



The Able Trust, also known as the Florida Endowment Foundation for Vocational Rehabilitation, is a 501(c)(3) public-private partnership foundation established by the Florida Legislature in 1990. Its mission is to be a key leader in providing Floridians with disabilities opportunities for successful employment. FLATE partners with the Able Trust's by providing professional development about STEM careers in manufacturing for the High School High Tech program's educators around the state.

<http://www.abletrust.org/>



The Corridor's focus is economic development in high technology business sectors along the Interstate 4 in 23 counties crossing the state. Educational outreach initiatives of the Florida High Tech Corridor Council support workforce development initiatives. It reaches young students in grades 6-12 by involving partners from a variety of academic affiliations and high tech companies. FLATE partners with the Corridor to sustain its outreach and professional development activities including the techCONNECT program. FLATE also works with the Corridor on high tech training needs of new Florida companies.

<http://www.floridahightech.com/>



The Florida Association for Career and Technical Education (FATE) is a non-profit organization committed to the development of education that prepares both young and adult Floridians for successful careers. Its role is one of leadership and support for CTE teachers, administrators, and students. FLATE annually partners with FATE to provide professional development for manufacturing related technical programs in Florida secondary educators. FATE and its division for Industrial and Trades Education (FAITE) are now the host organization of FLATE Educator Awards. FLATE works closely with both not only for FLATE awards, but also professional development opportunities throughout the year for industrial CTE educators.

www.facte.org



SME's mission is to inspire, prepare and support our stakeholders in the advancement of manufacturing. FLATE partners with Florida chapters for outreach to secondary and post-secondary educators and students. FLATE also works directly with the national organization for educational outreach and support of manufacturing education programs across the country.

www.sme.org



The Society of Women Engineers (SWE) and SWEnext works to promote and support women engineers of all disciplines. FLATE partners with SWE and SWEnext to promote engineering careers to young girls and women through mentoring and other outreach activities.

<http://societyofwomenengineers.swe.org/>



The Foundation of the Fabricators & Manufacturers Association, Intl.

FMA's mission is to advocate for the growth and sustainability of the North American metal processing, forming, and fabricating industries. Through top-notch educational programs; award-winning publications; and North America's largest metal forming, fabricating, welding and finishing event; FMA provides the tools and resources companies need to improve operations. FLATE partners with FMA's Nuts and Bolts Education Foundation outreach, scholarships, educational activities, summer camps and MFG DAY.

<http://fmanet.org/>



FLL introduces younger students to real-world engineering challenges by building LEGO-based robots to complete tasks on a thematic playing surface. FLL teams, guided by

their imaginations and adult coaches, discover exciting career possibilities and, through the process, learn to make positive contributions to society. HCC Brandon serves as the affiliate partner for the 16-county Florida west coast region. FLATE partners with FLL Central West Coast to sustain its robotics outreach activities by providing resources and expertise for regional events.

<http://www.suncoastfll.org/>



ChampionsNOW! Is an advocacy organization to raise awareness and promote the manufacturing industry and careers in manufacturing for young Americans. FLATE partners with ChampionNOW by supporting its outreach activities and programs for young people to explore manufacturing careers encourage them to enroll in college and technical school programs that support the industry.

<http://championnow.org/>



This project builds upon a previously NSF-funded initiative to facilitate collaboration between the manufacturing industry, Virginia Western community College (VWCC) faculty and regional secondary career and technical educators. The primary objective of the funded project, Partnership for Advanced Career Education in Mechatronics Engineering (PACE ME), is to strengthen Mechatronics technician training pathways from secondary to post-secondary education through a direct link from industry to the classroom. FLATE has a mentoring role with this project and supports their professional development.

<https://www.viriniawestern.edu/academics/stem/programs/atm.php>



National Science Foundation funded a new PathTech research project, *PathTech LIFE: A National Survey of LIFE (Learning, Interests, Family, and Employment) Experiences Influencing Pathways into Advanced Technologies*. In partnership with FLATE. PathTech LIFE's goal is to learn about the education and employment background, career goals, and work-life balance issues of community college students enrolled in advanced technology certificate and degree programs across the country with FLATE partner ATE Centers focused on Engineering Technologies.

<http://sociology.usf.edu/pathtech/>



The Centers Collaborative for Technical Assistance was created in response to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees. These services include: success coaching on program issues including project management issues pertaining to leading consortia; in-person convenings for the TAACCCT grantees to discuss specific issues; knowledge management through the identification and sharing of best practices; and peer-to-peer learning. Importantly this technical assistance is directly applicable to National Science Foundation Projects and Centers and Workforce-oriented programs of all kinds. FLATE is one of five NSF ATE centers leading this NSF project.

<http://www.atecenters.org/ccta/>



CORD (Center for Occupational Research and Development) is a nonprofit organization dedicated to leading change in education. CORD's work includes curriculum development, and educator professional development. "Necessary Skills Now" is a 2015 NSF ATE project that will develop curriculum that integrates technical content and employability concepts within existing courses in advanced manufacturing and cybersecurity. FLATE and 3 other NSF ATE Centers along with a team of industry advisors and partners of the project are working together to develop and pilot the project based learning modules.

<http://www.cord.org/>



FloridaMakes is a service created by manufacturers, for manufacturers, to increase their competitive ability and profitability. Its goal is to strengthen Florida's manufacturing sector, which leads to higher paying job opportunities, and economic impact.

FloridaMakes operates in partnership with Florida's Regional Manufacturers Associations, the State of Florida and the National Institute of Standards and Technology's Manufacturing Extension Partnership (MEP). FloridaMakes is part of a national network of 60 centers and more than 1,200 technical experts who help manufacturers solve their challenges and identify opportunities for growth. FLATE and FloridaMakes have signed a MOU to work together to define technical training and education needs of industry; provide training and professional development to both industry and educators and support Manufacturing Day outreach in Florida.

<http://www.floridamakes.com/#>



Hillsborough County is investing financially in manufacturing education through its "Hillsborough Manufacturing Alliance". The Manufacturing Alliance takes a three-pronged approach to support our local manufacturing employers with the following primary strategies: training, awareness and coordination. The Academy is supporting secondary, post-secondary equipment upgrades, facilities improvements and other resources along workforce manufacturing credential training programs and a media campaign to ultimately engage more students in local manufacturing education and career pathways are underway. FLATE is an important partner for the student engagement and recruiting activities, dissemination as well as the credentialing identification.

<http://www.madeinhillsborough.org/>

Florida's Regional Manufacturing Associations (RMAs) support a network of manufacturers across the state with services to enhance their business operations. Fourteen regional associations serve industry across the state. FLATE works with the educational and outreach committees of these organizations to further workforce development and community awareness of manufacturing careers. The RMAs work together voluntarily in an organized fashion through the statewide MEP, FloridaMakes to advocate for manufacturing. <http://www.floridamakes.com/#>



The Career and Technical Education (CTE) division of the Florida Department of Education is an integral partner of FLATE. FLATE and the CTE directors of the FLDOE work closely together to align Florida's industrial focused K-14 educational programs with industry needs. FLATE serves as a liaison to the Engineering Technology and related programs supporting manufacturing, providing professional development with the FLDOE for important legislative and policy changes to workforce education in Florida.

<http://fldoe.org/>



The Gus A. Stavros Center for Free Enterprise and Economic Education is a unit in the College of Education at the University of South Florida Tampa campus. The Center provides professional development for elementary and secondary teachers in the greater Tampa Bay region to raise awareness of financial literacy and fundamentals of our national, regional and local economies. FLATE has partnered with the Stavros Center to bring professional development opportunities about the manufacturing industry and its importance to Florida's economy through the Center's evening educator workshop program.

<http://stavros.coedu.usf.edu/index.php>



The goal of the Tampa Bay STEM Network is to directly impact underprivileged and underrepresented youth through a formal network. Specific goals include: access to and success within a PK-16 STEM pipeline for students and an expansion plan for the network. Ultimately, the Tampa Bay STEM Network strives to create an educational ecosystem with a high profile and recognizable name, mission, and vision, which will support the expansion of Tampa's recognized innovation and technology hub. This will increase the overall health of the local STEM community and provide rich opportunities for all students. FLATE is a proud founding partner of the new Tampa Bay community

and will support industry partnerships and engagement, STEM educator professional development and student engagement.

<http://stemecosystems.org/first-community-of-practice/>



The AVS has a 27-year history of providing excellent 2-day educator workshops at its annual International Symposium and Exhibition. The AVS Science Educators' Workshop (SEW) provides real high-technology applications for science and math educators. FLATE partners with AVS Education Committee for developing, organizing and presenting this workshop. Typically, 20-24 STEM educators from around the country attend, receive an equipment voucher, and are supported by their local or regional chapters of AVS.

<http://www.avs.org/Education-Outreach/Science-Educators-Workshop>



HI-TEC is a national conference on advanced technological education where secondary and postsecondary educators, counselors, industry professionals, trade organizations, and technicians can update their knowledge and skills. Charged with Educating America's Technical Workforce, the event focuses on the preparation needed by the existing and future workforce for companies in the high-tech sectors that drive our nation's economy. FLATE has played a leadership role in the conference organization and vision since its inception in 2009. <http://highimpact-tec.org/>



IHMC is a not-for-profit research institute of the Florida University System and is affiliated with several Florida universities. Researchers at IHMC pioneer technologies aimed at leveraging and extending human capabilities. In addition to its research activities, IHMC has an active outreach program. Both facilities (Pensacola and Ocala) host community STEM lectures, free Science Saturdays for grade school children; and regular newsletters. The Ocala facility has partnered with FLATE for the past 5 summers hosting and facilitating FLATE summer robotics camps.

<http://www.ihmc.us/>



NCATC (National Coalition of Advanced Technology Centers) is network of higher education resources that advocates and promotes the use of technology applications that enhance economic and workforce development programs and services. FLATE participates as a board member steering the organization for strategic and sustainable growth. FLATE also participates in NCATC's professional development workshops and conferences. <http://www.ncatc.org/>



The Manufacturing Institute is a nonprofit affiliated with the National Association of Manufacturers, NAM. The role of the institute is to provide leadership and resources for research, education, workforce, and services group supporting manufactures in order to reduce the skills gap and meet projected workforce needs. FLATE is an active member of the Institute's Education Council.

<http://www.themanufacturinginstitute.org/>



USF College of Engineering & Nanotechnology Research and Education Center (NREC)
FLATE has partnered with USF College of Engineering and its Nanotechnology Research & Education Center and SCME to advance small scale electro, electromechanical, and biological systems technician education in Florida by offering educator professional development workshops, engaging industry partners and outreach activities for educators. <http://www.nrec.usf.edu/>



The Manufacturing Skills Standards Council (MSSC) developed a nationwide system of industry-led standards, assessments and certifications for all sectors of manufacturing. The MSSC Certified Production Technician (CPT) credential is focused on core skills and

knowledge for production and production-support workers, entry-level through first line of supervision. FLATE aligned and embedded the MSSC CPT into the A.S. Engineering Technology in Florida and developed a statewide articulation from high school to the A.S. ET degree. Currently, the two organizations have partnered to improve the high school attainment rate of the MSSC CPT credential with a targeted project involving twelve Florida educators and their school system.

www.msscusa.org



Tknika is a center promoted by the Basque Department of Education, Universities & Research, under the direct auspices of the Sub-Department of Vocational Training & Lifelong Learning. Innovation is at the core of Tknika is its ongoing efforts to place Basque Vocational Training at the European forefront. Through networking and direct involvement by the Basque Vocational Training teaching staff, the Centre develops innovative projects in the areas of technology, education and management. FLATE has partnered with TKNIKA to expose Florida faculty and Engineering Technology students to technical education in the Basque region of Spain as well as to bring recent Basque technical school graduates to the Florida for working internships in US companies.

<http://www.tknika.eus/liferay/en/web/public/home>



Manufacturing USA is an initiative focused on coordinating public and private investment in emerging advanced manufacturing technologies. Manufacturing USA brings together industry, academia, and government partners to leverage existing resources, collaborate, and co-invest to advance manufacturing innovation and accelerate commercialization. This network creates a competitive, effective, and sustainable research-to-manufacturing infrastructure for U.S. industry and academia. The network consists of multiple linked Manufacturing Innovation Institutes (MIIs) with common goals but unique technological concentrations. FLATE participates in workforce education and development teams of AFFOA, AIM Photonics, PowerAmerica, IACMI, RIME and ARMI.

<https://www.manufacturing.gov/nnmi-institutes/>



National Career Pathways Network

The National Career Pathways Network (NCPN) is a membership organization for educators, employers and others involved in the advancement of Career Pathways, career technical education (CTE), and related education reform initiatives. The NCPN Advisory Board ensures that NCPN meets the requirements of the stakeholder groups, and to represent stakeholder interests. FLATE partners with the NCPN Advisory Board to promote NSF Advanced Technological Education (ATE) projects and centers with newsletter articles, conference exhibits, NCPN professional development workshops and conference presentations.

<http://ncpn.info/>



The Florida Career Pathways Network is a membership organization for educators, employer, and workforce development partners involved in the advancement of Career Pathways, Career & Technical Education, and other related education reform initiatives. FCPN assists its members in the planning, implementing, evaluating, and improving of secondary, post-secondary, and adult transition programs by pooling the resources of the state's leading practitioners to provide a network of communication and resources for new and existing programs. FLATE participate on the board of directors and facilitates professional development workshops at FCPN venues.

<http://flcpn.org/membership.html>

FAITE

The Florida Association of Industrial and Technical Education is a division of FACTERE (Florida Association of Career and Technical Education) provides professional development for industrial and technical K-14 educators across Florida. It offers educator professional development primarily at the Florida Skills USA competitions and the statewide FACTERE conference and partners with FLATE on their annual manufacturing Educator Awards. FLATE sits on the board of directors helping to set strategic goals.

<http://www.faite.us/#about-1>



FLATE mentors a number of NSF ATE projects in an official capacity, including CollaborATE and PACE-ME, both focused on Mechatronics program development; and housed at the College of Lake County, IL and Virginia Western Community College, VA; Piedmont Virginia Community College also focused on mechatronics; Wake College

focused on Robotics, professional development and pipeline development; Florida Keys Community Colleges' new Engineering Technology degree for Alternative Energy (with a focus on Hydrokinetic power); and Lake Sumter Community College's new power relay engineering technology program.



The Florida State University Information Institute partners with FLATE in an NSF research project: *Assessing Educational Pathways for Manufacturing in Rural Communities: An Investigation of New and Existing Programs in Northwest Florida*. This project will better define and align the educational preparation with industry needs, expand the research base and curriculum content recommendations for entrepreneur and intrapreneur AM (Advanced Manufacturing) education; building regional capacity for AM program assessment and improvements.

<http://www.ii.fsu.edu>



Mentor Connect is a leadership development and outreach initiative designed to broaden the impact of the NSF ATE program through mentoring and knowledge transfer for technician education advancement among the nation's two-year colleges. FLATE serves as a Mentor Connect mentor and focuses on building leadership and grant writing skills in community college faculty and administrators. FLATE also mentors rising Mentor-Connect mentors.

<http://www.mentor-connect.org/>



Preparing Technicians for the
FUTURE OF WORK



FLATE will participate in this the NSF-Advanced Technological Education (ATE) community to collaborate regionally with industry partners, within and across disciplines, on the transformation of associate degree programs to prepare US technicians for the Future of Work. The National Science Foundation has established "The Future of Work at the Human Technology Frontier," (NSF, 2016) as one of its 10 Big Ideas; a collective vision to prioritize NSF investments that "push forward the frontiers of U.S. research and provide innovative approaches to solve some of the most pressing problems the world faces."

<http://www.preparingtechnicians.org/index.php>