TE, Sarasota Co. Public Schools
- * Mellissa Morrow, Director C&TE, Manatee Co. Public Schools
- * Mark Hunt, Director C&TE, School District of Hillsborough Co.
- * Chip Bashinski, Director C&TE, Orange Co. Public Schools
- * Jerry Ditty, Director C&TE, Pinellas Co. Public Schools
- * Paul Wahnish, PLTW Master Teacher, East Lake H.S.
- * Michael Osterman, VP Curriculum, Middleton H.S.
- * Bill Gantner, PLTW Master Teacher, Young Magnet M.S.
- * Joe McCoy, Director, Mid-Florida Technical Inst.
- * Mary Ann Courtney, Principal, Aparico-Levy Tech. School (SDHC)
- * Gary Shepard, Osceola High School, PCSD
- * Ted Norman, Treasure Coast High School
- * Gil Burlew, Dept. Chair, Career and Technical
- * Allan Dyer, Science Teacher, Dowdell Middle Magnet School
- * Rose Tozzi, Ed. Career Specialist / ENLACE Liason, Dowdell Middle Magnet School
- * Rose Mack, Teacher/Leader, Lakewood HS CAT Program
- * Eric Fernandez, Teacher, Pierce Middle School
- * Brian Grip, Teacher Resource Specialist, Polk School District
- * Mia Conlon, Science Teacher, Rock Lake Middle School
- * Joe Luciano, Osceola Co. Public Schools
- * Elizabeth Heli, Greco M.S. Teacher
- * Andi Ringer, Science Coordinator SDHC

State Agencies, Economic & Workforce Development: FLATE has formal and informal partnerships with many state, regional organizations for outreach, dissemination, and subject matter experts.

- * Lucy Hadi, FL Department of Education

- * Eric Owens, FL Department of Education
- * Andy Anderman, FL Department of Education
- * Andra Cornelius, Workforce Florida
- * Beth Kirkland, Tallahassee Economic Development
- * Laura Berkowitz, Pinellas County Economic Development
- * Donna Harrack, Tampa Chamber
- * Kirk Kinsey, Tampa Bay Workforce Alliance
- * Rusty Skinner, Citrus Levey Marion Workforce Board
- * Mary Helen Kress, Suncoast Workforce Board
- * Janice Mee, Suncoast Educational Alliance
- * Mark Baird, FL Department of Education
- * Rebecca Rust, FL Agency for Workforce Innovation
- * Loretta Costin, FL Department of Education
- * Kim McDougal, FL Department of Education
- * Judy Yancey, FL Department of Education

Other Educational Collaborators and Projects: FLATE has formal and informal partnerships with many state, regional organizations for outreach, dissemination, and subject matter experts.

- * Scott Davis, Virtual Mentor
- * Jim Scott, Virtual Mentor
- * Mary Ann Hanson, Caliber Associates
- * Scott Furbay, Manager Goodwill Ind. - Project Bridge
- * Stephanie Feltz, Exec. Director, Girls Inc. Sarasota
- * Vicki Morelli, FHTCC TechPath Coordinator
- * Dr. Jeffrey Bindell, FHTCC TechPath Director
- * Wit Ostrenko - President MOSI
- * Alicia Slater-Haase, V.P. MOSI
- * Tammy Spain, Project Manager, USF-CoE BITT
- * Richard Snyder, Employ Florida Banner Center for Biotechnology
- * Elaine Puri, Employ Florida Banner Center for Logistics & Distribution
- * Rob Clancey, PCC-CC, Employ Florida Banner Center for Manufacturing

Section 2: Activities and Findings

Research and Education Activities:

This report represents activities for the renewal of the FLATE Center grant; it reflects activities for the grant's initial six month period (October 2008 → March 2009). Major activities included;

- A roundtable presentation at the ATE P.I. meeting to promulgate best practices with respect to development of statewide uniform engineering technology A.S. degree program.
- Sponsored a statewide Engineering Technology Forum (ET Forum) as a vehicle for community colleges with A.S. degrees to interact with the Florida Dept. of Education.

- Conducted a workshop to support system reform in the statewide numbering system for courses in the A.S. degree programs.
- Provided technical expertise for Florida Legislative committees with respect to technical education.
- Began an initiative for unification of curriculum associated with various alternative energy initiatives in the state.
- Provided faculty development in the use of FLATE's "Toothpick Factory", a game based simulation for teaching industry related soft skills in the classroom.
- Partnered with Workforce Florida's BANNER Center for Manufacturing to conduct a statewide joint industry and academic summit on technician workforce skill expectations.
- Established partnership with Florida Dept. of Education concerning access to student High School, PSAV, College Credit Certificate A.S. /A.A.S., degree demographic, enrollment and completer records.

FINDINGS:

Findings associated with the activities within this reporting period include:

- Post roundtable workshop survey indicated strong interest in FLATE's Engineering Technology degree model as implemented in Florida.
- Survey results from ET Forum participants indicated strong support of this vehicle as professional development opportunity and unifying tool for program alignments in Florida.
- State numbering system workshop resulted in the Department of Education adopting FLATE number and category changes in the course numbering system.
- Recognition by the Florida Legislators of FLATE's expertise in technician education issues.
- Codification of FLATE in statute by the Florida Legislature as a component of the Florida Energy System Consortium.
- Increased sales and use of the Toothpick Factory throughout the country.
- Summit partnership with the Florida BANNER Center for Manufacturing indicate the need to connect and/or overlap the workforce development efforts of FLATE and the BANNER Center to effectively meet the training needs of new and incumbent workers entering or shifting into manufacturing related technician positions. In addition, the focus group results provided feedback that connected training and degree efforts to a industry recognized certification program was an optimal and strongly recommend pathway.
- The FLDOE will now provide directly to FLATE this enrolment and completer data from its data bases. In this new data collection protocol data comes directly from the FLDOE which requires that all schools throughout the state submit their data directly to State before future funding allocations are provided. Findings from this reliable data base will be developed for future reports.

Training and Development:

FLATE staff has participated in college wide training requirements and opportunities including:

- Technical workshops for robotics for 3 staff members
- Technical workshop for automation for 2 staff members
- Technical workshop for metrology for 4 staff members
- Technical work shop for materials for 1 staff member
- College computer systems training for 2 staff members
- Safety training and sexual harassment training for all staff

Additionally, FLATE continues to provide professional development and training opportunities for its educational partners through workshops provided at the semi-annual ET Forum in both technical and curriculum areas. In this reporting period, 10 Florida educators participated in a metrology workshop.

Outreach Activities:

Outreach activities during this reporting period continue to focus on the FLATE conceived designed and implemented “Made in Florida” campaign. The momentum of the “Made in Florida” continues to increase as because;

- Financial aid from industry continues even as the economic situation deteriorates.
- Regional Manufacturing Associations’ partnership in “Made in Florida” Public Service Announcements (PSA) initiative.
- Partnership with FIRST Robotics, SkillsUSA and the Technology Student Association competitions.
- Continued industry support for the “Florida Trend’s NEXT” magazine technical career advertorial.
- Continued financial backing for FLATE’s Educators of the Year Awards/Recognition Awards held at the annual statewide manufacturing Summit in partnership with the Manufacturers Association of Florida.
- Continued the “Made in Florida Industry Tours” for secondary students with support from Regional Manufacturing Associations and employers.
- Regional Manufacturing Associations’ use of the “Made in Florida” brand and direction of students to the Made in Florida website for their localized events (i.e. high school football program advertisement in the Capital Region).

Section 3: Publications & Products

Journal Publications

Barger, M; Roe, E; Gilbert, R; Centonze, P., Jenkins, B, "Using a Baldrige/Sterling Evaluation Plan for an NSF ATE Center", 2009 ASEE Annual Conference Proceedings, p. , vol. , (2009).

Web/Internet Site URL(s):

www.fl-ate.org
www.madeinflorida.org
<http://flate-mif.blogspot.com/>

<http://flate.pbworks.com/>

Description:

- * The **www.fl-ate.org** website is a dissemination and communication vehicle for FLATE as an organization, its projects and activities, leadership committees, etc. It also archives events, information, activities and resources for FLATE.
- * The **www.madeinflorida.org** website is an outreach resource primarily for students, educators and the community with current information about careers, career pathways, educational institutions that support manufacturing education; career resources; and the Made in Florida video, virtual tours, teacher resources, etc.
- * Our newsletter is now electronic and resides on our blog: **<http://flate-mif.blogspot.com/>**. This allows us to connect with our industry partners and educators, while also keeping them informed on what is going on within FLATE.
- * We also have a wiki website, **<http://flate.pbworks.com/>**, that is dedicate primary to provide teachers instant 24/7 access to our Made in Florida Learning Challenge lesson plans and our career and education planning activities to enhance their classroom lessons.

Other Specific Products:

Product Type:

Audio or video products

Product Description:

"Made in Florida" is a 22 minute DVD upbeat video overview of the manufacturing industry in Florida focusing on its diversity and educational pathways to careers in the industry.

Sharing Information:

Implementing statewide dissemination in cooperation with the Manufacturers Association of Florida and regional manufacturing associations and regional economic development groups via community events featuring the Made in Florida DVD and website.

See the Made in Florida Presentation Section of the FLATE Activity File.

Product Type:

Teaching Aids

Product Description:

Manufacturing Community College Programs in Florida.

Sharing Information:

Distributed to students on industry tours and available as a pdf file on the Made in Florida website.

Product Type:

Display Panels

Product Description:

Display panels and posters to promote the Made in Florida DVD and outreach campaign.

Sharing Information:

Used at outreach activities, conferences, trade shows, etc.

Product Type:

Teaching Aids

Product Description:

Handout on Technical School and Community College Certificate programs associated with manufacturing.

Sharing Information:

Distributed at Outreach events and in response to inquiries from Florida Trend NEXT advertorial.

Product Type:

Teaching Aids

Product Description:

What is manufacturing? - An overview of Manufacturing for middle school and high school students.

Sharing Information:

This learning object is posted on the Made in Florida website and is delivered to students as part of an outreach industry tour.

Product Type:

Teaching Aids

Product Description:

Career Pathway Handout - a worksheet that allows the user to trace out their personal career path in manufacturing.

Sharing Information:

Distributed to students, faculty and industry partners.

Product Type:

Teaching Aids

Product Description:

The Toothpick Factory (mini version) this lesson plan is designed for middle school and high school students to provide them employability skills such as working on a team, problem-solving and organization.

Sharing Information:

Lesson plans are located on the Florida Department of Education website, in support of the 2006 Legislature passed House Bill 7087 (A++) and are available to educators throughout the state of Florida.

Product Type:

Teaching Aids

Product Description:

Project Highlights - 14 (1 page) overviews that give a brief description on all things related to FLATE (Vision, Teaching Materials, Student Tours, Degree Program, etc).

Sharing Information:



Distributed at presentations and exhibits.

Product Type:

Teaching Aids

Product Description:

Engineering Technology degree program marketing materials - materials given to colleges that have adopted the ET degree. Each school received copies of 5 different handouts for students, 2 posters focusing on the ET degree/careers in manufacturing and a CD containing electronic copies of all marketing materials.

Sharing Information:

Distributed to students and at presentation and exhibits.

Product Type:

Teaching Aids

Product Description:

Made in Florida Learning Challenges CD - this CD features the Featherlite Learning Challenge to give educators an idea about FLATE's different Learning Challenges.

Sharing Information:

Distributed at presentations, conferences, exhibits, trade show, etc.

Product Type:

Teaching Aids

Product Description:

The Toothpick Factory communication module - this lesson is designed for middle and high school student to help them understand the importance of communication in the workplace.

Sharing Information:

Lesson plans are located on FLATE's dedicated wiki and also the Florida Department of Education's website in support of the 2006 Legislature pass House Bill 7087 (A++), and are available to educators throughout the state of Florida.

Product Type:

Teaching Aids

Product Description:

The Toothpick Factory production module - this lesson is for middle and high school students and focuses on the importance of quality production and materials.

Sharing Information:

Lesson plans are located on FLATE's dedicated wiki and also the Florida Department of Education's website in support of the 2006 Legislature pass House Bill 7087 (A++), and are available to educators throughout the state of Florida.

Product Type:

Teaching Aids

Product Description:

Engineering Technology degree diagram - this aid demonstrates the ET degree path options for high school students.

Sharing Information:



Distributed at outreach events and in response to inquiries.

Product Type:

Display Panels

Product Description:

HCC ET Degree display poster - provides information about course requirement for the ET degree.

Sharing Information:

Displayed at HCC Brandon campus and used during presentation.

Product Type:

Display Panels

Product Description:

HCC ET Degree standup - provides overview of the ET degree program and course requirements.

Sharing Information:

Used during presentations, conference, trade shows, exhibits, etc.

Product Type:

Dissemination

Product Description:

FLATE Calendar - showing yearly school holidays and important dates.

Sharing Information:

Distributed to school and industry partners.

Product Type:

Dissemination

Product Description:

FLATE Monthly Newsletter - provides information about FLATE's outreach, curriculum and professional development activities.

Sharing Information:

Distributed to industry partners and educators.

Product Type:

Data or databases

Product Description:

Press Kit - this 28 page kit includes overview materials about FLATE and all its different programs.

Sharing Information:

Distributed to media/press at FLATE events.

Product Type:

Data or databases

Product Description:



Press releases - these releases provide immediate information/alerts about FLATE sponsored events.

Sharing Information:

Distributed to media outlets throughout the greater Tampa Bay region.

Product Type:

Audio or video products

Product Description:

Public Service Announcements - created to acknowledge the contributions made by manufacturers across Florida. These 30 second spots were made in partnership with the 7 regional manufacturers associations.

Sharing Information:

Distributed to 7 markets throughout Florida and 25 broadcast/cable stations.

Product Type:

Teaching Aids

Product Description:

I didn't know that was...Made in Florida - this activity is for middle school teachers. It focuses on the importance of the manufacturing process and the careers involved in the modern manufacturing process.

Sharing Information:

Lesson plans are located on FLATE's dedicated wiki and also the Florida Department of Education's website in support of the 2006 Legislature pass House Bill 7087 (A++), and are available to educators throughout the state of Florida.

Product Type:

Teaching Aids

Product Description:

Made in Florida Learning Challenges - Flyer describing the 8 industry/scenario based learning challenges and how to access them.

Sharing Information:

Distributed at presentations and exhibits.

Section 4: Contributions

Contributions within Discipline:

- FLATE is expanding its statewide curriculum reform activities beyond programs directly related to manufacturing.
- The FLATE developed A.S./A.A.S Degree in Engineering Technology now has specialization tracks in Advanced Manufacturing, Electronics, Advanced Technology, Mechanical Fabrication and Design, and Quality.

- New Engineering Technology degree specialization track academic frameworks are being written or revised to be included in this degree program and will be submitted to the Florida Department of Education.
- FLATE is developing in partnership with concerned community colleges and the Florida Energy Systems Consortium, academic frameworks for various alternative energy programs being developed throughout the state.

Contributions to Other Disciplines:

- The Florida Department of Education has used FLATE’s industry certification-based statewide articulation model as a basis for their “Gold Standard Career Pathways” initiative to bring this statewide educational pathway all CTE disciplines.
- In addition to technologies that directly support manufacturing, FLATE has begun to support biotechnology, bio-manufacturing and energy industry curriculum development efforts in Florida both within and outside of the ET Degree at both secondary and post-secondary levels.

Contributions to Human Resource Development:

Please see the earlier section under Activities and Findings that discusses FLATE’s outreach efforts and activities. Additionally, FLATE’s curriculum reform for secondary and post-secondary education in Florida strongly supports human resource development aligned to current industry needs.

Contributions to Resources for Research and Education:

Please see the earlier section under Activities and Findings that reports on FLATE’s ongoing reform efforts in Educational curriculum in Florida.

Contributions beyond Science and Engineering:

- FLATE is active in Florida’s initiative to connect teacher and student performance to expectations as expressed in national certifications
- FLATE’s work with the DOE and the development of articulated pathways between high school and community colleges technical programs based on aligned national certification has drawn national attention and has already become a model for other states career and technical educational system as well as other disciplines in Florida.
- FLATE participated in the legislative process by testifying with industry partners before both Florida house and senate education committees during the 2007 and 2008 legislative session to garner support for career and technical education initiatives across the state.
- FLATE plays a significant role in informing statewide workforce development activities through the Manufacturers Association of Florida’s Workforce and Education Committee and the Employ Florida Banner Center for Manufacturing.