Core Competencies and Collaboration among ATE Centers

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The proportion of U.S. graduates earning degrees in natural sciences and engineering is small compared to graduates in other countries.

21% United States, 38% South Korea, 47% France, 50% Singapore, 67% China.

Of all the engineering technicians working in 2008, 33% were electrical and electronic engineering technicians, 34% worked in manufacturing, and 26% worked in professional, scientific, and technical service industries.

Electrical and electronic engineering technicians: 164,000
Civil engineering technicians: 91,700
Industrial engineering technicians: 72,600
Mechanical engineering technicians: 46,100
Environmental engineering technicians: 21,200
Electro-mechanical technicians: 16,400
Aerospace engineering and operations technicians: 8,700
Engineering technicians, except drafters, all other: 76,600
Collaborations focus on common core competencies used to educate, train, and employ students across a variety of industries.
Multi-center collaborations allow for sharing of best practices, need fulfillments, and broadened job opportunities for students.
Collaboration

• Implemented 2 hybrid, professional development Weld-Ed courses for over 25 current marine welding instructors who teach on average 75 students each

• Participants teach in high schools, community colleges and industry
Career Pathways Technical Skills in Demand

Secondary

Dual Enrollment

Industry Credentials
MSSC / ASTL / CTL
ABYC / AWS

A.A.S. Business
~ Marine Logistics

College

Advanced College Certificates
Mechanical / Electrical Welding/RP & Technician Support

A.S. Engineering
~ Mechanical Electrical Design M & S

Industry Apprenticeship

Journeyman Card

A.A.S. Maritime Technologies
~ Mechanical Electrical Welding Maritime Tech

4 Year B.S. Or B.A.S.
ATE Collaboration Best Practice Example

- Visiting Instructor program to exchange relatable skills and best practices
- Webinars
- Job Announcements
  - Broadened job opportunities
Questions/Comments
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