## The National Academies of SCIENCES • ENGINEERING • MEDICINE

#### BUILDING AMERICA'S SKILLED TECHNICAL WORKFORCE

# Lessons from European Workforce Programs

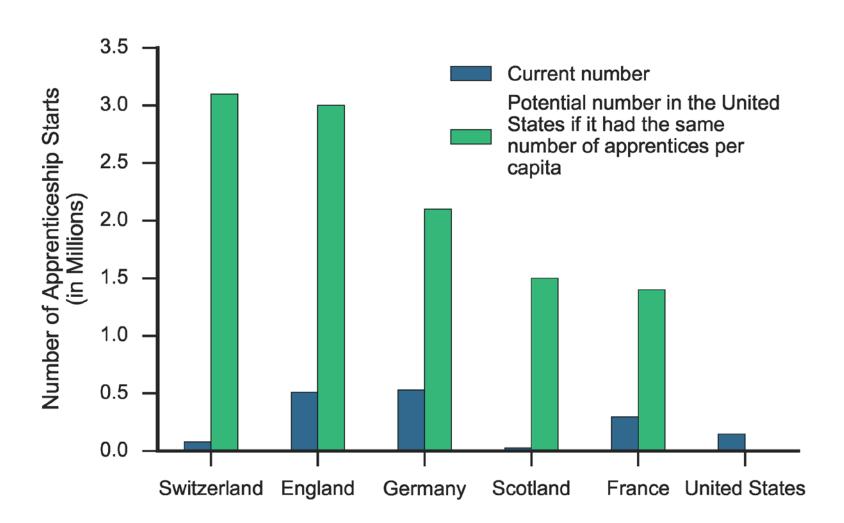
Mark Tomkins, German American Chamber of Commerce of the Midwest

Emily DeRocco, E3 and LIFT

Suzan G. LeVine, Former U.S. Ambassador to Switzerland and Liechtenstein

Arnd Herwig, Brose North America Inc.

## What Works?



# Key Lessons from Foreign Apprenticeship Systems

- Establish a flexible framework
- Set clear rights & responsibilities
- Balance incentives for employers and apprentices - "Earn while you Learn"
- Make apprentices "employees"
- Create strong intermediaries
- Set standards and signal accomplishment

## Apprenticeship Programs

- Strong concept: Combines occupational and education and training with paid on-the-job experience.
- Growing Interest: Particularly in high growth industries like health care, advanced manufacturing, IT and Biotech.
- Hard to get going: Need to define curriculum, get firms to cooperate with each other, partner with community college or other educational institution, recruit apprentices, build relationships with feeder high schools, develop "train-the-trainer" courses for employees, etc.
- Intermediaries Needed: Programs such as MAT2, KY FAME, ICATT, CareerWise aggregate groups of employers

## What Works? ... Common Themes

- Employer groups: Enables SMEs to participate in training, not just large corporations
- "Employee first": Apprentices hired by company before enrolling in community college
- Pathway to degree and career
- Support: Provided by state/federal government to enable scaling, but program self-sustaining without government financing
- High standards set by industry: Competency-based approach / Allows portability of credential

## Efforts to Link Skills and Needs

#### Portable Credentials and Licenses

- Make it easier to transfer education and training accomplishments across organizations, employers, industries, and geographic regions.
- Raises ROI for students and workers; improved mobility helps balance skills supply and demand around the country.

### Competency Models

- Clarifies industry-defined skill and knowledge requirements of specific jobs, combining both hard and soft skills.
- A basis to define career pathways, accumulate credentials, and design curricula





### **ICATT Network Companies & Partners**





















**GREENLEE** 



















































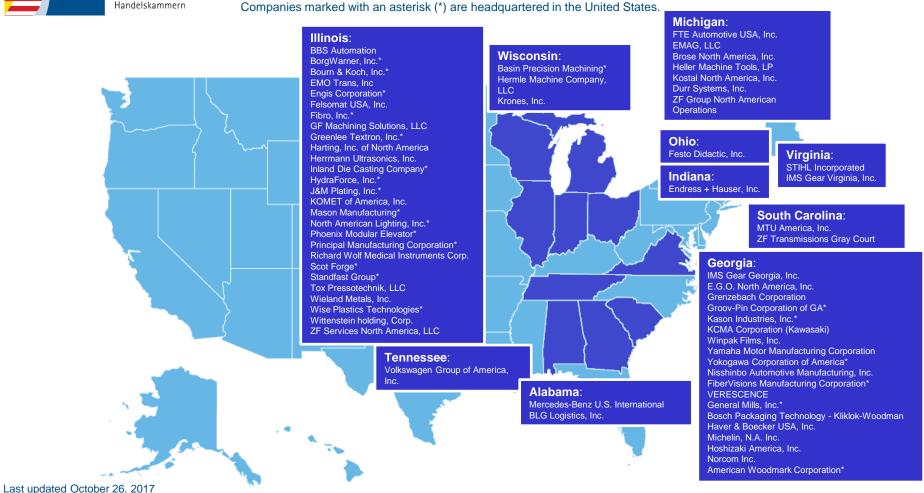








German American Chambers of Commerce develop and implement apprenticeship programs in the US, and also certify third-party apprenticeship programs to German standards.





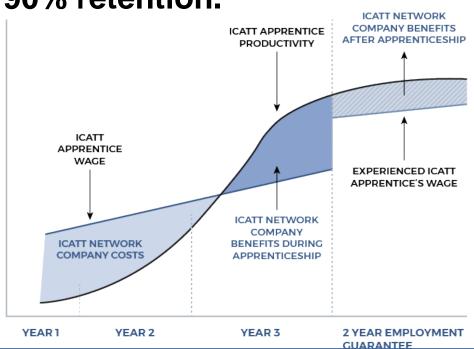


### **ICATT Apprenticeship Program: The payoff**

- Highly trained staff; best-of-class
- Investment in apprentices creates loyalty:
- DOL data shows 70% retention for apprentices. ICATT Apprentices are at **90% retention.**

ICATT
APPRENTICESHIP
PROGRAM
PRODUCTIVITY
PROGRESS

WAGE & VALUE OF ICATT APPRENTICE'S CONTRIBUTION TO PRODUCTION



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