Best Practices in Workforce Development

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Workforce Challenges

• Mismatch between skill needs of employers …and skills of job seekers
• Skill requirements are increasing …and changing rapidly
• Absence of a regular “pipeline” for new talent
• School/Parent bias toward 4-year college option
• Aging incumbent workforce
• Loss of institutional knowledge as veteran workers retire
Workforce Development = Economic Development

- A skilled workforce is essential to the economic future of NTMA member companies……BUT…..

- Young adults lack accurate, accessible, and easy-to-understand information about workplace skills

- Such information is also needed by parents, teachers, and counselors

- Underemployed workers, current employees, and displaced job seekers also lack up-to-date information
3 Key Elements for Success

1) RESEARCH specific skill needs & work trends affecting key industries (*Ready for the Job*)

2) Share career information widely through an affordable, easy-to-understand HIGH-TECH Web-based system (*www.NJNextStop.org*).

3) Build HIGH-TOUCH business-education partnerships to inform students, parents, teachers, & school counselors; align curricula with employer needs (*Career Connections*)
### Industries Covered by the Research

Reports on the workforce and emerging skill needs of 11 industries:

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<th>Construction</th>
<th>Finance</th>
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<td>Information Technology</td>
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Ready for the Job
Cross-Industry Skills

- Math & Technology Skills
- Communications & Teamwork
- Problem Solving & Critical Thinking
- Entrepreneurship & Business Skills
Ready for the Job
Cross-Industry Skills

- Language / Literacy skills…with more bi-lingual employees
- Specific “technical literacy” within your industry
- Computer literacy / keyboard ability
- Attitude / employability / diversity skills
Ready for the Job
Tool & Die Workers/Machinists

- Tool & Die Makers
- Tool & Die Supervisors
- Tool Designers
- Millwright
- Machinist
- Maintenance Machinist
- Inspector
- Welding / Repairs

Key Skills
- Attention to detail
- Eye/Hand Coordination
- Control Precision
- Mechanical
- Math / Engineering
- Design
- Computer / AutoCAD
- Critical Thinking
- Entrepreneurship
Ready for the Job
Tool & Die Workers/Machinists

Identify:

- Industry’s high-demand jobs and skill areas.
- CORE skills common to most high-demand jobs.
- SPECIFIC skills critical to particular jobs.
- Critical terms that represent “basic literacy” for workers in your industry.
- Career Paths that show that lower-paid entry-level jobs can lead to higher wages and benefits.
- Similar skill sets in other industries.
www.NJNextStop.org
Welcome!

You demand great things for yourself. And as candidates for tomorrow’s workforce, employers will demand great things from you. Want to know the skills you’ll need to succeed in leading New Jersey industries? Then you have made an essential step along your path of career prep.

At njnextstop.org, find out what New Jersey’s employers are saying about jobs and careers growing right here in the Garden State. Get vital details about industries, types of jobs, and the cutting-edge career paths that combine many of your talents.

Learn more

Name: Stephanie Clemente
Education: Immaculate High School
Hometown: Somerville
Occupation: Nurse in Training

Lifeline

Hop on a Forklift And Dig Into Your Future

Job prospects in the building trades look good, even if you would rather spin a test tube than a cement mixer. Angelica Torres of...
Occupation: First-Line Supervisor-Managers of Mechanics, Installers, and Repairers

Summary
Industry: Utilities/Infrastructure
Career Path: Management/Supervision

These are the go-to guys or girls. First-line supervisors of mechanics, installers and repairers oversee and coordinate the work of front-line skilled and trade workers. They also manage work sites to make sure that work methods and procedures are kept on schedule and within budget. First-line supervisors also coordinate personnel actions for mechanics, installers and repairers such as training, performance evaluations, promotions, transfers and disciplinary measures. Often, first-line supervisors must work with union representatives to solve problems and coordinate work activities. Workers in this category also conduct pre-job research on a work site to detect environmental hazards. First-line supervisors must interpret blueprints and job orders and inspect completed work to make sure it conforms to standards.

First-line supervisors need sharp business and accounting skills to monitor project budgets. They must also be able to communicate well and to convey accurate information to labor and skilled workers, union representatives and multiple project partners. These workers must also have a thorough understanding of

At A Glance
Mean Annual Wages: $59,210
Est. Number Employed 2002: 12,700
Proj. Number Employed 2012: 14,000
Percent Change 2002-2012: 10.1%
Annual Openings: 450

Required Degree
High school diploma

Preferred Degree
Bachelor’s - Business Management, Engineering

Required Credential
2-4 years on-the-job experience

Other Jobs in the Career Path
- Construction Managers
- First-Line Supervisors and Managers - Construction Trades and Extraction Workers
- Computer and Information...
**High-TECH Outreach**

- **SKILL WEB SITE**  
  O*NET -- [online.onetcenter.org](http://online.onetcenter.org)  
  Detailed skill profiles for numerous jobs

- **INDUSTRY WEB SITE**  
  [GettingIntoEnergy.com](http://GettingIntoEnergy.com)  
  Cutting-edge video presentations of jobs in the utility industry, produced by KidzOnline

- **STATE / REGIONAL WEB SITE**  
  [www.nycareerzone.org](http://www.nycareerzone.org)  
  Targeted geographic area
Career Connections
High-TOUCH Outreach

A Steering Committee of top business and education groups convened to:

- Educate students, parents, teachers, and school counselors about career options;
- Showcase successful business / education partnerships; and
- Promote the use of online career information resources.
Career Connections
Successful Partnerships

- Employer-led, with focus on industry needs
- Identify specific skills and credentials
- Link required skills to curricula
- Offer “real world” work experience
- Reach out to high schools, even for advanced jobs
- Evaluate and make improvements
Career Connections
Successful Partnerships

*Potential Partners*

- High schools – Teachers, Counselors, PTOs
- Vocational-Technical schools
- Community Colleges
- Workforce Investment Boards
- Industry Associations / Chambers of Commerce
- Faith-based organizations / Non-profits
Best Practices

GOAL = Industry Solutions
Regional Implementation

- Develop a **CORE industry curriculum** so that multiple employers can share & sustain local training

- Capture **institutional knowledge** from older workers prior to retirement; pair with new hires / apprentices

- Train "**Near Misses**" -- job candidates who come close to passing the company’s entry-level skills test
Best Practices

• Define multiple **Career Pathways** that build upon the industry’s core skills

• Expand incumbent worker training to include **non-technical skills**: Leadership, Communications / Writing, Customer Service and Problem Solving

• Recruit from **non-traditional sources**, such as people with disabilities

• Recruit from the **military** via state Transition Assistance Programs at [www.dol.gov/vets](http://www.dol.gov/vets), [www.hirevetsfirst.gov](http://www.hirevetsfirst.gov), and “At Your Service” -- [www.dodtransportal.dod.mil](http://www.dodtransportal.dod.mil)
Best Practices

• **Promote updated industry image** with a message that tooling/machining has a future that is cool, modern, interesting, challenging and “makes a difference”

• **Host annual High School briefing & hands-on tours** for region’s best vocational-technical Jr/Sr students with faculty partners, demonstrating the latest technology and projects

• **Offer Summer Student Internship** to shadow best workers in high-demand jobs

• **Create industry-wide online career resource** through NTMA, similar to www.GetIntoEnergy.com (utilities) or www.buildingcareers.org (construction)
Best Practices

• **Create model Career Academy** within local high school, using other industry examples (See *The Career Academy Toolkit* by Sandy Mittelsteadt at www.acteonline.org)

• Create **customized Tooling/Machining Certificate** program at community college level (Example: Belmont Technical College / Sinclair Community College – Ohio)

• Create **Computer Numeric Control** (CNC) program for inexperienced or dislocated workers (Stark State College, OH – 85% hired within 60 days of graduation)

• Create **customized Supervisory Training** for workers promoted from within
Best Practices

- **Promote a local talent “pipeline”** linking high schools, vo-tech, and community colleges through articulation agreements

  Utilities – Mercer County College (NJ)/ Trenton High
  Health Care – Union County Vo-Tech (NJ) / Union County College / Rutgers University

- **Educate policymakers** about how the failure to meet your workforce needs will impact OTHER industry sectors

- **Establish a permanent state industry advisory board**, as part of an ongoing Economic Development strategy
www.heldrich.rutgers.edu

For more information, please contact:

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