Panelists

- **Robert I. Lerman**, Institute Fellow, Urban Institute
- **Svetlana Darche**, Senior Research Associate, WestEd
- **Maria Flynn**, Senior Vice President, Jobs for the Future
- **Viktória Kis**, Project Manager, Work-based Learning in Vocational Education and Training, Directorate for Education and Skills, OCED
- **Demetra Nightingale**, Chief Evaluation Officer, U.S. Department of Labor
History of Work-Based Learning

Robert I. Lerman, The Urban Institute
Defining Work-Based Learning (WLB)

- An instructional strategy that prepares all students for success in postsecondary education and careers through direct engagement with industry and community professionals.

- Experiences intentionally designed to address learning outcomes that are difficult to achieve through classroom or standard project-based learning alone.
Outcomes Sought by WBL

- Understanding of career options and skills required
- Development of knowledge and skills
  - Technical knowledge and skills
  - Application of academic knowledge and skills
  - “21st Century” skills (e.g., problem-solving, communication, collaboration)
  - Social-emotional skills
  - Navigational skills
**Work-Based Learning Continuum**

**Career Awareness**

Learning ABOUT work
Build awareness of the variety of careers available and the role of postsecondary education; broaden student options.

**Career Exploration**

Learning ABOUT work
Explore career options and post-secondary for the purpose of motivating students and to inform their decision making in high school and postsecondary education.

**Career Preparation:** Practicum and Internships

Learning THROUGH work
Apply learning through practical experience that develops knowledge and skills necessary for success in postsecondary education and careers.

**Career Training**

Learning FOR work
Train for employment and/or postsecondary education in a specific range of occupations.
Features of WBL

For all experiences

- Connection to classroom with focus on outcomes
- Direct, systematic employer and/or community input
- Authentic value and benefit to students beyond the classroom

For intensive career preparation-level experiences

- Depth of experience with opportunity to engage in CoP
- Production of goods/services with value to employers, clients, and communities beyond the classroom
Why a Purpose-Driven vs. Place-Based Definition?

In the 21st C., when we want to prepare ALL students for postsecondary education/training, careers, and life-long learning...

- To address learning outcomes that may be attained through varied experiences
- To explore options that can enable us to scale work-based learning and ensure equity of access
- Because the workplace is changing and new skills and modes of work are needed
New Model of WBL

- For all students — to apply classroom knowledge and develop essential career readiness skills not easily taught in classrooms
- Continuum of experiences provided over time
- Location determined by purposes and goals, including equity in access
- Structured learning component, with intentional learning goals and assessments, linked to both CTE and academic classes
- Supervisor as worksite mentor
- 360 degree view until focused training required
Making WBL Work for Disconnected Youth
Organisation for Economic Co-operation and Development
In the US 4 out of 10 disconnected youth face difficulties with basic skills.
Three policy tools

1. Preparing youth for work-based learning
2. Supporting youth engaged in work-based learning
3. Targeted subsidies and tax breaks
Policy tool 1:
Preparing youth for work-based learning

The tool:
- Pre-apprenticeship type programs
- Common elements: literacy, numeracy, technical skills, career guidance

How should it help disconnected youth access to WBL?
- Better skills from the start → improved capacity to meaningfully contribute to productive work
- Better matching between trainees/apprentices and firms
Policy tool 2:
Supporting youth engaged in work-based learning

The tool:
Additional support offered to trainees/apprentices who need it

How should it help disconnected youth access to WBL?
Trainees/apprentices learn faster and contribute more to productive work
Policy tool 3:
Targeted subsidies and tax breaks

The tool:
Money given to firms who offer work-based learning opportunities to disconnected youth

How should it help disconnected youth access to WBL?
The costs of offering work-based learning are reduced
Which policy tool works (best)?

How to use them best?

Policy report in late 2016
Evidence on Work-Based Training

Demetra Nightingale
Chief Evaluation Officer
U.S. Department of Labor
Research and Evaluation Evidence

General Findings

- The more closely training is related to a real job or occupation, the better the results for training participants.
- Most training in the U.S. is work-based and employer sponsored
  - Over a quarter of all workers report that they receive some formal job training from their employers, and
  - About 70 percent of firms indicate they offer some type of training to employees
- Firms tend to invest in higher level workers (e.g., management and mid-level workers)
- Government investment in lower-skilled workers expands work-based training
Benefits to Workers
Findings from evaluations

- OJT (e.g., 6-9 months subsidy of 50-60% of wages)
  – Increases employment over time, increases earnings

- Registered Apprenticeships
  – Increases lifetime earnings of an average of $8,000 a year, and about $200,000 in lifetime earnings

- Summer jobs for youth
  – Important source of income and positive engagement
  – Comprehensive models that mix work-place job with education, mentoring, and personal counseling have positive impact—Chicago study found large reduction in violent crime and arrests.
Benefits to Workers
Findings from evaluations

- Workplace-based literacy programs
  - Improved skills, attendance, and job performance

- Subsidized or Transitional jobs—evidence is more mixed, but it is an important model
  - Provides short-term income and work
  - For low-skilled workers, youth, new immigrants/refugees, formerly incarcerated and persons with barriers to employment, provides skills and work experience if the training and assignment is of high quality
  - The key to long-term success is to actually transition to a regular job—that is sometimes challenging
  - Some positive evidence on reducing recidivism among formerly incarcerated
Benefits to Employers

Findings from research

- Less research on employers and firms
- Firms benefit from workplace training—if the training is high quality.
  - Lower turnover
  - Higher productivity
  - Positive returns to shareholders
- Little research yet estimating Firms’ Return on their Investment
Jobs for the Future

Maria Flynn
NEW JFF PUBLICATION
Making Work-Based Learning Work

JFF’s Work-Based Learning Models in Action:

- Showcases examples of different WBLs that incorporate one or more key principles
- Briefs currently available: Industrial Manufacturing Technician (IMT) Apprenticeship, Work-Based Courses
- Additional briefs coming soon
WHAT IS WORK-BASED LEARNING?

CORE PURPOSES:

• Exposes participants to the world of work
  • Exposes participants to a career field
  • Strengthens academic learning
  • Enhances professional skills
  • Provides a temporary or permanent job

OCCURS IN WORKPLACES

HAS MEANINGFUL JOB TASKS

DEVELOPS SKILLS AND KNOWLEDGE

SUPPORTS CAREER ENTRY AND ADVANCEMENT
BENEFITS OF WBL

BENEFITS TO PARTICIPANTS
- Develop professional and career-track skills
- Gain real-world work experience
- Earn postsecondary credentials that match employer expectations and needs

BENEFITS TO EMPLOYERS
- Employees have the information and skills needed to make informed job and long-term career choices
- Reduced turnover
- Greater productivity
- Lower costs
A lack of access to work-based learning limits the career prospects and economic mobility of millions of youth and adults, and prevents them from becoming part of the talent pipeline employers need to spur economic growth.

- 70% of employers offer some form of WBL to employees
- $177 BILLION spent by employers on training annually
- 58% spent on employees with a BA or higher
- 25% spent on employees with some college (sub-BA)
- 17% spent on employees with a high school diploma or less
# Overview of WBL Models

## Populations Served

<table>
<thead>
<tr>
<th>Internships</th>
<th>Co-ops</th>
<th>Transitional Jobs</th>
<th>On-the-Job Training</th>
<th>Apprenticeships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary, Postsecondary, Opportunity Youth, Recent Grads, Adults</td>
<td>Secondary, Postsecondary</td>
<td>Opportunity Youth, Individuals w/Barriers to Employment</td>
<td>Dislocated Workers, Low-Skilled Adults, Opportunity Youth</td>
<td>Opportunity Youth, Incumbent Workers, New-Career-Seekers</td>
</tr>
</tbody>
</table>

### Core Purpose

- Exposure to career field, world of work
- Development of professional skills
- Academic learning
- Temporary job
- Development of career-track skills
- Academic learning
- Development of career-track skills
- Permanent job
- Permanent job
7 PRINCIPLES FOR EFFECTIVE WBL

Support entry and advancement in a career track

Provide meaningful job tasks that build career skills and knowledge

Offer compensation

Identify target skills and how gains will be validated

Reward skill development

Support college entry, persistence, and completion

Provide comprehensive student supports
Youth WBL
GROWING PATHWAYS TO PROSPERITY NETWORK

Twelve states with over 50 regions, rural to urban, serve as starting places for demonstrating success, with a focus on scaling grades 9-14 integrated academic and career pathways statewide.

Of our nation’s K12 public school students in 12 states are touched by the network.
CONTINUUM OF EMPLOYER ENGAGEMENT IN YOUTH WBL

**Least Intensive Engagement**
- Guest speaker
- Company tours and field trips
- Job shadows
- Mock interviews

**Moderately Intensive Engagement**
- Service learning
- Class projects or challenges
- Mentorships
- Curriculum advising

**Most Intensive Engagement**
- Teacher externships
- Student internships
- Student capstones and assessments
- Convening and championing
- Apprenticeship
STATE STRATEGIES FOR WBL

- Cultivate highly visible employer champions
- Support and highlight districts actively involved in career development education and WBL
- Disseminate effective practices to other districts/regions
- Align education programs of study with state labor market needs and economic development priorities
- Use bully pulpit to emphasize that *all young people* (in K12, community college, four-year college, and beyond; liberal arts or technical studies) are headed for a career, and that WBL matters
- Education policies: extended learning time, credit for WBL, teacher externships
Incumbent Worker
WBL
The Jobs to Careers (J2C) initiative was funded by the Robert Johnson Wood Foundation (RJWF) and the Hitachi Foundation, and managed by Jobs for the Future.

17 sites across the country (allied health, long-term care, community health, and behavioral health).

Tested work-based learning as a career advancement strategy. Formalized learning that occurred on the job.

1,000 frontline health care workers:
- 67% wage increase
- 65% credential attainment
WORK-BASED COURSES

- Builds on J2C with a focus on manufacturing. Funded by National Science Foundation (NSF)
- An innovative way to bring college to the production line by using the job as a learning lab
- Key features:
  - Integrates the classroom and workplace by formalizing instruction that happens during work
  - Reflects the unique production needs of a company because teaching happens on the job
  - Fulfills program requirements for a community college certificate or degree

www.jff.org/workbasedcourses
BENEFITS OF WORK-BASED COURSES

- **Community Colleges**
  - Meet the needs of employers while maximizing value to students and maintaining academic standards
  - New student enrollment as gateway to certificate and degree programs

- **Employers**
  - Rigorous academic training for hard-to-fill positions
  - Tailored to their production processes and skill needs
  - Improve retention and loyalty among workers

- **Students**
  - Opportunity for career and educational advancement while working
  - Training immediately helps on the job
  - College credit and knowledge can be transferred across the industry
PRELIMINARY OUTCOMES

- JFF developed the model and piloted it with Owensboro Community Technical College in Kentucky, with funding from NSF
  - 115 students enrolled
  - 15 manufacturers participated including Aleris Corporation, Crop Production Services, Kimberly Clark, and Waupaca Foundry

- Interim outcomes of pilot
  - **27 courses** adapted, including in industrial maintenance, fluid power, PLC, machine tooling, welding, and blueprint reading
  - Work-based course students outperformed students in comparable traditional OCTC classes, with an **average GPA of 3.89 vs. 3.46**
  - Students earned an average of **11 credits**
  - **26%** of incumbent participants plan to go on to a degree. New workers have also enrolled as part of an 18-month A.A.S. degree
  - **62%** of students reported a promotion or new role and **57%** reported a wage increase in a post-course survey
OTHER FINDINGS

- Employers use work-based courses either to:
  - Better prepare workers for current jobs, or
  - As part of a strategy to develop talent for hard-to-fill positions—this was correlated with more wage increases and promotions

- Supervisor training is critical: supervisors or other employer mentors were often uncomfortable with their role as instructors

- Selection of work-based course students was driven by employers, not college or course preparation

“As a peer mentor, one piece of my accountability is not only transferring that knowledge, but making sure I understand when they need to move to the next step.”

- Tim Sheldon, Organizational Effectiveness Specialist, Kimberly-Clark
WORK-BASED COURSES

Read more about work-based courses, learn the six steps to implementation, and watch videos in an online toolkit:

www.jff.org/workbasedcourses

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IMT APPRENTICESHIP

- Industrial Maintenance Technician—stackable apprenticeship, easily adapted for different contexts, hybrid model (time-based and competency-based)

- JFF in partnership with AFL-CIO Working for America Institute, industrial unions, and regional intermediaries

- 164 registered apprentices to date
  - 26 apprentices achieved journey worker status

- Currently replicating in 8 states (WI, MI, MN, PA, KY, IN, OH and IL)

- USDOL H-1B and American Apprenticeship Grant funding

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