

WHAT WORKS FOR ADULT LEARNERS

*Lessons from rigorous
career pathway
evaluation studies for
policy, practice, and
future research*

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Over the past 15 years, public and private investments and deep field work have yielded important findings about what works for adult learners. Yet, these studies and insights are often scattered over many organizations and across time. The authors wish to thank the Annie E. Casey Foundation, most notably Irene Lee, and Jobs for the Future staff. They designed this project to be so much more than a grouping of studies, or a highlight of a few initiatives. This project is about coalescing the very best evidence, practices, and policies to drive a broader systems reform agenda, trying to break through persistently low transition rates of adults into credentials and better jobs. It's about finding scalable solutions.

We could not have done this work without the Casey Foundation's timely support. We are also grateful to colleagues who attended our special panel meetings in July and December 2017, with special thanks to the Urban Institute and New America for hosting our meetings. Finally, this project would not have been possible without the many practitioners (instructors, students, partners, and others) as well as researchers who worked collaboratively to implement and evaluate career pathway programs. We thank them for their generous contributions to the greater good.

Executive Summary

Evaluation studies from our systematic review of career pathway programs show promising education and even more compelling employment and earnings outcomes..

The level of evidence, the strong economy, and the growing interest in implementing integrated pathway approaches suggests that now is the time to scale these approaches.

- *Career pathway (CP) participants were more likely to attain higher wages and annual earnings than the control/comparison group, and this positive impact grew at two or more years beyond program completion*
- *CP participants were more likely to complete a training-related credential and be employed and retained in a training-related job than the comparison/control group*
- *Positive employment and earnings outcomes extended to CP participants who had reported having personal barriers*
- *CP participants made basic skills gains at a higher rate than the control/comparison group*
- *CP participants completed more college credits and contextualized instruction than the control/comparison group*
- *CP participants earned an entry-level credential, including vocational certificates or licenses, at a higher rate than the control/comparison group*

Executive Summary

Career pathway approaches are an exciting advancement with an evidence base to support the claim that well-designed pathways can improve both academic and job outcomes for students and workers.

Translating these key findings for broader impact requires us to think differently about a holistic approach to scale:

- What needs to happen, that hasn't happened, to make effective models the "norm"?
- How do we ensure all students/workers who can benefit from these approaches can access them and are ready to succeed?
- How can we increase the number and quality of integrated pathway programs offered to potential students?
- How can we redesign career pathways so that they can create career opportunities that go beyond the first job?

Table of Contents

<i>page</i> 6	<i>page</i> 8	<i>page</i> 10	<i>page</i> 11	<i>page</i> 15
<hr/> <i>Introduction</i> <hr/>	<hr/> <i>Career pathway systems and programs</i> <hr/>	<hr/> <i>Asset framing</i> <hr/>	<hr/> <i>Career pathway foci</i> <hr/>	<hr/> <i>Methods</i> <hr/>
 <i>page</i> 21	 <i>page</i> 22	 <i>page</i> 27	 <i>page</i> 32	 <i>page</i> 37
<hr/> <i>Results</i> <hr/>	<hr/> <i>Pathway entry</i> <hr/>	<hr/> <i>Integrated training</i> <hr/>	<hr/> <i>Career progression</i> <hr/>	<hr/> <i>Recommendations</i> <hr/>

Introduction

Introduction

Career pathways are rooted in the belief that adults can access and succeed in postsecondary programs to improve labor market outcomes.

Analysis of results of career pathway program evaluation studies is imperative to understanding how to make wise investments and grow impact in the future.

This research supports the claim that integrated pathways can improve both academic and job outcomes for students.

Integrated pathway approaches are an exciting advancement to ensure this becomes a reality.

The level of evidence, the strong economy, and the growing interest in implementing integrated pathway approaches suggests that now is the time to scale these evidence-based approaches.

Career pathway programs and systems

Over the last two decades, strategic investments have led to the measured expansion of career pathways in states and regions of the United States. The leadership of multiple agencies of the federal government have agreed to a common definition and metrics, state and local governments have worked collaboratively to support implementation, and national foundations have funded experimentation to move career pathways from a lofty vision to a tangible reality.

The varied approaches to career pathways that have emerged (and continue to emerge) represent attempts to make substantive changes in the ways adults are educated for employment and in the ways they progress through careers. Evaluating how career pathway programs are implemented and how they impact learners is imperative to moving forward.

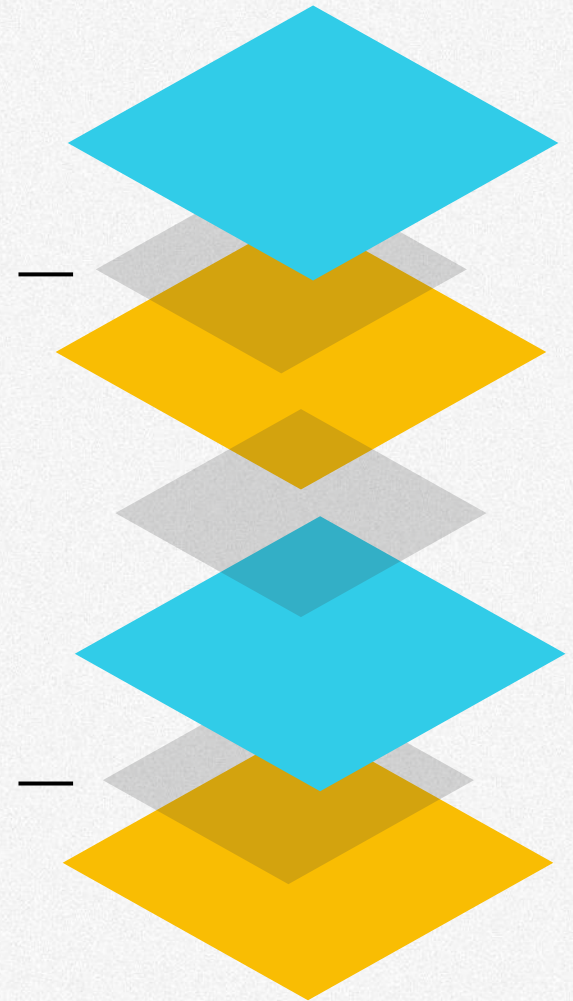
The time is right to assess whether career pathways can and should scale to more regions, more partners, and more adult learners.

Addressing inequities

The serious and growing income and wealth inequalities that are documented by Harvard's Equality of Opportunity Project (and many others) heighten the importance of understanding results of rigorous evaluations of career pathways*

Presently, opportunities to access education, training, and good jobs in the United States are not distributed equally, and these differences begin at birth and extend to and through adulthood.

More career pathway leaders need to recognize these inequities and aspire to address them through approaches that focus on student and labor market success.



*<http://www.equality-of-opportunity.org/>

Asset framing

We recommend dropping the deficit language that is used pervasively in the career pathway literature in favor of asset-based narrative that affirms adults as valued learners and employees.

Given the importance of achieving greater equity in education and employment outcomes, we believe some of the terminology associated with career pathways needs to change. Too often the literature uses terms to describe adult populations by their vulnerabilities rather than by their strengths. Labels such as “low-skill,” “low-income,” and “at risk” highlight personal shortfalls that prevent us from seeing what the whole person brings to learning and working endeavors.

In carrying out this project, we have replaced deficit terminology with an asset-based narrative that more honorably describes the adult learners who engage in career pathway programs.

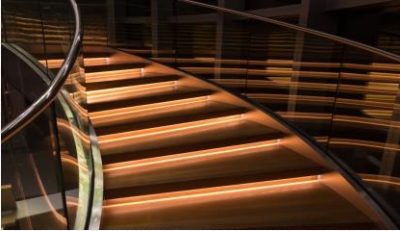
Career pathway foci

- ◆ *Pathway entry*
- ◆ *Integrated training*
- ◆ *Career progression*

Career pathway systems and programs deliver intentionally structured curriculum and student-focused supports that enable learners to pursue occupationally, technically, and professionally oriented postsecondary education and workforce training that, in turn, supports job entry and career advancement that offers a viable economic future for the students, their families, and their communities.

Across the career pathway continuum, three areas of focus emerge: pathway entry, integrated training, and career progression. Prior meta-analysis findings have not been organized in quite this way, presenting a unique opportunity to understand the findings of research more holistically.

Three foci



Pathway Entry

Some career pathway programs provide preparatory education and training, including bridge programs, designed to help students move from entry level, including non-college credit, to credit-bearing postsecondary coursework and employment



Integrated Training

Integrated training ensues through authentic partnerships involving employers, workforce training, adult education, postsecondary education, and other providers who offer industry-recognized credentials in high-demand occupations leading to family-supporting jobs and career opportunities



Career Progression

Career progression includes programming that enables learners/workers to advance in postsecondary education and training to secure multiple, often stacked credentials, including degrees, needed to transition to and through careers capable of providing financial stability

Program elements

Regardless of the specific focus, literature on career pathways includes a wide range of program elements, optimally guided by strategic education, employer, workforce, and community partnerships. These core elements include curriculum and instruction, work-based learning opportunities, industry-recognized credentials, proactive student supports, job placement, and career guidance. Rigorous research is needed to assess the results of career pathway efforts and support their improvement.

- *Engaged education-employer-workforce-community partnerships*
- *Contextualized, accelerated, and competency-based instruction*
- *Work-based learning options*
- *Industry- and postsecondary-recognized credentials*
- *Case management, navigation, and proactive student supports*
- *Job placement and continuing career guidance*
- *Rigorous evaluation and continuous improvement*

Key question

What do we know about the impact of career pathways on adults seeking to attain a living-wage career?

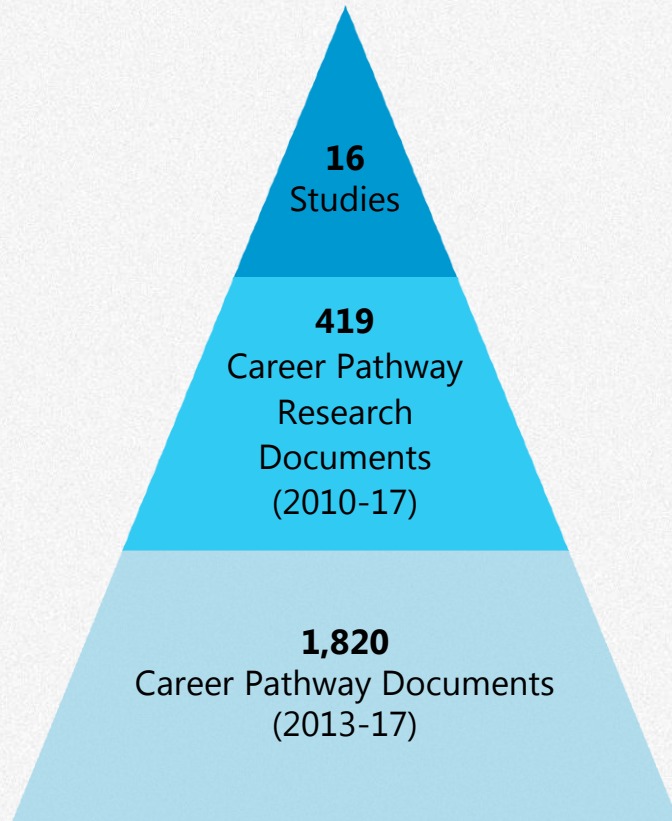
A limited but growing body of evaluation studies provides an in-depth look into how career pathway programs impact student outcomes. Our project examines these studies to better understand how career pathways are working, and how they are impacting adult learners' education and employment experiences.

We also expect to learn about the challenges, barriers, and failures that learners experience in career pathway programs. Scrutinizing these concerns is just as important as documenting student successes.

The remainder of this report presents methods, results, conclusions, and recommendations reflective of a small number of rigorous evaluations of career pathway programs that enrolled diverse adult learner populations from 2010 to 2017.

Methods

Evaluation study selection criteria



We began this project by identifying large-scale career pathway initiatives that had commissioned evaluation studies. More than 30 reports were included in this search, which was ultimately narrowed to 16 studies. The majority of studies have met or are anticipated to meet the rigorous selection criteria of the U.S. Department of Labor's CLEAR or the U.S. Department of Education's What Works Clearinghouse. We also queried the Education Full Text, ERIC, and Google Scholar search engines for literature on career pathways, not so much to analyze impact but to situate our work in the larger body of literature on career pathways over the last 5 to 10 years.

Evaluation studies

10 randomized control trials,
with most using mixed methods

4 quasi-experimental designs
(propensity score matching and
differences-in-differences, with
most using mixed methods)

1 large-scale longitudinal
qualitative study

1 systematic literature review

Our systematic review included 10 randomized control trials and four quasi-experimental design (QED) studies. Most of these studies also integrated qualitative methods to evaluate implementation. With respect to the QEDs, all four used Propensity Score Matching and one also used Differences-in-Differences. We also took into account the large-scale *Shifting Gears* qualitative evaluation, as well as the systematic review of workforce training authored by multiple federal agencies.¹

The selected studies concentrated on career pathway programs within states, within regions of the country and across multiple states across the nation. Regardless of state or region, most programs were located in large or medium urban locales, and very few were situated in rural areas.

Also, the preponderance of evaluations focused on programs in health care and manufacturing, with much more modest evidence of the trades, construction, transportation and logistics, and other areas.

¹ An annotated bibliography of the selected evaluation studies and complete reference list is available by request from Jobs for the Future (JFF) and lead author Dr. Debra Bragg at Bragg.Associates.Inc@gmail.com.

The review process

Our methodological approach to the systematic review included reading, notating, and critically analyzing the selected studies to address the main research question:

What impact do career pathway programs have on adult learners' educational and employment outcomes?

The process included categorizing each study's evaluation questions, design(s) and sources of evidence, outcome measures, analysis and interpretation approaches, and generalizations. Limitations, including estimated bias, were also noted.

Our review methods were also consistent with the American Educational Research Association (AERA 2006) guidelines that specify that all research claims (quantitative and qualitative) be both warranted and transparent.

Outcome measures

Employment outcomes

Our analysis included assessing categories of outcomes associated with the three foci of pathway entry, integrated training, and career progression.

The **employment outcomes** include placement in employment, including training-related employment; hourly wage and earnings gains; employment retention and promotion along career progress; and job quality and satisfaction.

Education outcomes

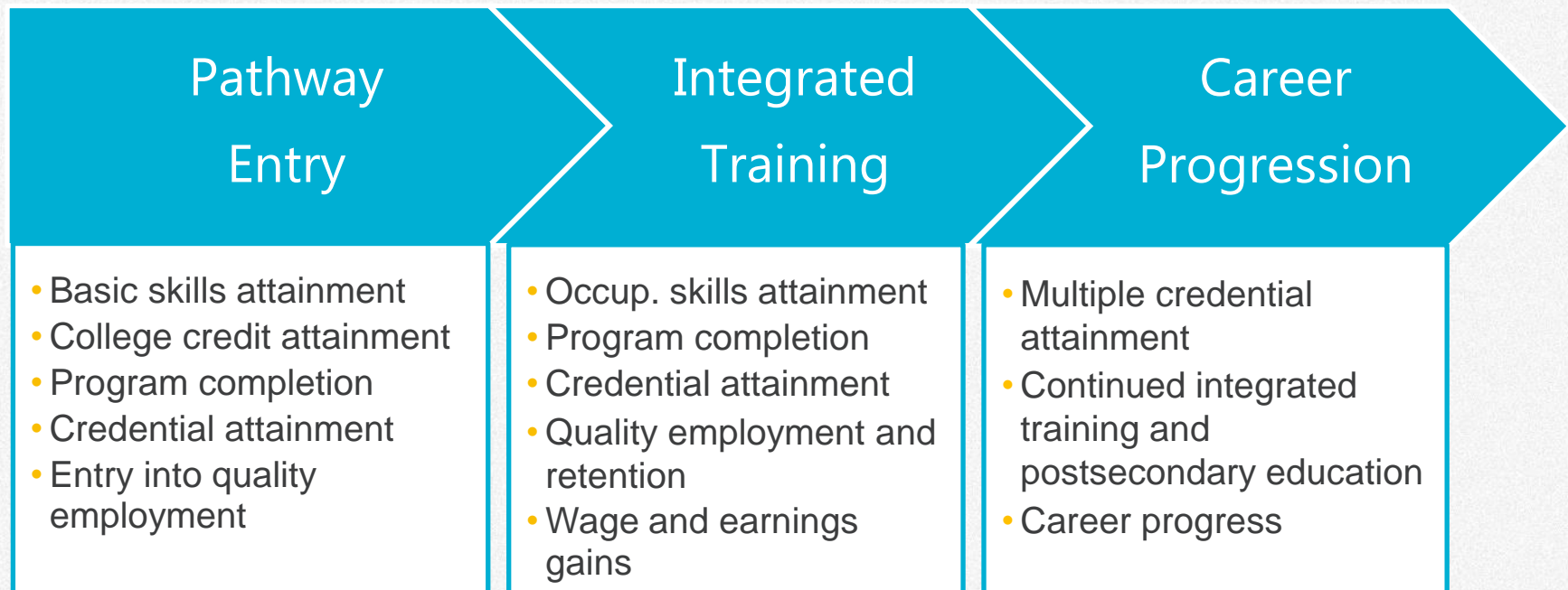
The **education outcomes** include non-college- and college-credit attainment; program completion; credential attainment, including certificate and degree attainment; and continuation in postsecondary education and workforce training.

Other outcomes

The **other outcomes** include change in financial stability, public assistance services, and other quality-of-life indicators.

Our analytical framework

Our analytical framework identifies outcome measures aligned to pathway entry, integrated training, and career progression. Some outcome measures apply to one focus and some apply to multiple foci to reflect the progress that learners can make as they move back and forth between workforce training, postsecondary education, and employment over the course of their lives.



Results

Pathway entry

Integrated training

Career progression

Pathway entry

Pathway entry defined

Impact

Implementation

Takeaway

Pathway entry defined

Pathway entry represents the critically important starting point to career pathway programs for many adult learners

Pathway entry represents the starting point to career pathway programs for adult learners who have not completed high school or have modest or no formal education beyond high school. Pathway entry also focuses on employability and initial job experience, heightening the importance of preparatory learning to enable students to enter and retain quality employment.

Seven of the career pathway evaluation studies that we reviewed included Adult basic Education or GED preparation; bridge programs offering basic academic, employability, and initial occupational skills training; and initial employment transition services.

Pathway entry impact results are summarized for career pathway (CP) participants relative to control/comparison members in the following slide.

Impact*

- CP participants made basic skills gains at a higher rate than the control/comparison group
- CP participants completed more contextualized instruction than the control/comparison group
- CP participants earned a modest number of college credits, including training-related credits, at a higher rate than the control/comparison group
- CP participants earned an entry-level credential, including vocational certificate or license, at a higher rate than the control/comparison group
- Results were mixed for employment and earnings, with some studies showing modest positive gains, and others showing no difference between CP participants and the control/comparison group

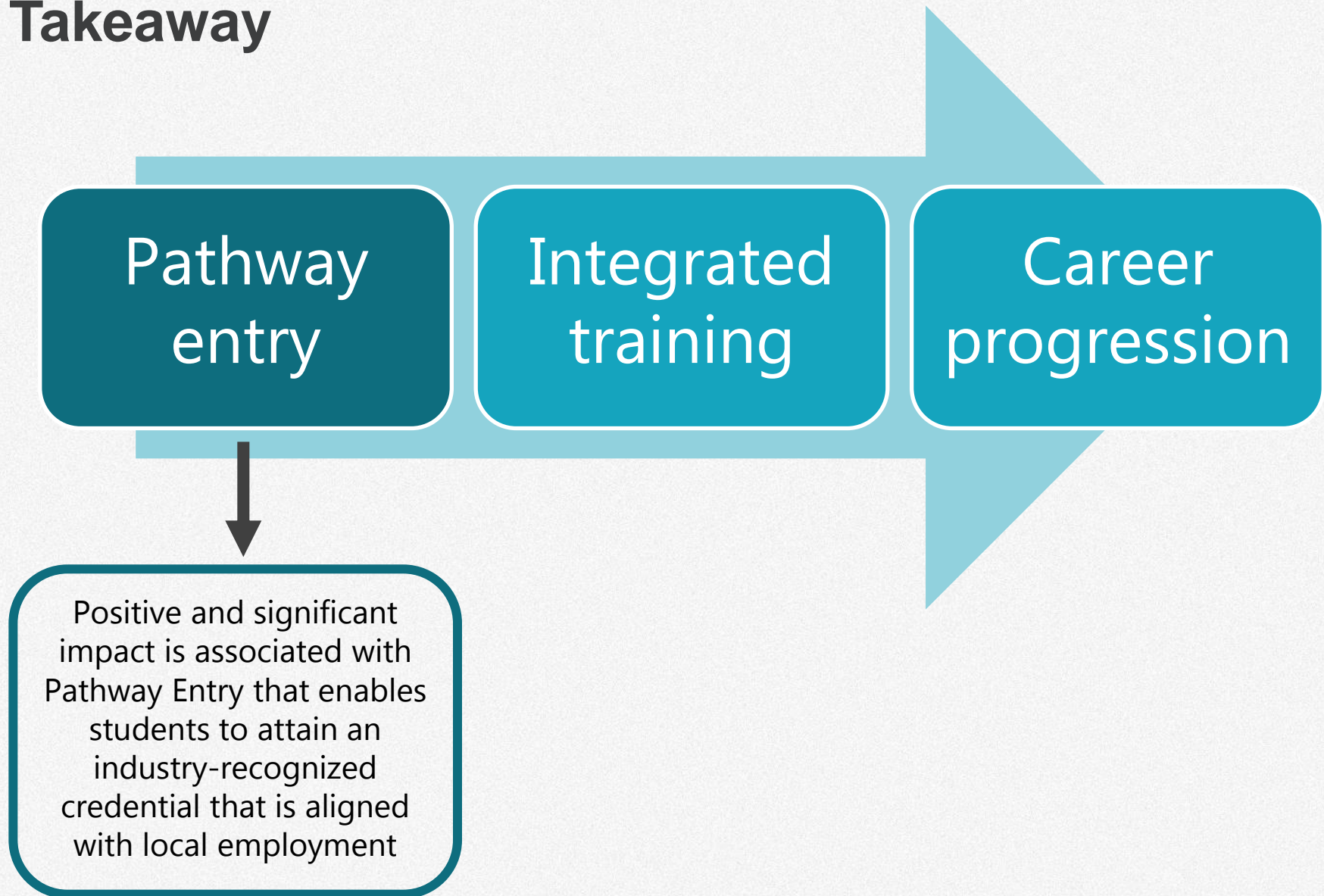
*Impact results between treatment and control groups are considered significant when the probability level equals or falls below 0.05, with most differences below 0.01, and these significant differences were observed across numerous studies, typically 3 or more studies.

Implementation

Pathway entry is enhanced when the following elements are implemented:

- Engagement of adult education; postsecondary education, including postsecondary career and technical education, workforce training, and employers
- Strategic outreach, recruitment, and intake of diverse adult learners, due to in-depth knowledge of these student populations' education and employment needs
- Contextualized basic skills curriculum and instruction that increases students' preparation for further postsecondary education
- Case management and navigational services, including academic and career advising, that helps retain adults in education and training
- Job readiness and employment assistance services that help adults enter employment

Takeaway



Integrated training

Integrated training defined

Impact

Implementation

Takeaway

Integrated training defined

Integrated training provides occupational skills that enable students to attain competencies and credentials they need to enter and advance in living-wage employment

The integrated training offers students postsecondary academic, occupational, technical, and professional competencies and industry- and college-recognized credentials that they need to enter, sustain, and advance in family living-wage employment.

Twelve of the career pathway evaluation studies that we reviewed offered occupational, technical, and professional curriculum and instruction; proactive academic and career advising services; financial assistance advising and aid; employment assistance and career counseling; and other related services to enhance student success.

Integrated training impact results are summarized for career pathway (CP) participants relative to control/comparison members in the following slides.

Impact

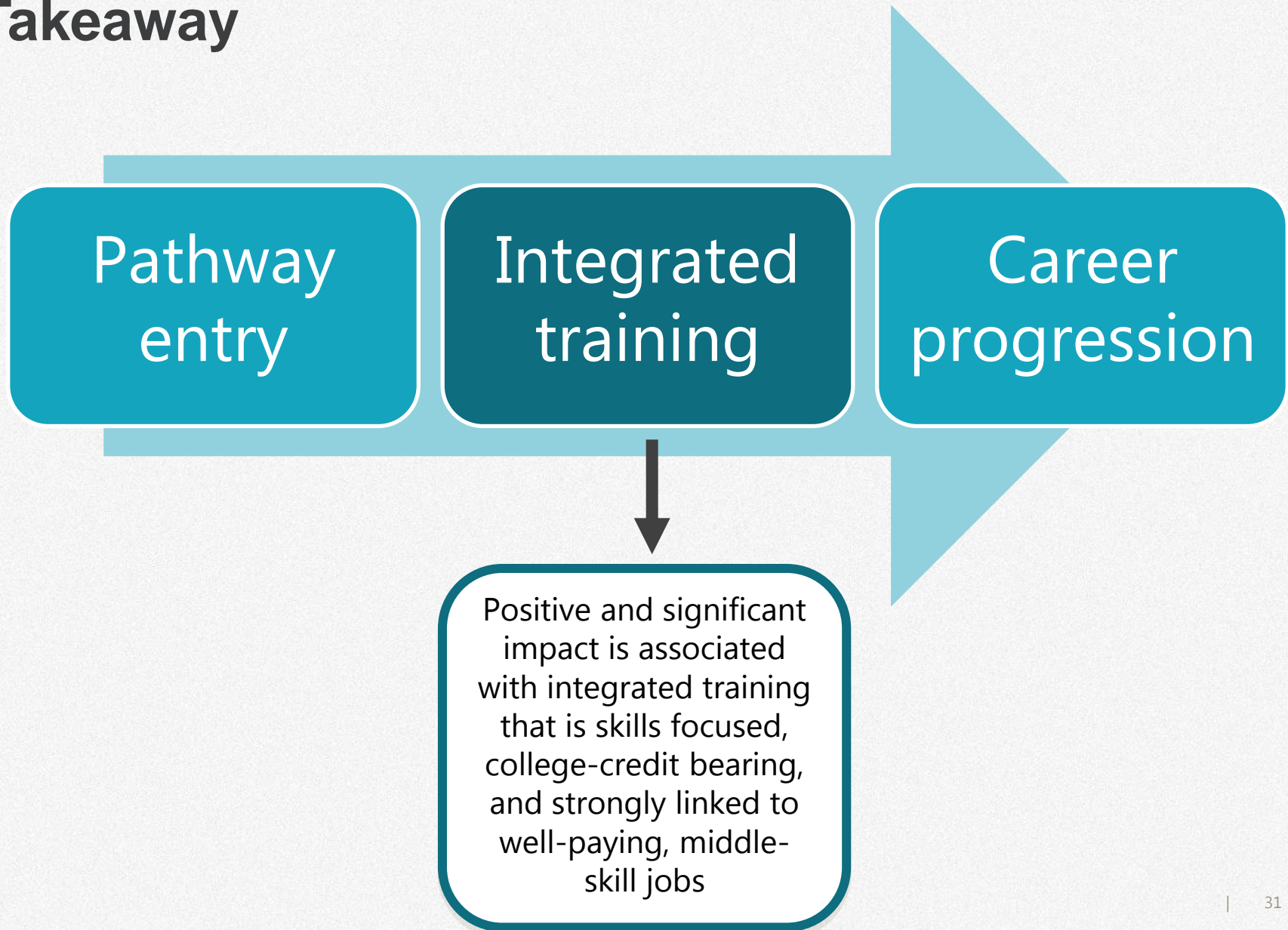
- *CP participants were more likely to attain higher wages and annual earnings than the control/comparison group, and this positive impact grew at two or more years beyond program completion*
- *CP participants were more likely to complete a training-related credential and be employed and retained in a training-related job than the comparison/control group*
- *Positive employment and earnings outcomes extended to CP participants who had reported having educational, employment, and personal barriers*
- *CP participants were more likely to attain a credential (certificate or license) below the associate's degree level than the control/comparison group*
- *In several studies, impact varied in significance and strength by provider (esp. community college and for-profit) and occupation (e.g., health care and manufacturing)*

Implementation

Integrated training is enhanced when the following elements are implemented:

- Employer engagement and partnerships with public and private education and training providers, including community colleges and for-profit providers, that focus on in-demand industries and occupations
- Occupational, technical, and professional skills training that confers college credit in postsecondary programs of study leading to well-paying, middle-skill jobs
- Comprehensive supports, including case management and navigators, that help adults progress through training and transition into employment
- Financial aid, advising, and individualized training plans that enable students to complete education and transition to employment
- Job development and placement services that help adults enter positions in family-supporting employment

Takeaway



Career progression

Career progression defined

Impact

Implementation

Takeaway

Career progression defined

Career pathways help students not only enter employment but also reenter and enroll in additional postsecondary education that enables them to successfully navigate career ladders

A fundamental tenet of career pathways is to help students not only enter employment but also reenter and enroll in additional postsecondary education that enables them to successfully navigate career ladders. To accomplish this goal, students need to be able to enter, exit, and reenter education and training that enables them to earn multiple credentials, often referred to as “stackable credentials,” that fulfill their immediate and long-term career goals.

Only five evaluation studies included any outcome measures pertaining to time periods extensive enough to track impact on longer-term education and employment. A few evaluation studies are being conducted currently, but longitudinal results are not publicly available for this report.

Career progression impact results are reported for career pathway (CP) participants relative to control/comparison members in the following slides.

Impact*

- Impact results are mixed on student enrollment in additional postsecondary and training for CP participants relative to the control/comparison group
- Impact results are mixed on credential attainment, including the associate's degree, for CP participants relative to the control/comparison group
- Impact results are mixed on employment retention for CP participants relative to the control/comparison group

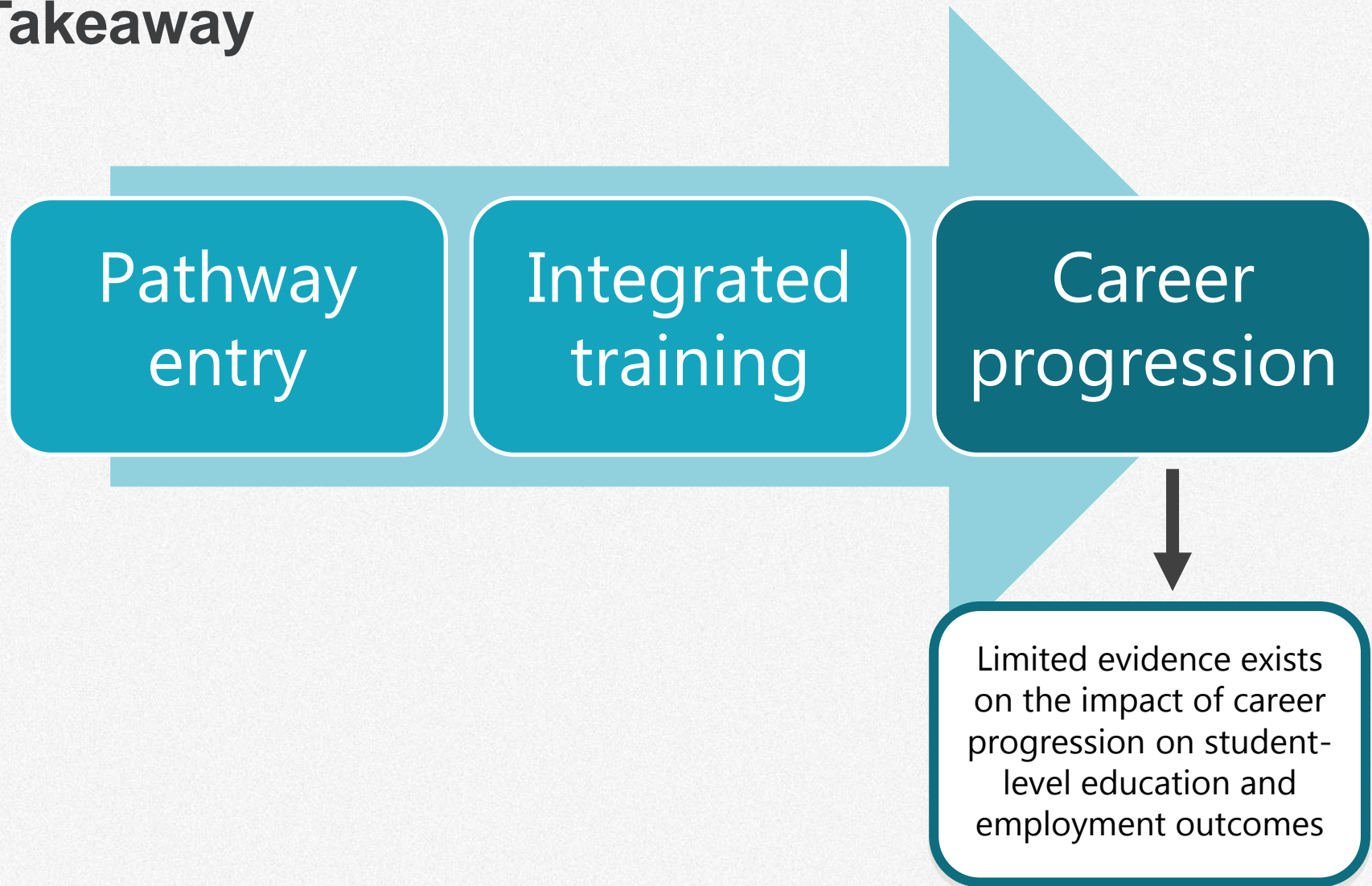
*Many evaluation reports note the serious limitation of time imposed on their capacity to track student outcomes to observe career progression outcomes, suggesting the need for more longitudinal evaluation designs.

Implementation

Career progression may be enhanced when the following elements are implemented:

- Employer partnerships emphasize industry-sponsored training and benefits that enable incumbent workers to return to college to pursue additional postsecondary education and credentials
- Work-based learning, including apprenticeships, are integrated into postsecondary and workforce training
- Postsecondary education and training providers deliberately design and clearly communicate curriculum that offers stackable credentials
- Employer-sponsored postsecondary education and training benefits that enable adult learners to progress in chosen careers or transfer skills and competencies to change career paths

Takeaway



Recommendations

Research

Practice

Policy

Other Strategies

Research

Our systematic review of education and employment outcomes reveals promising results, especially as participants extend time in the labor market. However, serious gaps in our understanding need to be addressed in the following areas:

- All focus areas: pathway entry, integrated training, and especially career progression
- Industry sectors other than health care and manufacturing
- Subgroups by site and demographic (race/ethnicity, age, gender, income, etc.)
- Program elements such as contextualized curriculum, proactive advising, job transition, etc.
- More states and geographic regions, especially rural America
- More extended tracking of employment and earnings outcomes through career ladders and lattices
- More evidence about the value of work-based learning opportunities for education and employment outcomes

Practice

Recommendations:

- Scale complete employer-driven career pathway systems, with stackable credentials beyond entry level, so that every training provider and every college in the country offer some level of programming
- Advance intentional work-based learning models across pathway entry, integrated training, and career progression with employer partners
- Adapt and scale effective integrated training models to new populations (English language learners, corrections system, career and technical education, and developmental education)
- Equip state system leaders and practitioners with next-generation labor market analyses and data facilitating upward economic mobility of students

Policy

Recommendations:

- Incentivize employers to co-develop regional career pathway systems that advance learners and their workers along a continuum
- Subsidize colleges and employers for students/workers who complete (not just access) in-demand credentials and successfully enter the labor market
- Incentivize work-based learning models across the full continuum of pathways

Other Strategies

Recommendations:

- Create a consortium of funders to “double down” on scaling these effective model elements; and do this via a networked approach (leveraging JFF, the Association for Talent Development, CLASP, New America, Adult Education State Directors, etc.)
- Anchor and scale these recommendations by institutionalizing transformative practice and policy by investing in a national center concept
- Support next-generation data and labor market methodologies that enable stronger programming and curriculum development for achievement of credentials resulting in true economic mobility
- Fund demonstration projects that test the efficacy of these evidence-based models with English language learners, reentry populations, and other groups

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