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A photograph of three people—two women and one man—sitting at a table and looking at documents. The woman on the left is wearing glasses and a striped shirt. The man in the middle has a beard and is wearing a pink shirt. The woman on the right is holding a pencil. They appear to be in a collaborative learning or work environment.

# What Works for Adult Learners

Lessons from Career Pathway Evaluations

AUTHORS

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# About the Authors

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The following JFF staff also contributed to this report: Erica Acevedo, senior program manager; Nate Anderson, senior director; Barbara Endel, senior director; and Lisa Soricone, associate research director.



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# Acknowledgments

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 have often been scattered over many organizations and across time. The authors wish to thank the Annie E. Casey Foundation, most notably Irene Lee, and JFF 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, and trying to break through persistently low transition rates of adults into postsecondary 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 to analyze what works for adult learners, with special thanks to the Urban Institute and New America for hosting our meetings. We appreciate their willingness to review documents, offer reflections, and share the findings of this work with their professional communities to help advance the progress of adult learners. A list of participants appears at the end of Appendix A.

Finally, this project would not have been possible without the many students, practitioners (instructors, partners, and others), and researchers who worked collaboratively to implement and evaluate career pathway programs. We thank them for their generous contributions to the greater good.

# Foreword

Traditional education and training models are failing to equip many job seekers—especially people of color and individuals living in low-income communities in urban and rural areas—with the skills and experience they need to succeed in today’s workforce. At a time when 29 million people across our nation are without a high school equivalency, and nine out of ten jobs in the United States are going to candidates with degrees, it is clear that we need bold and scalable solutions to get more people on pathways to economic opportunity.

These challenges call for evidence-based and cost-effective strategies to equip adult learners with the skills and credentials they need to meet business demands and land jobs that allow them to provide for themselves and their families.

Fortunately, we don’t have to search too far to find those strategies. Evaluations released within the past few years have revealed modest but growing evidence on what’s working. As a field, we have an opportunity to use these findings and collectively chart a path forward to invest in promising models and practices. This brief is a first step in that journey. It includes aggregated evaluation findings from multiple initiatives, as well as

insights gleaned from a special panel of adult education and workforce leaders, employer association partners, and researchers that the Casey Foundation and JFF convened. The authors have taken those pieces and rolled them into a robust set of future-looking recommendations to drive both policy and practice to ensure that millions of adult learners are not left behind. We are using these lessons to inform our work to ensure that youth and young adults, parents with young children, and immigrant families are on a path to increased mobility and opportunity.

We are particularly indebted to Dr. Debra Bragg, who served as the lead author, and to those JFF staff members listed as contributors whose commitment to equity of access and opportunity and evidence-based policymaking were shared values—from idea to this final publication.

**Irene Lee**

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## Introduction

Millions of adults in the United States are trying to support themselves and their families without a high school education. Millions more have finished 12th grade but still lack some of the basic reading, writing, and math skills the labor market demands of high school graduates. The need to scale proven, cost-effective strategies to increase the skills of adult learners, aid their search for good jobs, and improve the talent supply of employers is abundantly clear. This brief makes a major leap toward that goal, highlighting what works best in a steadily expanding approach to adult education and training known as “career pathways.”

Creating effective pathways to and through postsecondary education is a foundational strategy for transforming the delivery of education and workforce training in this country. Career pathways are rooted in the belief that adults of all backgrounds can access and succeed in postsecondary programs that include career training to improve labor market outcomes.

A limited but growing body of rigorous evaluation studies examines how career pathways influence student success. JFF set out to systematically examine these studies with the goal of answering one essential question: What do we know about the impact of career pathways on adults seeking to attain a living-wage career?

The results, reported in this brief, make a strong case for scaling career pathways to reach many more adult learners. Persuasive evidence shows that well-designed career pathways can improve academic, employment, and income outcomes for adults. Based on experimental or quasi-experimental studies, this growing body of results shows that career pathway participants are employed and retained in employment at higher rates and attain higher wages and annual earnings than students with similar characteristics who enroll in training that does not use a career pathway approach. They also earn entry-level credentials and gain basic skills at higher rates than the comparison group.

Analyzing the results of career pathway program evaluation studies is essential to understanding how to make wise investments and increase their impact in the future. We began this project by identifying large-scale career pathway initiatives that had commissioned rigorous evaluation studies. An initial group of more than 30 reports was ultimately narrowed to 16 studies.<sup>1</sup> JFF researchers and colleagues from other leading organizations reviewed the evidence from programs that enrolled diverse adult learner populations from 2010 to 2017.

The first section of this brief describes the core elements of career pathway programs and systems. The remainder of the report presents our research results, conclusions, and recommendations. Appendix A contains a full methodology, including contributors to the research project. Appendix B contains lists of the 16 studies broken down by these focus areas: pathway entry, integrated training, and career progression.

**“Persuasive evidence shows that well-designed career pathways can improve academic, employment, and income outcomes for adults.”**



# Career Pathway Programs and Systems

Over the last two decades, strategic investments have led to the measured expansion of career pathways in many states and regions of the United States. The leaders 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 models of career pathways that have emerged (and continue to emerge) represent attempts to make substantive changes in the ways adults are educated for employment and progress through careers. Evaluating how career pathway programs are implemented and how they impact learners is essential to making continuous improvements.

## Addressing Inequities

The serious and growing income and wealth inequalities that are documented by Harvard's Equality of Opportunity Project (and many other researchers) heighten the importance of understanding how well career pathways are working for adult learners.<sup>2</sup>

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.<sup>3</sup>

Although many career pathway leaders recognize these structural inequities, there is a need to raise awareness about the systemic nature of the barriers that contribute to the existence of large numbers of adult learners in need of education and job training. We urge career pathway leaders to take these structural inequities into account as they design approaches that focus on student and labor market success.



## Asset Framing

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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” focus on the person rather than systems that have failed adults, limiting our capacity to see adults as successful learners and employees.

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

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

## Core Elements of Career Pathways

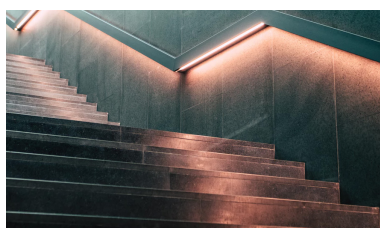
Career pathway programs and systems deliver intentionally structured curriculum and student-focused supports that enable learners to pursue occupationally, technically, and professionally oriented postsecondary education and workforce training. This education and training, in turn, supports job entry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

Career pathways include a wide range of core 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, career guidance, and job placement.

Across the career pathway continuum, three areas of focus emerge: pathway entry,

integrated training, and career progression. Prior reviews of career pathway studies have tended to bifurcate education and employment outcomes, but we think this is a mistake. It masks the ways in which these outcomes align with the three foci areas and relate to one another as students progress along a career pathway.

By framing the findings around critical aspects of the pathway, we are able to understand the research findings more holistically and to devise implications and recommendations for policy and practice that are richer and more meaningful to the field.



### Pathway Entry

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Some career pathway programs provide preparatory education and training, including bridge programs, designed to help students move from entry-level coursework (including those that do not confer college credit) to credit-bearing postsecondary coursework and employment.



### Integrated Training

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Integrated training—which is skills focused, college-credit bearing, and strongly linked to well-paying, middle-skill jobs—is made possible by intentional and 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

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Career progression includes strategies that enable adult learners to advance in postsecondary education and training beyond entry level to secure multiple—including stacked—credentials (certificates, licenses, and degrees), to enter and progress through careers that provide financial stability.

# Results

We present the results of our analysis below, divided into each of the career pathway focus areas described above, followed by policy recommendations and suggestions for further research. For a detailed discussion of our research methods, including our evaluation study selection criteria, the review process, outcome measures, and our analytical framework, see Appendix A.

## Pathway entry



Positive and significant impact is associated with pathway entry that enables students to attain an industry-recognized credential that is aligned with local employment.

Pathway entry represents the starting point to career pathway programs for many adult learners, underscoring the importance of preparatory learning to enable students to gain and retain quality employment. Adults who have not completed high school or who have modest or no formal education beyond high school focus on academic skills they need to succeed in college coursework. Pathway entry also focuses on employability skills and initial job experience.

Seven of the career pathway evaluations 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.

### Impact<sup>4</sup>

Results from five of the seven evaluations that assessed outcomes aligned with pathway entry showed significant differences in basic skills gains, college credits, and entry-level credentials earned by career pathway participants relative to a comparison/control group. For example, two studies show 20 to 30 percent higher GED or developmental placement pass rates for career pathway participants compared to a control/comparison group.<sup>5</sup> Three studies show between 9 and

17 percent higher rates of retention in training programs for participants compared to a control/comparison group. Also, two studies show entry-level credential attainment rates that are 11 to 50 percent higher for career pathway participants than a control/comparison group. Specifically, career pathway participants:

- Made basic skills gains at a higher rate than the control/comparison group.
- Completed more contextualized instruction than the control/comparison group.
- Earned a modest number of college credits, including training-related credits, at a higher rate than the control/comparison group.
- Earned an entry-level credential, including vocational certificate or license, at a higher rate than the control/comparison group.
- Demonstrated mixed results for employment and earnings. Some studies showed modest positive gains, while others showed no difference between career pathway participants and the control/comparison group.

## Implementation

Pathway entry is more successful, according to our analysis, when the following program elements are present:

- Engagement between adult basic education and postsecondary education, including postsecondary career and technical education, workforce training, and employers.
- Strategic outreach, recruitment, and intake of adult learners from diverse backgrounds, informed by in-depth knowledge of the education and employment needs of these populations.
- Contextualized basic skills curriculum and instruction that increase student preparation for further postsecondary education.
- Case management and navigational services, including academic and career advising, that help retain adults in education and training.
- Job-readiness and employment assistance services that help adults enter employment.

# Integrated Training



Positive and significant impact is associated with integrated training that is skills focused, college-credit bearing, and strongly linked to well-paying, middle-skill jobs.

Integrated training and education emanates from adult education and workforce development program models that provide simultaneous instruction in basic skills and occupational or industry-specific training. Integrated training provides postsecondary academic, occupational, and technical skills that enable students to attain the competencies and credentials they need to enter and advance in 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.

## Impact

Five of the 10 evaluations of integrated training show significant credential attainment, and wage and earnings gains for career pathway participants relative to a control/comparison group.<sup>6</sup> Four studies show between 18 and 29 percent higher rates of credential attainment for career pathway participants compared to a control/comparison group, and two studies showed \$4,500 to \$5,000 higher annual earnings two years after program enrollment for career pathway participants relative to a control/comparison group. Across the five studies that demonstrated significant results in most of these critical outcomes areas, career pathway participants:

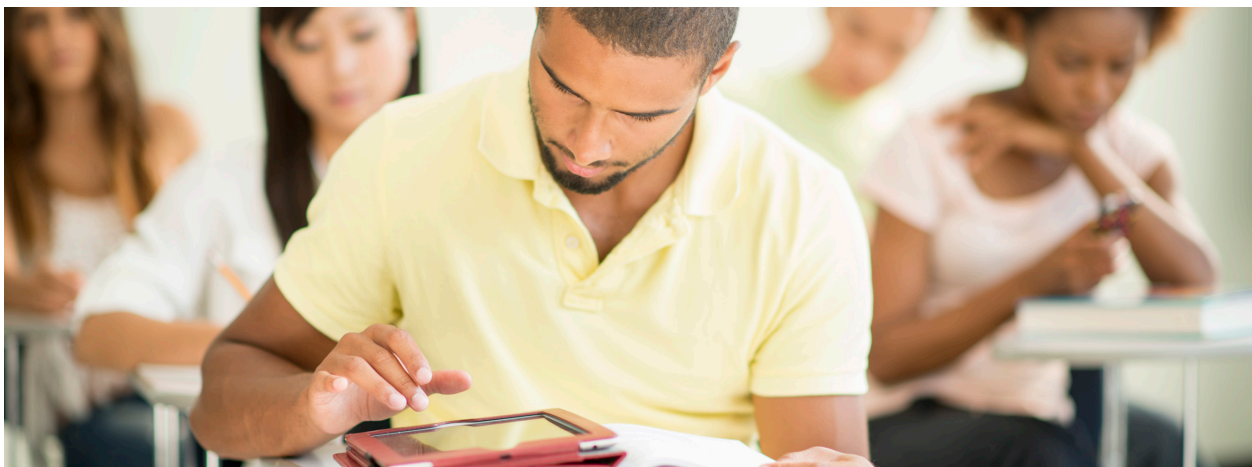
- Were more likely to attain higher wages and annual earnings than the control/comparison group, and this positive impact grew at two or more years beyond program completion; and
- Were more likely to complete a training-related credential above entry level but typically below an associate's degree and be employed and retained in training-related jobs than a comparison/control group.

In several studies, the impact on other education and employment outcomes varied in significance and strength by provider (especially community colleges versus for-profit institutions) and occupation (e.g., health care versus manufacturing). A few studies that broke out employment and earnings outcomes by participant demographics showed positive results for student subgroups as well.

## Implementation

Integrated training is more successful, according to our analysis, when the following program elements are included:

- 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 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.





# Career Progression



Limited evidence exists on the impact of career progression on student-level education and employment.

A fundamental tenet of career pathways is to help students not only find family-supporting employment but also to return to and engage in additional postsecondary education that enables them to advance in their careers. To accomplish this goal, students need ongoing access to education and training that offers multiple credentials, often referred to as “stackable,” that fulfill both 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 additional evaluation studies were underway at this writing, but longitudinal results were not publicly available.

## Impact

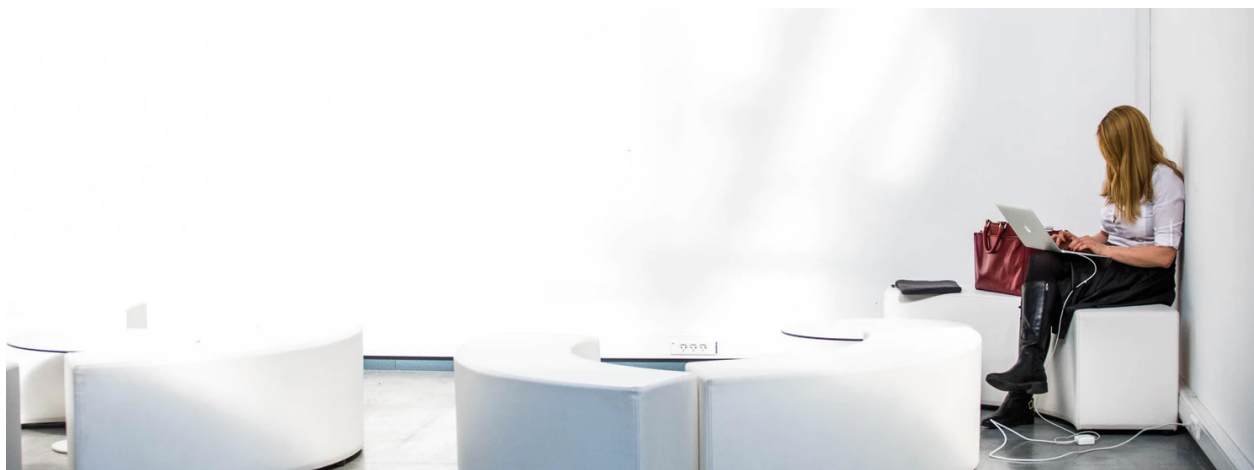
Results of four of the five evaluations of career progression show no difference in college enrollment following participation in an initial career pathway program, or in earning a subsequent college credential, relative to the control/comparison group.<sup>7</sup> The results were mixed on:<sup>8</sup>

- Enrollment in additional postsecondary and training for career pathway participants relative to the control/comparison group.
- Employment retention for career pathway participants relative to the control/comparison group.
- Credential attainment, including the associate’s degree, for career pathway participants relative to the control/comparison group.

## Implementation

Career progression may be more successful, according to our analysis, when the following elements are included:

- Employer partnerships emphasize industry-sponsored training and benefits that enable incumbent workers, who are actively employed, to enroll in college to pursue additional postsecondary education and credentials.
  - Work-based learning, including apprenticeships, may be integrated into postsecondary and workforce training.
  - Postsecondary education and training providers design and offer curricula that include stackable credentials;
- studies reveal that students often do not take advantage of stackable credential offerings, which suggests that further research into ways to improve student participation in these programs is needed.
- 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.





# Recommendations

The promising results of career pathway programs highlighted in this report underscore the need to scale approaches that work. The following recommendations include program design practices, policy approaches, and system-wide actions. We also recommend that additional research be conducted in specific areas.

## Practice

Based on our research findings, we recommend the following practical approaches to expanding career pathways for adult learners:

- Adopt and scale effective integrated training models across states in order to promote accelerated credential attainment and entry into good jobs.
- Explore implementation of upskilling and work-based learning by advancing worksite training models to reengage and accommodate working learners.
- Scale comprehensive career pathways beyond the entry level, promoting real opportunities for career advancement.
- Equip state education and training system leaders and the field with real-time labor market analyses to facilitate selection of credentials that promote upward economic mobility for students and workers.

## Policy

Policy conditions and strong incentives are needed to scale what we know works for adult learners. We recommend the following policy recommendations at the state and federal levels:

- Incentivize integrated education and training models that both help accelerate credential attainment and respond to employer needs and regional workforce efforts.
- Support public/private employer partnerships that help to upskill learners and workers along a career pathway beyond entry level.
- Use the federal Ability to Benefit provision to help more students access federal financial aid / grants required to cover college credentials/degrees.
- Establish state sponsorship of “what works for adult learners” institutes to help scale promising models and drive stronger adult education and workforce system performance outcomes.

## Other Strategies

In addition to practice and policy recommendations, we have identified a number of other strategies that can advance efforts to create and scale career pathways for adult learners:

- Support scaling of effective practice by capitalizing on the efforts and communication channels of national networks focused on adult learners representing over half a million students.
- Adapt and scale effective integrated training models to new populations, such as English language learners, reentry populations, career and technical education students, and developmental education students.
- Anchor and scale the recommendations of this report by institutionalizing transformative practice and policy through investment in a national center, possibly housed at JFF, and in partnership with key organizations, focused on the advancement of policy and practice for adult learners.

## Research

Our systematic review of career pathways shows positive education and employment outcomes, especially as participants extend their time in the labor market. However, results from rigorous evaluation are still limited but emerging, leaving knowledge gaps that need to be addressed. We recommend additional research in the following areas:

- Industry sectors other than health care and manufacturing.
- Subgroups by site and demographics (race/ethnicity, age, gender, income, etc.).
- Program elements such as contextualized curricula, proactive advising, and job transition.
- More states and geographic regions, especially rural regions of the country.
- More extended tracking of employment and earnings outcomes through career ladders and lattices.

Research is needed in all focus areas: pathway entry, integrated training, and especially career progression.

## Conclusion

In light of the evidence, the strong economy, and the growing interest in implementing career pathway approaches, we believe that now is an important time to scale these approaches.

This paper summarizes the key research findings. Translating these findings for broader impact requires us to think differently about a holistic approach to scale and ask:

- What needs to happen, that hasn't happened, to make promising models the norm?
- How do we ensure that 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 adult students?
- How can we redesign career pathways so that they can create career opportunities that go beyond the first job?

## Research Methods

### Evaluation Study Selection Criteria

We began this project by identifying large-scale career pathway initiatives that had commissioned rigorous evaluation studies. More than 30 reports were included in this search, which was ultimately narrowed to 16 studies. Some studies have met the U.S. Department of Labor’s CLEAR or the U.S. Department of Education’s What Works Clearinghouse criteria, and some of the more recent studies may meet these criteria once they have been reviewed. We also queried the Education Full Text, ERIC, and Google Scholar search engines to look more broadly at literature on career pathways, not so much to analyze impact studies per se but to situate our results in themes and trends in the larger body of literature on career pathways.





## Evaluation Studies

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 qualitative evaluation from Shifting Gears, a Joyce Foundation supported initiative, as well as the systematic review of workforce training authored by multiple federal agencies.<sup>9</sup>

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 medium or large urban locales, with fewer 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.

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

## The Review Process

Our systematic review included reading, notating, coding, 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 review process included categorizing each study's evaluation questions, design(s) and sources of evidence, outcome measures, analysis and interpretation methods, and generalizations. Limitations, including estimated bias, were also noted.

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

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## Outcome Measures

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



**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.



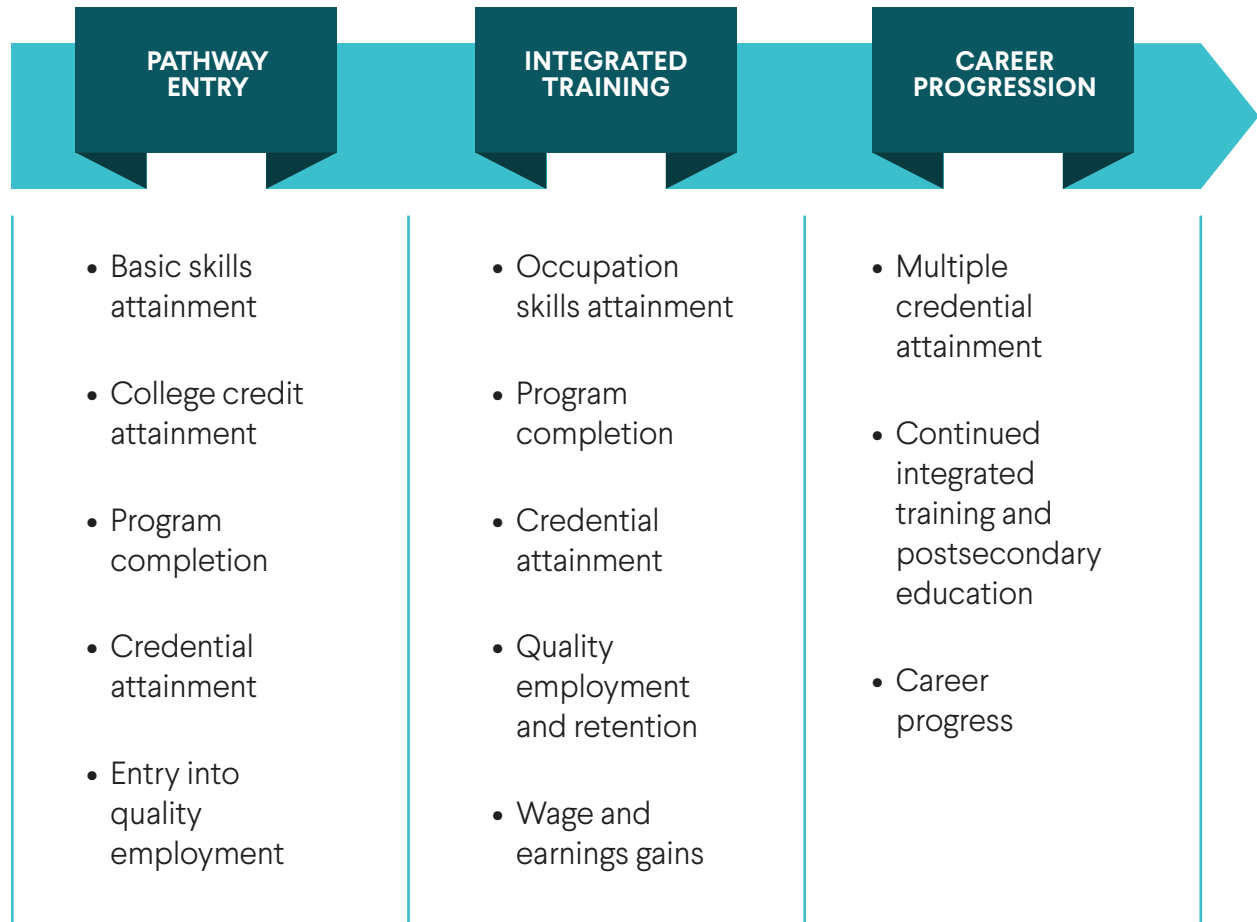
**Education outcomes** include non-college and college-credit attainment; program completion; credential attainment, including certificate and degree attainment; and continuation in postsecondary education and workforce training.



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

## 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.



## Panel Participants

JFF would also like to thank the following individuals who participated in panel discussions on “What Works for Adult Learners.” We appreciate their willingness to review documents, offer reflections, and share findings with their professional communities to help advance the progress of adult learners.

**Theresa Anderson**

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Lead facilitator

**Maria Flynn**

**Kathy Mannes**

**Lisa Soricone**

## Appendix B:

# Evaluation Studies Reviewed

We analyzed the results of 16 career pathway program evaluation studies to reach the findings we present in this report. Our analysis included assessing categories of outcomes associated with three focus areas: pathway entry, integrated training, and career progression. Here are lists of the studies that addressed each of those focus areas. Some studies looked at all three focus areas, others looked at two of them, and a few only looked at one.

### Pathway Entry

Anderson, Theresa, Daniel Kuehn, Lauren Eyster, Burt Barnow, and Robert Lerman. *New Evidence on Integrated Career Pathways: Final Impact Report for Accelerating Opportunity*. Washington, DC: Urban Institute, June 2017.

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# Endnotes

1. See Appendix B for lists of the 16 studies broken down into the following focus areas: pathway entry, integrated training, and career progression.
2. Raj Chetty, Nathaniel Hendren, Maggie Jones, and Sonya Porter. *Race and Economic Opportunity in the United States: An Intergenerational Perspective*. Cambridge, MA: The Equality of Opportunity Project, 2018.
3. Chetty et al., *Race and Economic Opportunity in the United States*.
4. 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 three or more.
5. These results are aggregated from five of the eight studies of Pathway Entry listed in Appendix B.
6. See Appendix B for a list of the 12 studies of Integrated Training.
7. 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.
8. See Appendix B for the list of five studies of Career Progression.
9. Brandon Roberts and Derek Price, *Building Career Pathways for Adult Learners* (Chicago: The Joyce Foundation, 2015).