INNOVATIVE DELIVERY MODELS IN POSTSECONDARY EDUCATION

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PRESENTATION OVERVIEW

1. ABOUT JOBS FOR THE FUTURE
2. POSTSECONDARY CREDENTIALS
3. REDESIGNING DEVELOPMENTAL EDUCATION
4. EMPLOYER ENGAGEMENT IN POSTSECONDARY
5. HIGH SCHOOL THROUGH COLLEGE CONTINUUM: PATHWAYS TO PROSPERITY NETWORK
6. JFF RESOURCES FOR POLICY AND PRACTICE
7. DISCUSSION / Q&A
ABOUT JOBS FOR THE FUTURE
Our Mission:
JFF works in 43 states and over 200 communities to ensure that all lower-income young people and workers have the skills and credentials needed to succeed in our economy.

Our Vision:
The promise of education and economic mobility in America is achieved for everyone.

Our Goals:

1. **Preparing for College and Career:** All young people graduate high school on a clear path to college completion and career success.

2. **Earning Postsecondary Credentials:** All students gain the skills they need to earn postsecondary credentials with high labor market value.

3. **Advancing Careers and Economic Growth:** All workers obtain the education and training required to move into high-demand, high-wage, high-growth careers with clear paths for advancement.
HOW JFF WORKS: SCALING SOLUTIONS

Develop Evidence-Based Innovations

Build Systems and Field Capacity

Advocate and Influence Policy

ALIGNMENT ACROSS SECONDARY—POSTSECONDARY—WORKFORCE
URGENT NEED: POSTSECONDARY CREDENTIALS

50%+ of 25 year olds in the U.S. have no postsecondary credential with which to enter the job market.

29 million Adults in the U.S. without a high school diploma or GED.

65% of all students entering community colleges are referred for developmental (remedial) education, and only 1 in 4 of those complete a credential within 8 years of enrollment.

OPPORTUNITY: 1,200 community colleges in the U.S. serve 12.4M students and provide 750k degrees and 450k credentials each year.
65%, or 106.6M, of jobs will require some postsecondary education.

Source: Georgetown University Center on Education and the Workforce, RECOVERY (2013)
TYPES OF POSTSECONDARY CREDENTIALS

1. Educational diplomas, certificates & degrees
2. Registered apprenticeship certificates
3. Occupational licenses
4. Personnel certifications from industry/professional associations
5. Other certificates
WHAT MAKES A HIGH-QUALITY CREDENTIAL?

4 QUALITIES TO LOOK FOR IN A CREDENTIAL

- Industry-recognized
- Portable
- Stackable
- 3rd Party Validated/Accredited
In 2010, there were more than 900,000 sub-baccalaureate certificates awarded by colleges, up from 700,000 in 2008.¹

Most of these are not national in scope.

More than 4,000 credentialing bodies in the U.S., with less than 10% accredited or reviewed by a third party.²

Poor employer uptake: For example, only 7% of manufacturers list a credential in their job posts³

Source 1: http://nces.ed.gov/surveys/ctes/tables/P105.asp
Source 2: http://www.clasp.org/
Define quality credentials, and terms like “industry recognized”

Incentivize institutions to produce credentials that meet quality standards

Develop data systems to better track student outcomes: linking credentials to job attainment, job retention, and wage information

Promote private-public partnerships that include employers and focus on quality (not just quantity) credentialing
REDESIGNING DEVELOPMENTAL EDUCATION
Foundational **redesign** work in Virginia and North Carolina led to big advances in the field:

- **Rethinking** assessment and placement: “multiple measures”
- **Reduce** need for developmental education altogether: *college prep curriculum*
- Developmental education positioned as an **on-ramp** to programs of study: *suggested course-taking and degree audits*

32% increase in students earning 12 or more college credits in one year
Create structures so that colleges can ensure that all developmental education is accelerated. Stand-alone developmental education with traditional sequencing should be phased out over time.

Implement metrics that measure student success, retention, persistence, and completion—and provide transparency on these and other essential indicators.

Incentivize colleges to work with feeder high schools, adult basic education, and workforce programs to align curriculum and expectations.
Support colleges as they **redesign student intake, orientation, and advising** to create a seamless system of student evaluation, support, and planning.

Implement policies that **remove high-stakes placement decisions** by requiring colleges to use multiple and holistic placement measures.

Incentivize colleges to ensure that **delivery of developmental education is contextualized** and provides an **integrated on-ramp** to a program of study.
EMPLOYER ENGAGEMENT
SKILLS GAP: PERCENTAGE OF EMPLOYERS STRUGGLING TO FIND SKILLED WORKERS

Source: Eleven employer surveys from different entities as cited in chart, 2013-2014
96 percent of college and university chief academic officers said they are extremely or somewhat confident in their institution's ability to prepare students for success in the workforce.

Just 11 percent of business leaders strongly agree that today's college graduates have the skills and competencies their business needs.

Source: Gallup Poll, 2014
Early Employer Involvement
- Identify skill needs with employers
- Build curriculum working with college faculty
- Align college curriculum with industry-recognized credentials

Engage Employers in Learning
- Internships
- Clinical education
- On-the-job training
- Apprenticeships

Early and deep employer engagement results in JOBS for graduates
**Florida Trade:** Colleges across the state partnering with 270 manufacturing employers that provide program development input and work-based learning such as internships, guest speakers, and interviews leading to jobs.

**Get Into Energy:** Five colleges, 10 industry partners, working together to meet the demands of a rapidly growing population and changes in the energy industry.

**Air Washington:** Eleven colleges and Aerospace Industry representatives partnering to provide training to 2,600 workers in advanced manufacturing/composites, electronics/avionics, aircraft assembly, and aircraft maintenance.
EMPLOYER ENGAGEMENT KEYS TO SUCCESS

- Participation of economic development or workforce development organizations and industry associations
- State-level policies and practices that support regional economic development by supporting industry/educator partnerships, and by convening employers in key sectors
- Providing state level support regarding labor market information and industry strategy and sector development
- Support from an intermediary—an organization to provide structure and support the collaboration
Twelve states with 40+ regions, rural to urban, serving as starting places for demonstrating success, with a focus on scaling grades 9-14 integrated academic and career pathways statewide. *Not a new program or add-on reform, but a strategic alignment and bolstering of existing initiatives to improve education, workforce, and economic outcomes.*
Every student has clear college and career goals with the supports to achieve them.

Every employer has a pipeline of young professionals with the skills needed to contribute to and lead the workforce.

Every regional and state economy is thriving and growing, providing opportunities for upward mobility to its citizens.
System Outcomes:

Financially sustainable, aligned and integrated 9-14(+) career pathway systems

Increased number of skilled young professionals with credentials of value to the labor market

State and regional economies develop talent pipelines in key industry sectors

Adapted from the ED OCTAE Advancing CTE initiative
Complete high school with at least 12 college credits and work-based learning experience

Attain postsecondary credential with value in regional labor market

Advance in career and pursue further education as interested

Launch a career in a high-demand, high-growth, high-wage occupation

ALL YOUNG PEOPLE
KEY PATHWAYS IMPLEMENTATION LEVERS

Engaged employers: work-based learning opps. & curricula support

Intermediary links between education and employers

Early, sustained career counseling and information

Committed state leaders and favorable policy environment

Rigorous Academic and Career 9-14 Pathways
Awareness & Exploration
- Guest speakers
- Company tours or field trips
- Career fairs
- Mock interviews

Preparation
- Job shadows
- Service learning
- Class projects or challenges
- Mentorships

Training & Application
- Deep internships
- Paid apprenticeships
- Capstone projects
- Faculty externships
- Mentorships

Increasing Intensity of Employer Engagement

Source: Adapted from Guide to Becoming a P-TECH Employer; JFF, IBM, CUNY, P-TECH
Early Secondary
• How many students are enrolled in Pathways?
• How many students are on-track to graduate without remediation in postsecondary?

Late Secondary
• Are students graduating without needing remediation in postsecondary?
• How many students are completing a Pathways program of study?

Post-secondary
• Are students enrolling in postsecondary education?
• How many students are enrolled in a Pathways program of study?
• Are students leaving postsecondary with credentials of value to labor market?

Career
• Are graduates finding a job? In the field that they studied?
• Are graduates earning a family-sustaining wage?
• Are high-demand, high-growth jobs being filled?
**Policy Implications for 9-14 Pathways**

- **Dual enrollment** policy: student eligibility and access, quality assurance, sustainable funding, accountability, data systems, integrated student supports

- Incentivize **work-based learning partnerships** for young people; create structures for cross-agency collaboration at state and regional levels to support work-based learning

- Funding mechanisms that **support pathways innovation and cross-sector partnerships** to accelerate the work

- Access to and usage of current **labor market information** to inform career advising and pathways development
JFF WEBSITE: RESOURCES FOR POLICY AND PRACTICE (WWW.JFF.ORG)

Browse by area of work:
ALL  PREPARING FOR COLLEGE AND CAREER  EARNING POSTSECONDARY CREDENTIALS  ADVANCING CAREERS AND ECONOMIC GROWTH

ABOUT OUR AREAS OF WORK

Accelerate TEXAS
Integrating basic skills with career and technical pathways to help adults acquire skills and...

Accelerating Opportunity
Improving Adult Basic Education to increase the number of adults who enter postsecondary education...

Back on Track Designs
Reengaging youth and young adults who are off track to graduation, or disconnected from both...

Breaking Through
Strengthening community college efforts to help low-skilled adults enter and succeed in...

Credentials That Work
Using innovations in labor market information technology to narrow the skills gap by preparing...

Postsecondary State Policy
Advancing states and community college systems on developing accelerated pathways through community...
Strengthening State Policies to Advance Postsecondary Success and Careers

Advising states and community college systems on developing accelerated pathways through community college and strengthening policies to help more students graduate with a high-value credential.

57 PERCENT of students who take no remedial courses graduate within 8 years

29 PERCENT of students who take 1-2 remedial courses graduate within 8 years

19 PERCENT of students who take 4 remedial courses graduate within 8 years


The need for improvements in college completion is compelling. Between 1970 and 2009, undergraduate enrollment in the United States more than doubled, while the completion rate has been virtually unchanged. We work to improve student success and completion.

Jobs for the Future's Postsecondary State Policy work advocates for state policies that support structured, accelerated student pathways through community college to high-value credentials and transfer, including innovating and reforming remedial or developmental education.
Policy Meets Pathways: A State Policy Agenda for Transformational Change

National leaders, state officials, and system heads need to “put efforts to bolster completion on a new trajectory” by analyzing the extent to which state policies support the colleges that are trying to do right by their students, and then by designing policy environments meant to serve large percentages of low-income and nontraditional students. Institutions need to operate in a policy environment that helps them introduce comprehensive and integrated reform strategies that change every aspect of what they do. The report identifies specific strategies states and colleges can follow and model efforts on nine campuses in Florida, North Carolina, and Ohio—states that have made good progress in creating incentives for colleges to take on the types of transformational change necessary to implement structured pathways.

LEARN MORE

Leading the Charge for Change at Community Colleges

Cranking up student success at community colleges requires many integrated changes at both the state and college level. To organize around a unified agenda and achieve that degree of change, seven states now each host an independent Student Success Center that provides a vision, a venue, and practical support for research, collaboration, policy, and programs. Change magazine highlights JFF’s work to develop and support centers in Arkansas, Connecticut, California, Michigan, New Jersey, Ohio, and Texas.

LEARN MORE

DesignForScale

In spite of a decade of interventions and student support initiatives, the nation’s most disadvantaged adults and young people are not gaining traction towards degrees. To help accelerate progress, JFF will work with states and campuses to implement integrated, visionary interventions through a new initiative called DesignForScale. The DesignForScale resources and services are designed to help state actors create the policy conditions within which community colleges can implement evidence-based, institution-wide innovations.

LEARN MORE
1. Define “quality” credentials, with curriculum responding to labor market needs

2. Align data systems to track long-term outcomes; transparency in goals, measures of success, data reporting

3. Partnerships: public-private, cross-sector, cross-agency, regional in support of career pathways

4. Employer engagement, including work-based learning, sector strategies, curricula design

5. Dual enrollment and career pathways programs of study starting in high school
QUESTIONS FOR DISCUSSION

> What are your state’s postsecondary completion rates? Does your state have goals and strategies for educational attainment and/or workforce outcomes?

> What is the “gap” between the education level of your state’s workforce and the projected postsecondary requirements for jobs of the future in growing industry sectors?

> What do you know about your state’s least successful postsecondary students? What supports are in place for their success? Is there widely distributed data indicating where the leaks are in the education pipeline?

> Does your state’s postsecondary system align curricula to real-time labor market demand? To high school programs of study?

> How does your state test and bring to scale key reforms or improvement strategies?

> How do the education, workforce, and economic development systems collaborate in your state on career pathways?
APPENDICES

ADDITIONAL EXAMPLES, DATA, AREAS FOR CONSIDERATION
> **ACCELERATION**: More material in less time, honoring prior learning, engaging student interest, and increasing likelihood of obtaining credential

> **CONTEXTUALIZATION**: Content and skills taught in (or connected to) the context that students will use in their future work and daily lives

> **SCALABILITY**: Evidence-based and promising practices are replicable in other institutions and communities; coherence in systems-building

> **INDUSTRY-RESPONSIVE DESIGN**: Strong collaboration with employers inform the skills, competencies, and credentials that employers need from education and training programs
### Workforce Certificates
- PC Hardware Support
- Data Management
- Mobile App Programming
- Database Technologies
- Security+
- Health IT Support
- Computer Forensics
- Data and Accounting Support

### Career Certificates
- Computer Support Specialist
- Data Management/Storage
- OO Programming
- Database Programming
- Cyber Security
- Health IT Specialist
- Digital Forensics
- Data Analytics

### Associate’s Degrees
- Networking and Computer Support
- Data Management and Analytics
- CS or Technical Programming
- Database Administration
- Information Security
- Health Informatics
- Digital Forensics and Investigations
- Data Analytics and Informatics

### Bachelor’s Degree (BSIT)
- Systems Administration
- Information Systems
- Computer Science
- Information Architecture
- Information Security Assurance
- Health Analytics/MGT
- Computer Forensics
- Business Intelligence

<table>
<thead>
<tr>
<th>Credits</th>
<th>16-19 credits</th>
<th>27-30 credits</th>
<th>60+ credits</th>
<th>120+ credits</th>
</tr>
</thead>
</table>

BATEC (Broadening Advanced Technological Education Connections) is a national Center of Excellence for Computing and Information Technologies sponsored by the National Science Foundation.
Skills Documentation
- Identify entry level jobs
  - Validated by labor market information
- Summarize expertise to perform entry level jobs
- Develop job descriptions with defined competencies

Skills/Curriculum Map
- Identify AAS degree pathways
- Order skills by complexity
  - Technical Skills vs. Professional Skills
- Connecting skills to courses & curricula
- Developing an integrated scope and sequence
- Providing work-based professional development for school staff

Skills/Curriculum Map
- Understand AAS degree requirements
- Work with college to develop course scope and sequence
- Backwards map specific work-ready/21st Century skills to 9th grade
- Determine set of academic outcomes, potential project topics and WBL opportunities
- Provide PD for school staff
Pathways to Prosperity in Georgia

A Guide to Understanding and Implementing Pathways

Georgia has taken big steps forward in recent years in the areas of economic and workforce development. State policies have been put in place that support the efforts of local communities to work collaboratively to develop and implement grades 9-14 career pathways aligned with state and regional workforce needs. In 2013, Georgia became a member of the Pathways to Prosperity Network, a collaboration of member states, the Boston-based nonprofit Jobs for the Future, and the Harvard Graduate School of Education. The Pathways to Prosperity Network seeks to ensure that many more young people complete high school and attain postsecondary credentials with value in the labor market. Each participating state is engaging educators and employers in building a system of grades 9-14 career pathways, combining high school and community college, that launches young people into initial careers while leaving open the prospect of further education. In Georgia, the Pathways to Prosperity work is being led by a state-level cross-agency team that includes the Georgia Department of Education, the Technical College System of Georgia, the University System of Georgia, and the Georgia Department of Economic Development.
Pathways Tennessee Regions

9 Regions based on the ECD Jobs Base Camps

★★ = Pathways Region already online or are projected to come online in 2015.
Pathways Tennessee

- Workforce Investment Board
- Industry Partners
- Economic Development Groups
- State & Local Government
- K-12 School Systems
- Postsecondary Partners

Pathways Tennessee is about changing culture and aligning priorities.
PATHWAYS TENNESSEE STATE PLAN

CHAMPION
• Convene and Utilize State Partnerships to Advocate the Importance of Regional Academic / Career Pathways Across Tennessee

SUPPORT
• Support Regionally Led and Sustainable Pathways Initiatives that Align with Local Industry Needs

ALIGN
• Align and Expand Resources across State Agencies to Assist Regional Pathways Initiatives

EVALUATE
• Ensure Continuous Improvement of Pathways Tennessee Opportunities through Critical Evaluation of Processes and Outcomes
States all over the country redesigning developmental education through legislative and/or administrative mandates:

> Making dev ed optional for high school graduates, regardless of test scores (e.g. Florida, Massachusetts)
> Eliminating dev ed for all but lowest literacy students (e.g. Colorado, Connecticut)
> Requiring multiple measures for assessment and placement (e.g. No. Carolina)
> Mandating acceleration and other delivery structures (e.g. Florida)
> Establishing programs of study/structure (e.g. Florida, Ohio)
> Requiring student supports (e.g. Florida)
> Creating incentives (e.g. OH outcomes-based funding)
## DEVELOPMENTAL EDUCATION REFORMS

<table>
<thead>
<tr>
<th>Theory of Action</th>
<th>Compressed</th>
<th>Co-Requisite</th>
<th>Curricular Redesign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete two courses in one semester</td>
<td>Simultaneously enroll in college course and supplementary remediation</td>
<td>Fine-tune or streamline content to better align with college curricula</td>
</tr>
<tr>
<td>Target population</td>
<td>All students</td>
<td>Students placed in upper-level developmental courses</td>
<td>Varies depending on redesign</td>
</tr>
<tr>
<td>Primary sphere of Influence</td>
<td>Structure</td>
<td>Structure and Misplacement Remedies</td>
<td>Curriculum</td>
</tr>
<tr>
<td>Examples</td>
<td>CCD FastStart</td>
<td>CCBC ALP</td>
<td>Carnegie Statway, Chabot Accelerated English</td>
</tr>
<tr>
<td>Evidence of Effectiveness</td>
<td>Stronger completion of developmental and college math; no impact of persistence</td>
<td>Stronger completion of second college English course and one-year persistence</td>
<td>Statway: Stronger college math completion Chabot: Stronger transfer and graduation</td>
</tr>
</tbody>
</table>

Source: Community College Research Center, *JFF Bridging the Gap Conference, 2015*
<table>
<thead>
<tr>
<th>Theory of Action</th>
<th>Modularization</th>
<th>Linked Courses</th>
<th>Assmt. &amp; Placement Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break down content into smaller units; students take only what they need when paired with diagnostic assessment</td>
<td>Co-enroll in two or more classes; curricular integration and cohort design build academic and social engagement</td>
<td>More accurately assess and place students, reducing the likelihood of misplacement; may entail multiple measures for placement, changes to placement exams, and/or changes to placement policy</td>
<td></td>
</tr>
<tr>
<td>Target population</td>
<td>All students</td>
<td>All students</td>
<td>All students (though those nearest cutoff mostly impacted)</td>
</tr>
<tr>
<td>Primary sphere of Influence</td>
<td>Curriculum and Structure</td>
<td>Structure and Curriculum</td>
<td>Misplacement Remedies</td>
</tr>
<tr>
<td>Examples</td>
<td>Math redesigns in TN, VA and NC</td>
<td>Learning communities</td>
<td>NC multiple measures for placement policy; new VA placement test and policies; FL SB 1720</td>
</tr>
<tr>
<td>Evidence of Effectiveness</td>
<td>TN: Stronger short-term persistence and credits attempted but not credits completed</td>
<td>Modest positive impact on credit accrual; no effect on persistence</td>
<td>VA: Sizeable effect on gatekeeper course enrollment and completion but unclear if impacts persist</td>
</tr>
</tbody>
</table>

Source: Community College Research Center, JFF Bridging the Gap Conference, 2015
> Reward both progress and completion.
> Protect the academically and economically vulnerable.
> Make the incentive big enough to change institutional behavior.
> Implement the new formula gradually and with predictability.
> Get buy-in from key stakeholders, including faculty.
> Introduce performance-based funding in the context of a higher education improvement and efficiency strategy.

Competency-based education (CBE), in which credit is provided on the basis of student learning rather than credit or clock hours, is starting to gain traction with educators and policymakers.

CBE programs are often touted as a far more affordable route to college credit and a degree, but these claims often fail to account for assessment fees, differences in financial aid eligibility, and opportunity costs of time.

Many questions about CBE remain to be answered before its wide adoption, including which students and degree programs are best suited for CBE, overall cost of CBE compared to more traditional programs, and how to lower out-of-pocket costs for students.

Many Students’ Transfer Expectations Are Not Met

80% of students intend to earn a bachelor’s degree.

25% of students transfer to a 4-year college within 5 years.

17% of students earn a bachelor’s within 6 years of transferring.

Source: Community College Research Center, What We Know About Transfer, 2015
http://ccrc.tc.columbia.edu/media/k2/attachments/what-we-know-about-transfer.pdf
“In light of the limited capacity and rising costs at four-year colleges and universities, **vertical transfer offers a vital route to a bachelor’s degree for large numbers of underserved students**, as well as critical efficiencies for taxpayers in a time of scarce public resources. At the same time, there are **significant barriers to transfer**—the most pressing being the **loss of credits** that community college students experience when they transition to four-year institutions.”

Source: Community College Research Center, *What We Know About Transfer*, 2015
http://ccrc.tc.columbia.edu/media/k2/attachments/what-we-know-about-transfer.pdf
EDUCATION LEVEL OF U.S. LABOR FORCE

- No High School: 8%
- High School Diploma / GED: 24%
- Some College, No Degree: 14%
- Associate's Degree: 10%
- Certificate: 12%
- Bachelor's Degree: 21%
- Graduate Degree: 11%

Source: Georgetown Center on Education and the Workforce, 2012
2020 EMPLOYMENT PROJECTIONS

- HS Diploma or Less: 35%
- Some College/AA Degree: 30%
- BA Degree or Higher: 35%

Sources: Recovery 2020, Georgetown Center on Education and the Workforce, 2013; and Complete College America