Building a Stronger Workforce
Educatings Future Workers
Closing the Skills Gap
Team

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EWIN’s Mission

Foster community collaboration with partners and leverage work to create networks of innovative education models that are aligned with the realities of the economy
Why?

60% of Indiana's jobs between now and 2025 will require a postsecondary credential.
Why?

30% of jobs in Indiana will require a certificate or associate's degree.
Why?

40.9% of Indiana’s population holds a postsecondary credential or degree.
Why?

Only 23% of Indiana's 9th graders will complete a postsecondary degree in time-and-a-half.
Why?

9% is Indiana's underemployment rate: unemployed, employed part-time for economic reasons, or marginally attached workers.
Why?

750,000

Indiana citizens have some college, but no degree.

Indiana Commission for Higher Education
Sense of Urgency

Estimation from Georgetown & Lumina Data

- 1,977,734 graduates needed
- 1,483,300 graduates projected

Expected % of degree holders vs. Benchmarks Needed for 60%
Developing Sector Partnerships
Sector Partnerships
Sector Partnerships: Why?

- Integrated manpower and funding streams
- Agreed upon goals and barriers before programmatic implementation
- Collaborative efforts
- Shared metrics
Sector Partnership Benefits

- Build out a career pipeline system
- Lower training costs
- Higher retention rates
- Larger talent pool
- Better economic development prospects
Sector Partnerships’ Role in Career Pathways

- Intentional pathways to real careers

- Intermediary role:
  - Employer exposure to multiple models
  - Ensure competencies are defined
  - “Bilingual” employer & educator systems
EWIN’s Pathways Framework

- PK-16 framework
- Locally designed
- Employer & community driven
- Systems collaboration
Hallmarks of Exemplary Partnerships

- Collaborative teams
- Identify employer skills
- Pathway Design
- Marketing in Community
- Data
Jay/Blackford County Example

- Focus: Manufacturing

- Problem: Need over 2,000 more employees within sector by 2023

- Purpose: Meet employer needs, build talent pipelines, raise personal income
Partnership vs Process (see handout)

- Do you believe you have strong partnerships?
- Do you believe you have a strong process to sustain and formalize those partnerships?
- How do you know?
Using Data Wisely
Data

- Painting the picture
- Evaluating
- Revising your plan
Data, Choosing metrics

1) What jobs are you targeting?

2) Who are you targeting to fill those jobs?

3) What are the barriers keeping them from those jobs?

4) What barriers will you remove or supports will you add to connect them to those jobs?

5) How will you know if you are successful?
Data, Painting the Picture

- What jobs are you targeting?
  - DDWS
  - Job Mapping
  - Sustainable Wage Calculator, IIWF
Data, Painting the Picture

- Who are you recruiting to fill jobs?
  - Zip code data (DWD)
  - Some college, no degree
  - Labor market versus geographical boundaries
Data, Job Mapping

Purpose:

- to clarify that DDWS data is reflected in the reality of your labor market
- to map stackable careers for learners
<table>
<thead>
<tr>
<th>Wage</th>
<th># jobs now/5yrs</th>
<th>Job</th>
<th>Certificate/Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>$18/hr</td>
<td>40/200</td>
<td>Production team members</td>
<td>HS diploma</td>
</tr>
<tr>
<td>$25/hr</td>
<td>10/40</td>
<td>Team lead</td>
<td>OSHA/Work Ethics</td>
</tr>
<tr>
<td>$30/hr</td>
<td>5/20</td>
<td>Maintenance</td>
<td>1-year on job, technical certificate</td>
</tr>
</tbody>
</table>
Production Team Member

$18/hr
200 jobs to fill now
Complete 2/wk bridge program to employment, including OSHA and 98% attendance

Team Lead

$20/hr
20 jobs to fill now
Incumbent workers with company for over 6 months complete leadership certificate

Maintenance

$30/hr
20 jobs to fill now
Incumbent 1 year accelerated program
YOU MUST ASK:

Do you anticipate the jobs you have open now will exist in 10 years?
Data, Labor Market

- Surrounding counties leaving to work (DWD)
- HR representatives: where do employees live?
- DWD zip code data—where are people not working?
Data, disaggregation

- What populations exist in your area that are not working?
- Partner with organizations that support those populations.
  - Centers for Working Families, Excel Centers
  - Community organizations
  - Treatment centers
  - Re-entry
“The process will likely challenge some of the existing offerings, sequences and prerequisites.” - PTECH
Data, HS Programming

Surface data:

“66% of our students (950) enroll in postsecondary.”

Narrative:

“We are setting most of our students up for success!”
“776 of those 950 students enrolled in Indiana public schools.

404 of them enrolled in universities that graduate less than 40% of their students.

3 enrolled in the local manufacturing 2-year program that has wages and tuition paid for by businesses.”
Data, HS programming

What happens when students come back with debt and no degree?

How many students enrolled in local postsecondary trade programs?
Data, HS programming

- Indiana Commission for Higher Education Reports, National Clearinghouse
- College Navigator
- Management Performance Hub
- Use it to drive success and increase enrollment
Data

- Process
  - Who shows up to meetings?
  - How many enroll in program?

- Impact
  - How many credentials earned?
  - How many placed in jobs?
  - Turnover rate
Short-Term

- **Process**
  - Who attends meetings?
  - How many enrolled?
  - Employer interactions
  - Outreach metrics

- **Impact:**
  - Student progress towards credential
  - Student retention
Long-Term

Process:
- # of active employers in partnership
- Employer satisfaction
- Student satisfaction
- # of students through program
- Employer investments

Impact:
- # of credentials earned
- Wage increases
- Vacancy rates
- Employer turnover
- Employment rates in target population
- Personal income
Example Process Data Dashboard

Measuring Partnership Success

- What percentage of employers in the region within the identified industry is represented on the alliance?
- Are all partners (workforce development agency, post-secondary education, and economic development) represented on the alliance?

<table>
<thead>
<tr>
<th></th>
<th># in Region</th>
<th># on Alliance</th>
<th>% Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers within the Industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Resource from Ohio Means Jobs
# Measuring Occupational Demand

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Job Need in 1st Yr</th>
<th>Total Jobs Filled after 1 Yr</th>
<th>% of Jobs Filled</th>
<th>Total Jobs Retained 2 Qtrs after Hire</th>
<th>Total Jobs Retained 4 Qtrs after Hire</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example Data)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welders</td>
<td>100</td>
<td>50</td>
<td>50%</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Machinists</td>
<td>75</td>
<td>25</td>
<td>33%</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation (cont.)</th>
<th>% of Jobs Retained</th>
<th>Avg. Earnings 2 Qtrs after Hire</th>
<th>Avg. Earnings 4 Qtrs after Hire</th>
<th>% Increase in Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example Data)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welders</td>
<td>75%</td>
<td>$20,200</td>
<td>$21,210</td>
<td>5%</td>
</tr>
<tr>
<td>Machinists</td>
<td>90%</td>
<td>$22,400</td>
<td>$24,192</td>
<td>8%</td>
</tr>
</tbody>
</table>

Resource from Ohio Means Jobs
Phases of Performance

(Exploring) Early Evidence of Progress
- a workplan or roadmap
- employer engagement

(Emerging) Actual Outputs/Products
- skills standards
- career awareness campaigns
- training programs for groups of employers
- industry-driven networking
- tackling non-workforce issues together

(Active) Impact
- employment for job seekers
- advancement for workers
- reduced vacancy rates for employers
- reduced time to hire
- job creation
- savings to public programs
Jay/Blackford County Example

1) Establish job forecast (DWD Data)

2) Job profiles and gap analysis (ACT Profilers)

Outcome Metrics:

- # of people connected to jobs
- % increase in personal income
Data Mapping (see handout)

Reflect on your data chart.

Discuss your areas of strength and growth opportunities with your team or a neighbor.
ENGAGING BUSINESS PARTNERS
Education program

Students

HR
Workforce

Industry

Community

Training

Support
Benevolent Engagement

Flyover
• Financial Support
• Donation of equipment

Technical Support
• Curriculum advice
• Advisory committee
• Equipment installation and support

Resource from Ford Next Generation Learning
Stakeholder Partner

Boots on the Ground
• Career exploration involvement
• Teacher externships
• Teacher mentors
• Student mentors
• Student internships
• Real-world problems

Resource from Ford Next Generation Learning
Skills Mapping

Purpose:
What’s the output you are looking for?
Where are the current gaps?
Employability

PROBLEM SOLVING
COMMUNICATION
LEADERSHIP
PERSEVERANCE
CRITICAL THINKING
SELF-MANAGEMENT
ADAPTABILITY
TEAMWORK
Employment Competencies

- Educators, students, and business should know
  - what competencies are being developed
  - when they are being developed
  - how you will know if they are developed
Menu of Options

- Career fair
- Work-Place Learning
- Tuition
- Apprenticeships
- Equipment donations
- Teaching a course
- Paid internships
- Hybrid internships
- Job shadows
- Practice Interviews
- Serving on advisory council
Jay/Blackford County Example

1) Develop competency maps
2) Create employer-driven curriculum K-12
3) Provide employer-driven workforce training for adults
INDUSTRIAL MAINTENANCE
as a career in Jay and Blackford County

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Initial Hiring
Take a skills assessment test and interview with department manager
Job offer based on skills and job interview
Average starting wage $14.00 to $16.50/hr ($29,120 - $34,320 annually)

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Evaluation of Skills or Passed Skills Attainment Class
Take a hands-on skills assessment every 2 years
Promotion and pay raise based on skills assessment and assessed soft skills
Average A-Level wage $18.30 to $21.60/hr ($38,064 - $44,928 annually)

---

Evaluation of Skills or Passed Skills Attainment Class
Take a hands-on skills assessment every 2 years
Promotion and pay raise based on skills assessment and assessed soft skills
Average starting wage $21.50 to $24.20/hr ($42,640 - $50,336 annually)

---

Evaluation of Skills or Passed Skills Attainment Class
Take a hands-on skills assessment every 2 years
Promotion and pay raise based on skills assessment and assessed soft skills
Average starting wage $25.16 to $29.00/hr ($48,172 - $60,320 annually)
“We did not approve our curriculum, our manufacturing council did. They govern our system. They hire the manufacturing teacher.”

- Jeremy Gulley, Superintendent of Jay School Corporation, Board Chair of John Jay Learning Center
Building Sustainable Programs
Sector Partnerships Drive Sustainability
Sustainability

- Multiple resources at the table from the beginning
  - Economic development
  - Foundations
  - Industry
  - City/County
  - Education
Sustainability in Sector Strategies

- Defined MOUs
- Governance Structure
- Continuous improvement
- This is a new way of doing business, not a program
Matching funds

- Cash
- Tuition/training/certification fees
- Membership dues
- Co-sponsoring a case
- Manager
- Local foundation grants
- Government funds
Matching funds, in-kind

- Time spent (Average executive/HR level: $100/hr)
- Space (what would it rent out for * time)
- Equipment (use vs donation)
- Providing a teacher
- Transportation (bussing fees)
Matching funds, in-kind

- Keep documentation
  - Use forms
- Be consistent
- Thank your partners in quantifiable ways
  - “You all contributed $5,000 in time this month!”
Innovative Career Pathways

- Intermediary role:
  - Expose employers to a variety of options
  - Be a neutral guide around different programming
  - Translate education models into workforce speak
  - Don’t let meetings turn into programmatic sales pitches
Innovative Career Pathways

Do something different.

Start with ideal.

Work together to break down barriers.

If this is important, systems will have to change.
Innovative Career Pathways

- Apprenticeship models
- Combined HS and Adult programming
  - Bridge programs that result in credential
  - If you kept students in the same location for 1 more year, how many more would earn a credential?
Denver Public Schools, 2017

**K - 8 EXCITE**
- Exploratory STEM Courses

**YEAR 9 DISCOVER**
- Introductory & Survey Courses

**YEAR 10 NAVIGATE**
- Foundational Courses

**YEAR 11 ENGAGE**
- Advanced Level 1 Courses

**YEAR 12 ADVANCE**
- Advanced Level 2 Courses

**YEARS 13/14* IMMERSE**
- Post-Secondary Level Courses

**CareerResidency** - Optional 3-yr immersive pathway

**Work-Based Learning**
- CareerSpark Industry Exploration Event
- CareerX Industry Exploration Event
- CareerCoach Mentoring Program
- CareerLaunch Internship Program
- CareerLaunch Industry Consulting Project
- CareerCollaborate Industry Consulting Project

*For students who opt into the CareerResidency.
HERE’S HOW IT WORKS.

CAREERWISE APPRENTICES SPLIT TIME BETWEEN SCHOOL, TRAINING CENTERS, AND WORK ON A SCHEDULE THAT WORKS FOR STUDENTS AND BUSINESSES

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AT HIGH SCHOOL</strong></td>
<td>~3 days a week</td>
<td>~2 days a week</td>
<td>NA</td>
</tr>
<tr>
<td>Core academic courses at school (e.g., math), some community college coursework</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ON-THE-JOB</strong></td>
<td>16 hours a week</td>
<td>24 hours a week</td>
<td>32-40 hours a week</td>
</tr>
<tr>
<td>On-the-job training, in form of occupation, rotation or projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AT TRAINING CENTER</strong></td>
<td>~150 hours a year</td>
<td>~175 hours a year</td>
<td>~200 hours a year</td>
</tr>
<tr>
<td>Multi-skill training curriculum in pathway-specific skills</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CareerWise Colorado, 2017
Jay/Blackford County Example

- Incumbent worker training
  - Competency based certificates
  - Employer-paid education time
  - Stepping stones up the career ladder
    - Map certificates to wages
    - Stackable credentials
  - Short-term is better
<table>
<thead>
<tr>
<th>Level</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue Level</strong></td>
<td></td>
</tr>
<tr>
<td>Automation Systems Certificate</td>
<td>72</td>
</tr>
<tr>
<td>Automation Systems</td>
<td></td>
</tr>
<tr>
<td>Robotics and Motion Control</td>
<td>62</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>134</td>
</tr>
<tr>
<td><strong>Red Level</strong></td>
<td></td>
</tr>
<tr>
<td>Industrial Controls and PLCs Certificate</td>
<td>38</td>
</tr>
<tr>
<td>Control Systems</td>
<td></td>
</tr>
<tr>
<td>Programmable Logic Controllers</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>94</td>
</tr>
<tr>
<td><strong>White Level</strong></td>
<td></td>
</tr>
<tr>
<td>Basic Machining Certificate</td>
<td></td>
</tr>
<tr>
<td>Basic Machining</td>
<td>66</td>
</tr>
<tr>
<td>Basic Welding Certificate</td>
<td></td>
</tr>
<tr>
<td>Basic Welding</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>114</td>
</tr>
</tbody>
</table>
Innovative Career Pathways

- Accelerated credentials, combining credentials
  - Especially for smaller businesses

- Recognition of previous skills for credit or credential

- Timeframe that makes sense, not based on current educational limitations
Summary of Sector Strategies

- Data: Target metrics, continuous improvement
- Business engagement: On-the-ground, consistent
- Sustainability: Supplemental grant funds and large in-kind/local matching
- Innovative Pathways: Change the system, listen to employers
Support after grant awards

- On-the-ground facilitation
- Exposure to best practices
- Networking
Opportunities to Stay Engaged

- Sign up for EWIN email list
- Education-Workforce Partnership grants, next round in Spring 2018
- National & Statewide study tours
- EWIN Pathways Summit: June 13 & 14 2018!