BUILDING AMERICA'S SKILLED TECHNICAL WORKFORCE

What Works? Promising or Proven Strategies

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Connecting the System

- The American "system" of skilled education and training is made up of interconnected networks.
- Improving the system requires realigning incentives and improving cooperation within/across networks.
 - Linking Students to Training and Education Programs
 - Linking Secondary and Postsecondary Education
 - Linking Training and Work
 - Linking Skills and Employer Needs
- Examples of successful initiatives reviewed improve linkages, align incentives across actors.

Efforts to Link Students to Education and Training Programs

- Counselling services
 - One Stop Centers can link students to viable career options in a changing market.
 - Under WIOA, states can rethink and expand the reach of these job centers
- Remediation
 - Improved identification of need for remedial courses, and creation of targeted and cost-effective curricula.
- Corral Financial Support
 - Braiding Strategies (e.g., Oregon's Career Pathways Initiative) merge public dollars to support training programs.
- Wraparound Services
 - Help with counselling, tutoring, child care, and transportation
 - Particularly beneficial for low income and first generation students.

More Efforts to Link Students to Training

Career Pathways

- Roadmaps of education and training required to attain credentials for specific industries
- Targeted to meet the needs of local labor markets
- Online Learning
 - New MIT report highlights use of online tools in remedial education and reskilling adult learners.
- Community College Incentives
 - Allocate funding based on course completion, timeto-degree, number of degrees awarded
 - Link CC funding to employment metrics, such as earnings of students after graduation.

Efforts to Link Secondary & Postsecondary Education

- Mainstream CTE:
 - Prepare all high school students for employment and a full range of postsecondary educational opportunities.
 - Eliminate rules that silo CTE
- Integrate high school and college education through Early College Schools
 - Models include IBM's P-Tech, Pathways to Prosperity
 - Dual Enrollment Programs provide opportunities for high school students to take college level courses

Efforts to Link Training and Work

- Employer-Community College Partnerships
 - Employers provide input on needed emerging industry knowledge and skills needs
- Strategic Centers of Excellence
 - Serve as points of contact and resource hub for industry needs, professional development
- Sector Specific Strategies
 - Partnerships train individuals to work in specific industries, with the expectation that firms will hire them.

Employer-based Training Programs

- Joint Labor-Management Programs
 - Partnering with employers, unions help workers from a wide range of career fields develop in-demand skills to meet employer needs.
- Talent Pipelines
 - US Chamber of Commerce Foundation promotes the use of supply chain management principles to link investments in workforce development with business strategy.

What Works?



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8

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 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

How to Improve Links with Better Info

- Big data and Web-based Tools
 - Leverage advances in statistics and computation to capture, augment, and analyze data from different sources.
 - Digital tools include crowd sourcing; web crawling
- Public Data Warehouses
 - Longitudinal data systems can link employment and earnings data with education, employment service, and training data over time.
 - Create consumer applications to estimate ROI on education and training.
 - Dept. of Labor Workforce Data Quality Initiative has provided \$30 million in grants to 29 states.
- Consumer Report Cards
 - Helps students and workers search/assess schools and training programs
 - Includes information on employment rates, earnings, etc. of program participants.

Improving a Complex System

- Examples of successful initiatives reviewed improve linkages, align incentives across actors
 - Students, educational organizations, employers, labor organizations, etc.
- The committee's report builds on what works
 - It provides practical recommendations for improving our nation's skilled technical workforce.

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Thank you.

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