



Measuring Success

Career Pathways Research

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CLASP

Policy solutions that work for low-income people

Maximizing the Power of Career Pathways

The Convening

In July 2018, the Center for Law and Social Policy (CLASP) and Workforce Collaborative of the Greater Washington Community Foundation hosted a convening titled “Maximizing the Power of Pathways: Vital Career Pathway Conversations.” It brought together education and workforce development leaders from states, national organizations, advocates, funders, and federal agency staff to share perspectives on four career pathway issues:

- Guided pathways alignment;
- Increasing the use of Ability to Benefit;
- Leveraging career pathways to advance racial equity; and
- Measuring success through career pathway research.

This brief is part of a series highlighting lessons from our convening as well as new research. You’ll learn what’s working, what isn’t, and collaboration opportunities for states to provide better career pathways.

The Issue

Career pathways can improve education and employment outcomes in public education and training systems. When making decisions, policymakers should draw on emerging research showing which approaches are effective. At the same time, we need more and deeper research to address unanswered questions about career pathway strategies.

Background

Three recent reports from the Annie E. Casey Foundation and Abt Associates show the scope of career pathway implementation, provide early evidence of what's working, and identify new research questions.

Appendix A summarizes these studies, which were explored in depth at CLASP's convening.

“What is the sequence of steps needed to build career pathways within each state and then across the nation? Are we using the career pathways wage and earnings data to market career pathways and provide information to adults?”
Michelle Johnson, Office of State Superintendent, D.C.

What We Learned

The new studies are generally encouraging. They show increased earnings and better educational outcomes for career pathway participants, including those with barriers to training and employment. It's important that we learn from successful career pathways, in order to improve future programs and build broad-based support. Career pathway advocates should communicate these results to policymakers and funders.

The research shows challenges, including mixed results from several studies. It's also important to note that we have much more to learn. These studies examine short-term results and only include career pathways in health care and manufacturing. Additionally, there is also limited information on system-level career pathways initiatives and limited research on the impact of specific career pathways components (such as employer engagement, contextualized instruction, supportive services and work-based learning). Finally, program administrators may not be collecting all the data needed to measure implementation and impact of career pathways initiatives. That could hamper researchers' ability to examine important questions.

“Our legislature is recognizing that meeting Arkansas' college attainment goals will need the inclusion of adult learners, and CPI is seen as a proven strategy. For every dollar invested in our Career Pathways Initiative, there is a return of \$1.79. CPI students of color have a three times greater chance of success compared with their non-CPI counterparts.”
Alisha Lewis, Arkansas Department of Higher Education

Attendees of CLASP's convening identified several research questions that should be considered:

- What are the actual needs of the career pathways participant population? Are these needs being met?
- What sequence of steps is needed to build career pathways in each state and across the nation?
- How much money is saved when partners collaborate across funding streams?
- What are participants' goals? How do they match the systems we're building?
- Why are so many intermediate-level adult learners leaving school before entering longer-term college programs?

See **Appendix B** for additional example research questions around the six core elements of a robust career pathways system.

Convening attendees also shared their ideas for measuring career pathway outcomes, including how to connect career pathways to performance measures under the Workforce Innovation and Opportunity Act (WIOA), Career and Technical Education (CTE), and Temporary Assistance for Needy Families (TANF). Attendees recommended:

- **Creating additional career pathway measures and benchmarks** beyond those that are required.
- **Eliminating TANF's work participation rate.** Currently, states are required to focus 30 percent of their caseloads on a narrow range of "work activities," as defined by the federal government. According to one convening attendee, 67 percent of his state's TANF recipients remain in deep poverty five years after exiting. The work participation rate is an impediment to long-term career pathway participation.
- **Measuring co-enrollment** to determine its success addressing students' education and employment barriers.
- **Measuring student retention more effectively.**
- **Building greater awareness between workforce development, adult education and postsecondary education systems.** Through collaboration, each system can improve outcomes for its participants.

"We have used our ACT 2 TAACCCT grant to build robust career pathways data collection in Wisconsin. Now we have key measures to track transition from secondary to postsecondary, basic skills to postsecondary, progress through gatekeeper courses, embedded technical diplomas, and more."
Mark Johnson, Wisconsin Technical College System

"We are working on additional metrics for TANF/CalWorks recipients. The work participation rate perpetuates poverty – we must measure outcomes."
Javier Romero, California Community Colleges Chancellor's Office

Appendix A – Summary of Recent Evaluation Research Studies

<i>What Works for Adult Learners: Lessons from Rigorous Career Pathway Evaluation Studies for Policy, Practice and Future Research¹</i>	
Scope and Framework	<p>The study conducted from 2010 to 2017 reviewed evaluation reports from 30 large-scale career pathway initiatives, focusing on 16 in particular. These included 10 randomized control trials; four quasi-experimental designs; one large-scale longitudinal qualitative study; and one systematic literature review. The analytical framework organizes the review around three career pathway foci: pathway entry, integrated training, and career progression. Across these foci, the study assessed results for three categories of outcomes: employment, education, and other. Another notable feature of this study is a change in how career pathway participant populations are described: “Too often the literature uses terms to describe adult populations by their vulnerabilities rather than by their strengths... 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.”</p>
Key Findings	<ul style="list-style-type: none"> • “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. <ul style="list-style-type: none"> ▪ 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.”
Implications for Future Research	<p>The study identifies the following “serious gaps in our understanding of career pathways:</p> <ul style="list-style-type: none"> ▪ 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.”

<i>Career Pathways Research and Evaluation Synthesis: Career Pathways Design Study²</i>	
Scope and Framework	This report focuses on developing evaluation design options. It reviewed 52 adult career pathway evaluation studies, 29 of which were ongoing at the time of the report. Twenty studies used random assignment methodologies, of which 13 are ongoing. Forty-two studies included outcomes. Thirty-eight featured at least one employment outcome and 29 included at least one educational outcome. Impact findings have been published for four quasi-experimental studies and eight random assignment studies.
Key Findings	<ul style="list-style-type: none"> • “Most of these published impact findings have short- (~1-2 years) and medium- (3-4 years) term follow-up periods. Just two studies to date have reported impact findings for long-term outcomes (5 years or longer) • Nine of these impact studies examined earnings. Three found statistically significant positive results, five found mixed results, and one found mostly negative results. • Ten of these impact studies examined educational outcomes. Seven found statistically significant positive results, one found mixed results, and two found mostly negative results. • Of the eight random assignment studies reporting impacts, only one included at least one site that offered multiple steps of training. We chose to highlight multiple steps of training as a proxy for understanding the extent to which sites in a study focused on career advancement, arguably the most distinctive feature of career pathways. • Looking across all of the studies we examined, researchers found that implementing a model as intended often proved challenging. Sites varied considerably in the populations targeted and served, targeted sectors and occupations, and the extent to which a given model was implemented as planned.”
Implications for Future Research	<ul style="list-style-type: none"> • More study of multi-step, longer-term career pathways is needed. • Current research underway will add evidence of employment and earnings, better descriptive information, multi-step pathways, and other aspects of the career pathway model. • More study is needed of: <ul style="list-style-type: none"> ▪ Pathways in sectors other than health care, manufacturing, and information technology; ▪ Pathway approaches for groups not well represented in existing studies; ▪ Relative effectiveness of particular components; ▪ The role public workforce systems can and should play; ▪ Career pathway implementation at scale; and ▪ Career pathways’ return on investment.

Career Pathways Implementation Synthesis: Career Pathways Design Study³

Scope and Framework	<p>This report, like the previous one, focuses on developing evaluation design options. It's primarily concerned with "the type, scope, and setting of career pathways initiatives that are currently active as well as those whose periods of performance have ended." One hundred and twenty-eight initiatives were identified that focused on adults or out-of-school youth and that include occupational training. Among these, 84 had at least one site with multiple career pathway steps and 54 had multiple steps at every site. The report is intended to address:</p> <ul style="list-style-type: none"> ▪ How career pathways initiatives are defined in practice; ▪ What career pathways initiatives look like in terms of their program versus system focus, target population, sector and occupation, and lead organization; ▪ Key findings from our examination of the definitions of career pathways approaches, the Implementation Matrix, and discussions with external experts; and ▪ Implications for future research.
Key Findings	<p>The report includes numerous findings. The following seemed the most relevant to our research discussion:</p> <ul style="list-style-type: none"> ▪ "There is some level of agreement in practice about the definition of career pathways approaches at the program level, but less so at the system level. ▪ Most career pathway initiatives are at the program level and most offer more than one step of training in at least one site. ▪ Most initiatives target low-income, low-skilled individuals; operate in the healthcare sector; provide short-term training opportunities; and are led by community colleges or non-profits. ▪ The experts we interviewed...observe that a number of local entities and their partners have successfully implemented career pathways approaches at the program level. There has been less perceived success implementing career pathways approaches at the system level compared to the program level. ▪ Funding and sustainability are major challenges in implementing career pathways approaches. ▪ These experts also believe that implementing career pathways approaches at a system level requires a culture change, but there has been little attention given to aligning policies to support implementation of career pathways approaches. ▪ Experts observe that career pathways approaches generally require partnerships at the State and local levels across a host of different entities. ▪ Finally, the experts we interviewed agree that there is a lack of data to help programs and systems track progress in achieving their goals for career pathways initiatives."
Implications for Future Research	<p>"Overall, our synthesis of career pathways implementation added to these some additional research questions that: (1) focus on best practices and strategies that practitioners can employ immediately, particularly around employer engagement; (2) examine the progress of and lessons to be learned from system-level efforts; (3) address the efficacy of sector-based approaches; (4) assess the success of career pathways initiatives with an experiential learning component; and (5) examine the effectiveness of different types of supportive services."</p>

Appendix B - Career Pathway Components, Guiding Questions and Example Research Questions⁴

Core Element	Components	Guiding Questions	Example Research Questions
Sector	Focusing on an industry with a skills shortage, engaging employers based on occupational targets, and producing skills that are portable (supporting occupational mobility).	Which workforce need in the regional/state economy will the career pathway address? How will the skills created be portable and relevant over time?	Has career pathways implementation improved employer engagement? Have career pathways improved the relevance of programs to the skill needs of employers? Have career pathways resulted in improved labor market outcomes for participants?
Design	Building the pathway for a defined population of participants; addressing starting skills levels, featuring course and credential sequencing, providing multiple entry and exit points as well as alignment across settings, and awarding credentials that stack (supporting educational and economic mobility).	Who is the career pathway intended to serve and how will it do so? How is the pathway designed from a participant perspective? How do the educational components connect as participants move between settings and stages?	Do career pathways improve participant progression and completion? Which career pathway design components are most associated with improved results?
Partnership	Forming and maintaining collaborations based on shared goals and aligned responsibilities, with defined leadership, governance, and funding.	Who comes together to create, implement, and sustain the career pathway? What resources and responsibilities does each player bring? How do partners find common language, as well as articulate and pursue shared goals, while meeting their individual accountabilities?	How important is the breadth and depth of career pathway partnerships to successful career pathway implementation? How important are partnerships to career pathway participant success?

Core Element	Components	Guiding Questions	Example Research Questions
Delivery	Using participant-focused, evidence-based practices that incorporate contextualized instruction, concurrent remediation, dual enrollment, competency-based education, work-based learning, and integrated education and training.	Which instructional strategies will be used to produce results from the career pathway? How does the pathway make use of academic and occupational skill building and work-based learning approaches?	Do participant-focused instructional strategies improve learning outcomes? Which instructional strategies are most associated with improved results?
Supports	Providing participants with services based on individual assessment of needs and including active advising, career navigation, case coordination, and referrals to specialized suppliers.	How does the career pathway address the holistic needs of participants to enhance their success? How is equity considered in providing differentiated supports for individual participants?	Do participant supports improve participant progression and completion? Which participant supports are most associated with improved results? Do career pathways improve equity in access and outcomes?
Measurement	Tracking progress through shared use of data, selection of metrics, and commitment to formative and summative assessment to inform continuous improvement.	How is success defined for the career pathway? How are data assembled to assess success? What is the approach to continuous improvement?	How measurable are career pathways? Do career pathway improvement efforts lead to more robust implementation? Do they lead to improved results?

Endnotes

¹*What Works for Adult Learners: Lessons from Rigorous Career Pathway Evaluation Studies for Policy, Practice and Future Research*, Prepared by Debra D. Bragg, with Barbara Endel, Nate Anderson, Lisa Soricone, and Erica Acevedo December 12, 2017, Annie E. Casey Foundation.

² *Career Pathways Research and Evaluation Synthesis: Career Pathways Design Study*, Deena Schwartz, Julie Strawn, Maureen Sarna, February 2018, Abt Associates, under contract to USDOL.

³ *Career Pathways Implementation Synthesis: Career Pathways Design Study*, Maureen Sarna, Julie Strawn, February 2018, Abt Associates, under contract to USDOL.

⁴ Columns 1 – 3 of Table 1 are from *Career Pathways and Adult Education*, September 2017. Judy Mortrude, CLASP.