

Journal Publications

- ["Best Practices for Student Robotics Camps,"](#) *American Society of Engineering Education (ASEE)*, June, (2011).
- ["Impact of ATE Regional Centers for Next Generation Manufacturing,"](#) *American Society of Engineering Education (ASEE)*, June, (2011).
- ["Manufacturing Career Pathways,"](#) *Manufacturing Engineering*, p. 101, vol. 144, No. 4 (2010).
- ["Getting Started with a Successful NSF ATE Proposal,"](#) *National Career Pathways Network*
- ["STEM Works because of Talent, Training, Time and Tools,"](#) *American Society of Engineering Education (ASEE)*, June, (2010).
- ["Implementing Engineering and Technical Education to Support Florida's 21st Century Energy Sector,"](#) *American Society of Engineering Education (ASEE)*, June, (2010).
- ["Florida's Unified Curriculum Model for Engineering Technologies",](#) *Vicissitude-A Refereed Journal for College Leaders*, p. 20, vol. 2, n. 2 (2010).
- ["Using a Baldrige/Sterling Evaluation Plan for an NSF ATE Center,"](#) *American Society of Engineering Education (ASEE)*, June, (2009).
- ["What is the National Science Foundation Advanced Technological Education Program?,"](#) *National Career Pathways Network Connections*, p. 3, vol. 19, No. 6 (2009).
- ["Florida Advanced Technological Center \(FLATE\),"](#) *National Career Pathways Network Connections*, p. 4, vol. 19, No.6 (2009).
- ["Florida Engineering Technology Forum: A Vehicle for Change,"](#) *American Society of Engineering Education (ASEE)*, June, (2008).
- ["The Toothpick Factory: A Simulation Game for Soft Skills,"](#) *American Society of Engineering Education (ASEE)*, June, (2008).
- ["A Process Map for State-wide Engineering Technology and Manufacturing Technology Curriculum Reform,"](#) *American Society of Engineering Education (ASEE)*, June, (2008).
- ["A Community College-Industry Partnership to Develop an Automated Systems Training Platform,"](#) *American Society of Engineering Education (ASEE)*, June, (2007).
- ["Engineering Technology Curriculum Reform in Florida,"](#) *American Society of Engineering Education (ASEE)*, June, (2007).
- ["Made in Florida: a Dynamic STEM Career Outreach Campaign,"](#) *Conference for Industry and Education Collaboration* , (CIEC), February (2006).

Online Resources

2011, *Robotics Camp Survival Guide: a FLATE Best Practices Guide*. Available in print or online at <http://www.fl-ate.org/>

Curriculum Resources

FLATE's sTEem centered, industry-connected curriculum site was awarded a 2011 Best Practice Award for Excellence Integrating Needs of STEM-Enabled Programs into Engaging Curriculum and Educational Outreach Resources from stemFlorida.

FLATE's online resources for educators contain a total of 67 online curriculum objects. FLATE's *Curriculum Challenges* provide complete lesson plans including print-ready handouts for students, or items may be adapted and used individually. "Challenges" are middle and high school level classroom materials designed to enrich science, technology, engineering and mathematics (STEM) classes. These free instructional resources provide students with real world scenarios relevant to manufacturers throughout Florida. Each Challenge gives teachers the materials needed to engage students with authentic and sometimes unresolved challenges faced by manufacturing companies today. Shared online through FLATE's educators' BLOG linked from FLATE's *Made in Florida* home page at <http://flate.pbworks.com/w/page/10889545/Teacher-Materials-Home>

FLATE expanded curriculum offerings in 2010-2011 to include:

Energy Curriculum

This new presentation contains 16 modules which are ready for teachers to use or adapt to middle school, high school, and college curriculum as well as providing professional development for STEM K-20 teachers. Developed in partnership with Florida Energy Systems Consortium (FESC), these presentations were used in FLATE's Summer Energy Camp for Middle School Students and FLATE's Summer sTEem Energy Camp for Hillsborough County High School teachers. Shared online through FLATE's educators' BLOG linked from the *Made in Florida* home page at <http://flate.pbworks.com/w/page/10889545/Teacher-Materials-Home>

sTEem-at-work Puzzles

sTEem-at-work puzzles have been developed as alternative / supplementary materials that can be used in all high school science and first level college courses. The puzzles are short snapshots of real world sTEem scenarios, providing enough information for the reader to "puzzle" out the solution using inductive and deductive reasoning, critical reading and interpretation skills. The "yes-no" answers allow teachers to focus on either the sTEem concepts within the puzzle (that vary for every puzzle), the problem solving strategies that can be used to come up with the answer, or the theme that runs in a group of puzzles. The sTEem-at-work puzzles can be used in the classroom, tied to the specific content as an modern application, or be used as homework or extra curricula /extra credit opportunities. In addition to providing fun, applied contextual content, it is increasingly important that students gain an appreciation of the critical role that science and mathematics plays in engineering and technological advancement. Shared online through FLATE's educators' BLOG linked from the *Made in Florida* home page at <http://flate.pbworks.com/w/page/10889505/FrontPage> and on the FLATE homepage at www.fl-ate.org