



## Education



Education interventions offer instruction or services to support educational attainment that is applicable to a variety of jobs, such as GED support, adult basic education, or postsecondary education. These interventions typically combine education with case management and other services that help people identify, apply to, or complete training for job opportunities that make use of their new educational abilities or credentials. The Pathways to Work Clearinghouse classified interventions as delivering education services if the study authors described the intervention as providing or helping people access adult basic education, English language classes, high school completion or GED coursework, or postsecondary education relevant to a variety of occupations.<sup>1</sup> For example, an education intervention might help people enroll in community college programs to pursue an associate in arts or science degree to expand their employment options, or a program might offer English classes to people whose employment opportunities are limited because of language barriers.

State and county government agencies, local nonprofits, faith-based organizations, and community colleges administer these types of interventions. The interventions typically begin by assessing the academic abilities of potential clients, either to determine eligibility for services or to place clients in appropriate educational programs. Education interventions typically serve clients who are unemployed and who do not have the educational credentials required by many employers.

### What do we mean by education?

The Pathways to Work Evidence Clearinghouse defines education as services to support educational attainment, such as GED support, adult basic education, or postsecondary education.

### What are Evidence Snapshots?

Evidence Snapshots are short briefs on the effectiveness of programs that use a specific approach to service provision. These briefs draw on interventions that the Pathways to Work Clearinghouse has reviewed. They summarize what we know about programs that use a specific service (such as education) or a common service-delivery strategy (such as career pathways).

### What is the Pathways to Work Clearinghouse?

The Pathways to Work Clearinghouse identifies interventions that aim to improve employment and earnings outcomes for populations with low incomes, especially public benefits recipients. The Pathways to Work Clearinghouse conducts a transparent, comprehensive search for studies of such interventions, rates the quality of those studies to assess the strength of the evidence they provide, and determines the evidence of effectiveness for the studied interventions.

For more information, visit the Pathways to Work Clearinghouse website: <https://pathwaystowork.acf.hhs.gov/>.

## What does the evidence say?

The Pathways to Work Clearinghouse identified 12 interventions in which education was the primary focus of the intervention, or the primary service.<sup>2</sup> These interventions were each examined in at least one high- or moderate-rated study that reported employment, earnings, public benefit receipt, or education and training outcomes.<sup>5</sup> This Evidence Snapshot summarizes 12 studies of these 12 interventions reviewed by the Pathways to Work Clearinghouse. The studies were conducted between 1991 and 2016, and published through May 2022.<sup>4</sup>

For this snapshot, the Pathways to Work Clearinghouse considered earnings, employment, public benefit receipt, and education and training findings in the short term (18 or fewer months) and long term (between 18 months and 5 years). Across these studies, we observe the following:



**Short-term annual earnings increased by \$23, and long-term annual earnings increased by \$102, on average, across the 12 education interventions for which these outcomes were examined.** Four education interventions increased clients' earnings, either in the short term or long term. One intervention increased earnings in the short term but not the long term, and three of these interventions increased earnings in the long term but not the short term.



**Short-term employment increased by two percentage points and long-term employment increased by one percentage point, on average, across the nine education interventions for which these outcomes were examined.** One intervention increased employment in the short and long term, two interventions increased employment in the short term but not the long term, and two interventions increased employment in the long term but not the short term.<sup>5</sup>



**The proportion of people receiving public benefits decreased by two percentage points in the short term and one percentage point in the long term, on average, across the nine education interventions for which this outcome was examined.** Eight interventions examined the amount of public benefits received. **On average, across these eight interventions, the amount of annual public benefits received decreased by \$169 in the short term and \$137 in the long term.** Across the nine education interventions that measured whether people received public benefits or the amount of public benefits received, two interventions reduced the proportion of people receiving public benefits and the amount received in the short and long term, and two interventions reduced the proportion of people receiving public benefits and the amount received in the long term only.<sup>6</sup>



**Education and training attainment increased by six percentage points, on average, across the eight education interventions for which these outcomes were measured.**<sup>7</sup> Five of the eight education interventions increased education and training attainment.



**Six education interventions improved more than one type of outcome domain.** Specifically, three education interventions improved outcomes in three or more domains. The [Riverside Human Capital Development \(HCD\) Program](#) increased long-term earnings, long-term employment, and education and training attainment, and it decreased the amount of public benefits received and the proportion of people receiving public benefits in the long term. [Grand Rapids HCD](#) increased short-term employment and education and training attainment, and it decreased the amount of public benefits received and the proportion of people receiving public benefits in the short and long terms. These two programs provided services to single parents who were applicants or recipients of Aid to Families with Dependent Children (AFDC).<sup>8</sup> The National Guard Youth ChalleNge increased long-term earnings, long-term employment, and education and training attainment. The [National Guard Youth ChalleNge](#) program served youth ages 16 to 24 without a high school degree. [Atlanta HCD, English for Advancement](#) and [Oklahoma City's Education, Training, and Employment \(ET&E\) Program](#) each improved two types of outcome domains.

## How does the Pathways to Work Clearinghouse assess if an intervention is effective?

The Pathways to Work Clearinghouse assigned an evidence of effectiveness rating to each intervention in each of four outcome domains: earnings, employment, public benefit receipt, and education and training. Most of the domains are broken into short (18 or fewer months) and long (between 18 months and 5 years) term because we expect the interventions might have different effects in different time periods. The education and training domain is not broken into time periods because after you obtain a degree, you cannot lose it in the future. The evidence of effectiveness rating describes the extent of support that the intervention is likely to produce favorable results in that domain if faithfully replicated with a similar population. If an intervention had no evidence to assess support in any domain, we excluded it from this brief.

### There are six ratings:

- ★ *Well-supported* means there are at least two moderate- or high-quality studies with statistically significant favorable findings.
- ⬆️ *Supported* means there is one moderate- or high-quality study with statistically significant favorable findings.
- ⚖️ *Mixed support* means there are some statistically significant findings from moderate- or high-quality studies both that the intervention improves outcomes and that it worsens outcomes.
- ❌ *Not supported* means that we have the strongest evidence that the intervention is unlikely to produce substantial favorable results in a given outcome domain. Studies of these interventions have found only a pattern of null and/or unfavorable findings. We only consider impact studies of at least moderate quality in determining this rating.
- ⚠️ *Insufficient evidence to assess support* means there are moderate- and high-quality studies but we cannot assign one of the other ratings.
- *No evidence to assess support* means there are no moderate- or high-quality studies.

Full definitions of each rating are located in the [Pathways to Work Clearinghouse protocol](#).

No education interventions received the well-supported rating in the outcome domains of interest to the Pathways to Work Clearinghouse. Eight education interventions received a supported rating in at least one outcome domain.

Evaluations compared the outcomes of study participants in the intervention group to the outcomes of participants in a comparison group who were not offered the intervention but who might have received alternative services. For studies examining education interventions, people in the comparison group had access to (1) other services provided by the organization or available in the community (75 percent of the studies), or (2) a different set of intensive services (25 percent of the studies).<sup>9</sup>

## How does the Pathways to Work Clearinghouse calculate the average effect of an intervention?

For this brief, the Pathways to Work Clearinghouse calculated the average effect for each domain by averaging effects within moderate- and high-quality studies, then within interventions, and then across interventions that use education as their primary service. The average includes all studies, not just those with a supported rating or statistically significant findings, because these studies still provide useful evidence in considering the overall effectiveness of education as a primary service in employment and training interventions. We show the average and not the median because, for the most part, there are no outliers skewing the average.<sup>10</sup> For more information, visit the Pathways to Work Clearinghouse website [Frequently Asked Questions](#).

## What makes an effect large?

The Pathways to Work Clearinghouse classifies an effect as large if its corresponding effect size is more than 0.25 standard deviations. The effect size is the strength of the effect measured in standard units (that is, standard deviations). In 2018, an increase in annual earnings of \$5,229 would have an effect size of about 0.25.

## What interventions provide education as their primary service?

The Pathways to Work Clearinghouse defines an intervention as a specific bundle of services or policies implemented in a given context. Exhibit 1 alphabetically lists and describes the 12 interventions that offered education as the primary service. This exhibit includes information about the populations

served by each intervention, the setting where the intervention was provided (whether it was in urban, rural, or mixed settings), and when the evaluation was conducted. It also contains the highest effectiveness rating for each domain.

**Exhibit 1.** Education interventions and their effectiveness by domain<sup>a</sup>

Intervention description	Populations and employment barriers <sup>b</sup>	Settings <sup>c</sup>	Year evaluation began	Increase earnings	Increase employment	Decrease public benefit receipt <sup>d</sup>	Increase education and training
★ well-supported   ↑ supported   ⊖ mixed support   ✗ not supported   ⊕ insufficient evidence   ○ no evidence							
<b><u>Atlanta Human Capital Development (HCD) Program</u></b> To help participants secure jobs that could lead to economic self-sufficiency, Atlanta's HCD program focused on providing education and training to single parents who were AFDC recipients.	Cash assistance recipients, Parents, Single parents	Urban only	1991	⊕	⊕	↑	↑
<b><u>Atlanta HCD Program as compared with Atlanta Labor Force Attachment (LFA) Program</u></b> To help participants secure jobs that could lead to economic self-sufficiency, Atlanta's HCD program focused on providing education and training to single parents who were AFDC recipients. This evaluation directly compared HCD with a separate intervention, LFA, in order to better understand which of the two interventions might be more effective. The distinctive features of HCD were adult basic education courses or vocational training programs.	Cash assistance recipients, Parents, Single parents	Urban only	1991	⊕	○	⊕	○
<b><u>Bridges to Pathways (Bridges)</u></b> Bridges offered educational services and subsidized internships to help Chicago male youth with previous justice system involvement earn a GED and find employment.	People with less than high school diploma or GED, Males, People who were formerly incarcerated, People with justice system involvement, Young adults (aged 16–24)	Urban only	2015	⊕	↑	○	⊕

Intervention description	Populations and employment barriers <sup>b</sup>	Settings <sup>c</sup>	Year evaluation began	Increase earnings	Increase employment	Decrease public benefit receipt <sup>d</sup>	Increase education and training
★ well-supported   ↑ supported   ◐ mixed support   ✖ not supported   ◑ insufficient evidence   ○ no evidence							
<b>English for Advancement (Efa)</b> Efa, a program offered by Jewish Vocational Service in Boston, promoted the economic mobility of limited English speakers by providing English instruction and workforce development services.	People with low incomes	Tested in multiple settings	2016	↑	↑	○	○
<b>Grand Rapids HCD Program</b> The Grand Rapids HCD program focused on providing education and training to single parents who were AFDC recipients to increase employment and earnings and to decrease benefit receipt.	Cash assistance recipients, Parents, Single parents	Urban only	1991	◑	↑	↑	↑
<b>Grand Rapids HCD Program as compared with Grand Rapids LFA Program</b> The Grand Rapids HCD program focused on providing education and training to single-parent AFDC recipients to increase employment and earnings and to decrease benefit receipt. This evaluation directly compared HCD with a separate intervention, LFA, in order to better understand which of the two interventions might be more effective. The distinctive features of HCD are adult basic education courses or vocational training programs.	Cash assistance recipients, Parents, Single parents	Urban only	1991	◑	○	✖	○
<b>Los Angeles Reconnections Career Academy (LARCA) Program<sup>e</sup></b> To facilitate educational advancement and employment, the LARCA program provided case management, education, training, employment services, and supportive services to youth with low incomes who were at risk of dropping out or who had already dropped out of high school.	People with less than high school diploma or GED, Young adults (aged 16–24)	Urban only	2013	◑	↑	◑	↑
<b>National Guard Youth Challenge (Challenge)</b> The Challenge Program aimed to improve the lives of youth who were out of school and under- or unemployed by providing education, positive youth development, and mentorship.	People with less than high school diploma or GED, Young adults (aged 16–24)	Tested in multiple settings	2005	↑	↑	○	↑



Intervention description	Populations and employment barriers <sup>b</sup>	Settings <sup>c</sup>	Year evaluation began	Increase earnings	Increase employment	Decrease public benefit receipt <sup>d</sup>	Increase education and training
★ well-supported ↑ supported ⊖ mixed support ✗ not supported ⊘ insufficient evidence ○ no evidence							
<b><u><a href="#">New Visions Self-Sufficiency and Lifelong Learning Project</a></u></b> New Visions Self-Sufficiency and Lifelong Learning Project was a college bridge program for TANF recipients that aimed to provide them with educational skills necessary for longer term academic success, foster lifelong learning, and promote job advancement.	Cash assistance recipients, Parents	Tested in multiple settings	1998	⊘	⊘	⊘	⊘
<b><u><a href="#">Oklahoma City's Education, Training, and Employment (ET&amp;E) Program</a></u></b> Oklahoma City's ET&E program provided education and occupational training to single parents who were AFDC recipients to help improve their employment prospects.	Cash assistance recipients, Parents, Single parents	Urban only	1991	↑	⊘	↑	⊘
<b><u><a href="#">Riverside HCD Program</a></u></b> To support future employment, the HCD program implemented in Riverside, CA, focused on providing education and training to single parents who were AFDC recipients.	Cash assistance recipients, Parents, Single parents	Urban only	1991	↑	↑	↑	↑
<b><u><a href="#">Riverside HCD Program as compared with Riverside LFA Program</a></u></b> To support future employment, the HCD program implemented in Riverside, CA, focused on providing education and training to single parents who were AFDC recipients. This evaluation directly compared HCD with a separate intervention, LFA, in order to better understand which of the two interventions might be more effective; the distinctive features of HCD were adult basic education courses or vocational training programs.	Cash assistance recipients, Parents, Single parents	Urban only	1991	⊘	○	⊘	○

Table notes:

- <sup>a</sup> To make the results easier to view in this exhibit, the effectiveness ratings represent the highest rating given to the short-term, long-term, or very long-term outcomes for that intervention. For example, if an intervention has a supported effectiveness rating in the long term for earnings, but not in the short term or very long term, we will display the supported icon for the earnings domain.
  - <sup>b</sup> Populations and employment barriers are listed if authors described all intervention participants as having the characteristic or if the characteristic was an eligibility requirement.
  - <sup>c</sup> The settings indicate whether the study or studies of an intervention were conducted in urban, rural, or multiple settings.
  - <sup>d</sup> The decrease public benefit receipt ratings in this table are from the Pathways to Work Clearinghouse website and combine outcomes related to public benefit receipt and amount. Later in this report, we break out the outcomes by public benefit receipt and public benefit amount. That means the ratings listed in this column might or might not line up with data presented in the text and graphs in this report.
  - <sup>e</sup> LARCA reported two effects on short-term employment that are included in the [Pathways to Work Clearinghouse](#). One of these effects was statistically significant and favorable, and none were statistically significant and unfavorable; therefore, LARCA is shown as a supported intervention in Exhibit 1. However, when the average effect on short-term employment is calculated using the two relevant outcomes, the average effect size is negative, as shown in Exhibit 4.
- AFDC = Aid to Families with Dependent Children; TANF = Temporary Assistance for Needy Families.

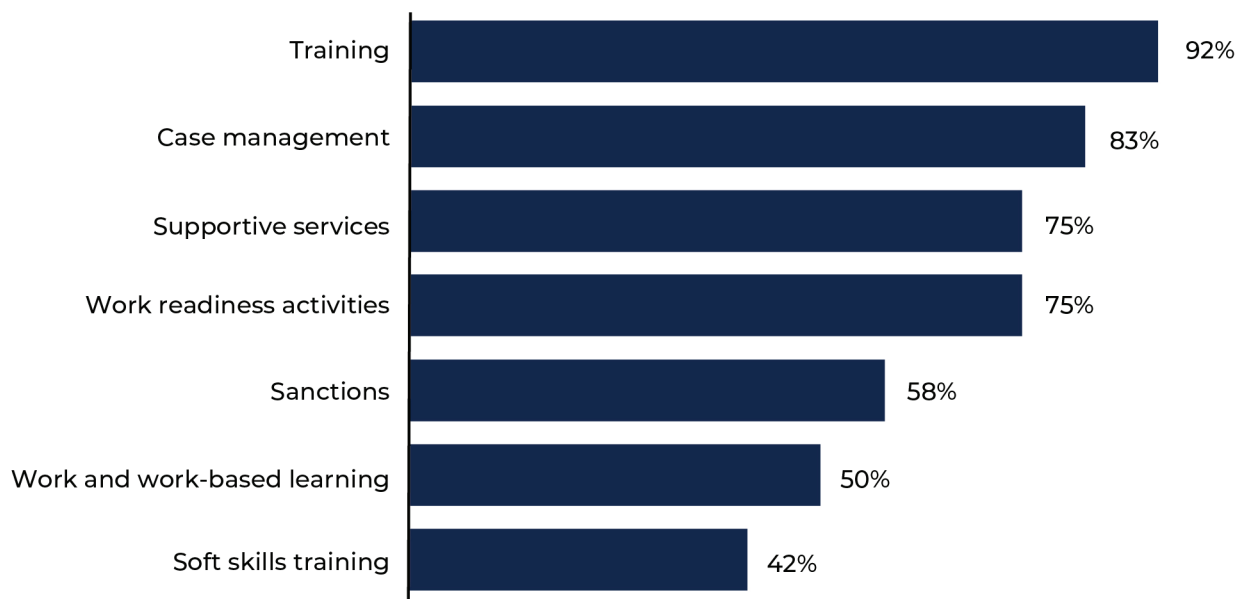
## How were the interventions implemented?

Understanding how interventions were implemented is crucial to deciding whether an intervention is likely to have a similar effect in another community. Public-sector organizations, such as human services or Temporary Assistance for Needy Families (TANF) agencies, often implemented education interventions in collaboration with community colleges, local nonprofits, or workforce agencies. The 12 education interventions we examined offered different combinations of policies or services (see Exhibit 2). Almost all provided other forms of training as well as education (92 percent). Most education interventions offered services through ongoing case management (83 percent), and the majority provided work readiness activities (75 percent), supportive services (75 percent), or both. Seven of the 12 education interventions, and 7 of the 8 interventions that targeted AFDC or TANF recipients, required clients to participate in services and could reduce or terminate their cash assistance benefits if clients did not participate. About half of the interventions offered adult basic skills, and about half offered GED preparation. Two interventions offered English for speakers of other languages, and one intervention offered postsecondary education.

The length of the interventions varied widely from two months to almost three years. The populations, settings, and timing of the studies of education interventions also varied (Exhibit 1). Most interventions served single parents, and although all served people with low incomes, about half served cash assistance recipients specifically, and most of the others served young adults. Most education interventions were tested in urban settings, but a few were tested in multiple settings.

Studies of education interventions for adults with low incomes were most common in the 1990s, while studies of education interventions for young adults were more recent. Of the 12 interventions examined for this snapshot, 9 were delivered to adults with low incomes and 7 of these were studied in evaluations that began in 1991. Of the 12, only 1 intervention for adults with low incomes was studied in the past 20 years (English for Advancement). The other three interventions were delivered to young adults and studied in evaluations that began between 2005 and 2015. Evaluations of education interventions that are ongoing or that released findings after May 2022 are not included in this snapshot. The Pathways to Work Clearinghouse website (<https://pathwaystowork.acf.hhs.gov/>) includes more detail about each intervention.

**Exhibit 2.** Other services offered with education, out of 12 interventions<sup>11</sup>



Percentage of education interventions that provided service

## Do education interventions increase earnings?



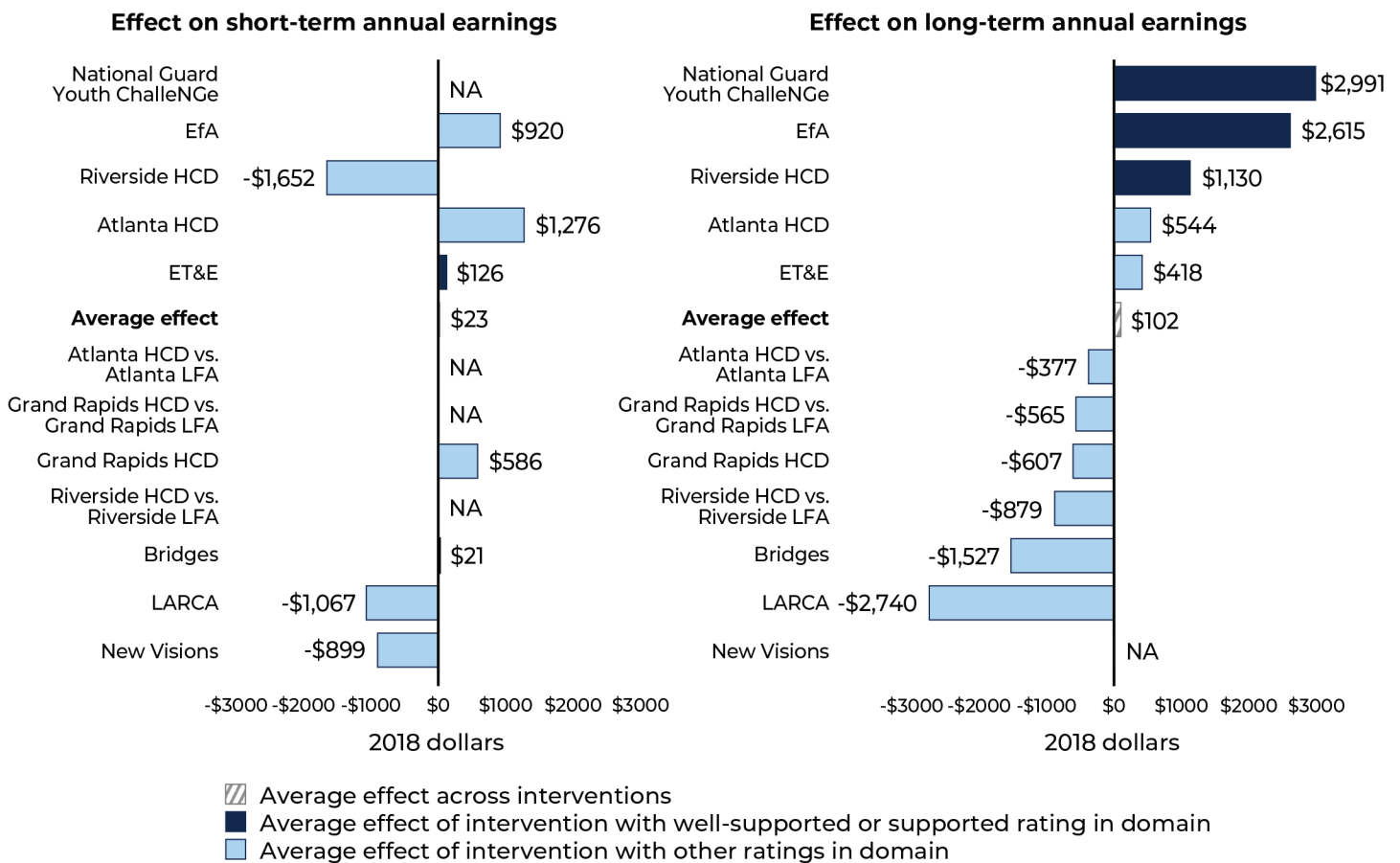
Short-term annual earnings increased by \$23, and long-term annual earnings increased by \$102, on average, across the 12 education interventions that measured an effect on earnings (Exhibit 3), compared with comparison group earnings.

Four of the 12 education interventions increased clients' annual earnings in the short term or long term, compared with comparison group earnings. Oklahoma City's ET&E Program increased earnings in the short term by \$126. Three interventions increased earnings in the long term but not the short term. National Guard

Youth ChalleNGe and English for Advancement had the largest effects on long-term earnings, increasing earnings by \$2,991 and \$2,615, respectively. Adhering to the interventions' education and training requirements likely reduced the amount of time that participants had available to participate in paid employment and might have contributed to smaller or negative measured short-term effects while the interventions were being evaluated.

Exhibit 3 shows the average effect on earnings for each intervention. Significant and favorable effects are noted in darker blue.

**Exhibit 3.** Education interventions, on average, had little effect on short-term and long-term annual earnings



Interventions are sorted according to the size of the long-term effects because long-term effects better represent sustained increases in economic self-sufficiency. Supported interventions, meaning interventions with research indicating significant and favorable effects, are noted in darker blue.

NA means an intervention did not measure outcomes at the specified time period.

Bridges = Bridges to Pathways; EfA = English for Advancement; ET&E = Oklahoma City's Education, Training, and Employment Program; HCD = Human Capital Development; LARCA = Los Angeles Reconnections Career Academy Program; LFA = Labor Force Attachment; New Visions = New Visions Self-Sufficiency and Lifelong Learning Project.



## Do education interventions increase employment?

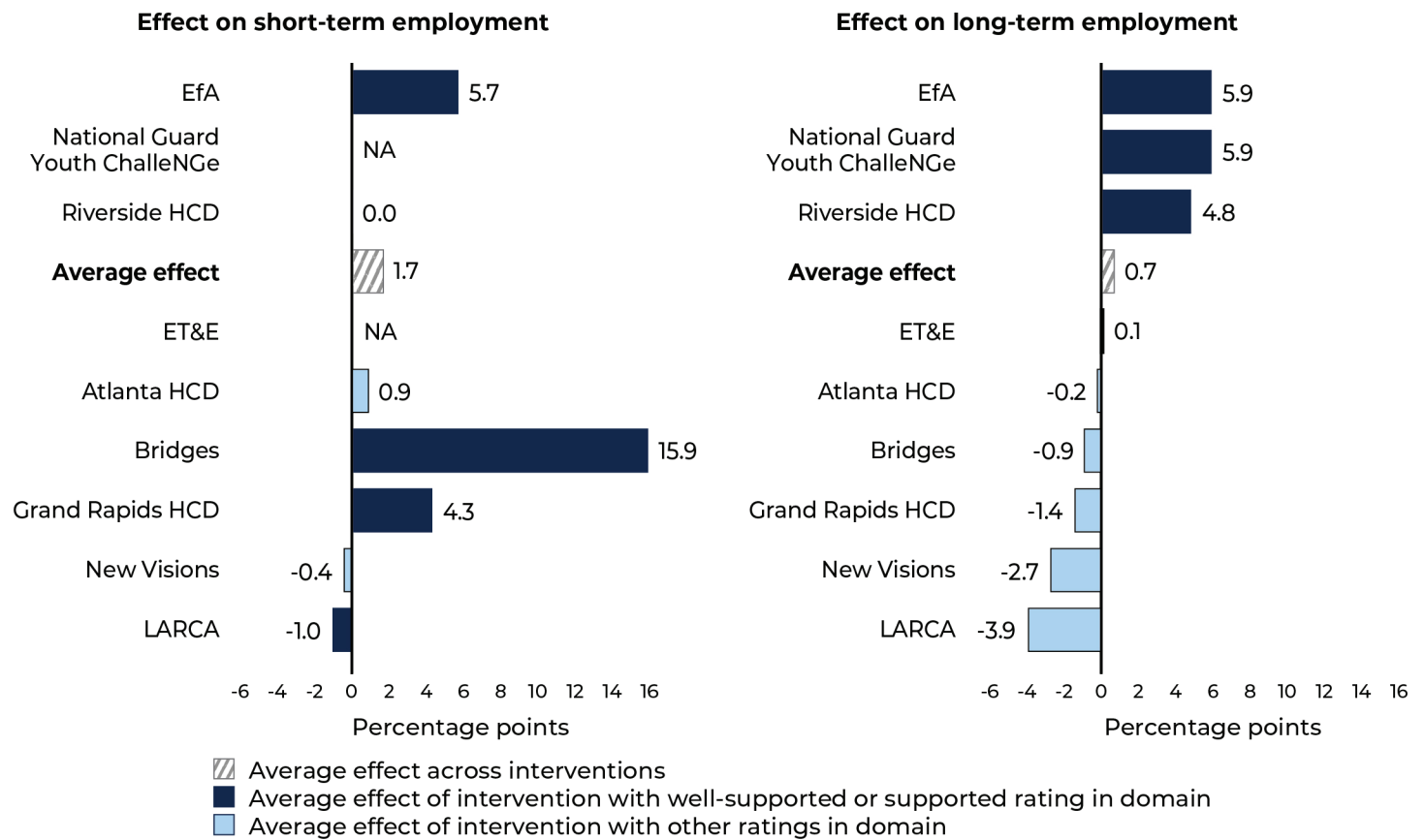


**Short-term and long-term employment increased by one to two percentage points, on average, across the nine interventions that examined employment outcomes (Exhibit 4), compared with comparison group employment.**

**Three interventions increased employment in the short term, and three interventions increased employment in the long term.**<sup>12</sup> English for Advancement increased employment in the short

term by 5.7 percentage points and in the long term by 5.9 percentage points. Two interventions increased employment in the short term only. Bridges to Pathways (Bridges) increased employment by 15.9 percentage points, and Grand Rapids HCD did so by 4.3 percentage points. Two interventions increased employment in the long term only. National Guard Youth Challenge increased employment in the long term by 5.9 percentage points, and Riverside HCD increased long-term employment by 4.8 percentage points.

**Exhibit 4.** Education interventions, on average, had little effect on short-term and long-term employment



Interventions are sorted according to the size of the long-term effects because long-term effects better represent sustained increases in economic self-sufficiency. Supported interventions, meaning interventions with research indicating significant and favorable effects, are noted in darker blue.

LARCA reported two effects on short-term employment that are included in the Pathways to Work Clearinghouse. One of these effects was statistically significant and favorable, and none were statistically significant and unfavorable. Therefore, LARCA is a supported intervention. However, across the domain outcomes, the average effect was negative.

NA means an intervention did not measure outcomes at the specified time period.

Bridges = Bridges to Pathways; EfA = English for Advancement; ET&E = Oklahoma City's Education, Training, and Employment Program; HCD = Human Capital Development; LARCA = Los Angeles Reconnections Career Academy Program; LFA = Labor Force Attachment; New Visions = New Visions Self-Sufficiency and Lifelong Learning Project.

## Do education interventions decrease public benefit receipt?



**The proportion of people receiving public benefits decreased by two percentage points in the short term and one percentage point in the long term, on average, relative to the comparison group.** Studies of nine education interventions estimated effects on the proportion of people receiving public benefits (Exhibit 5).<sup>13</sup> ET&E and Grand Rapids HCD reduced the proportion of people receiving public benefits in both the short and long term. Grand Rapids HCD showed the largest reduction in short-term public benefit receipt (3.3 percentage points). The four interventions that decreased public benefit receipt in the long term were Atlanta HCD, Grand Rapids HCD, Riverside HCD, and ET&E. Riverside HCD reduced the proportion of people receiving public benefits in the long term by the largest amount (5.0 percentage points).

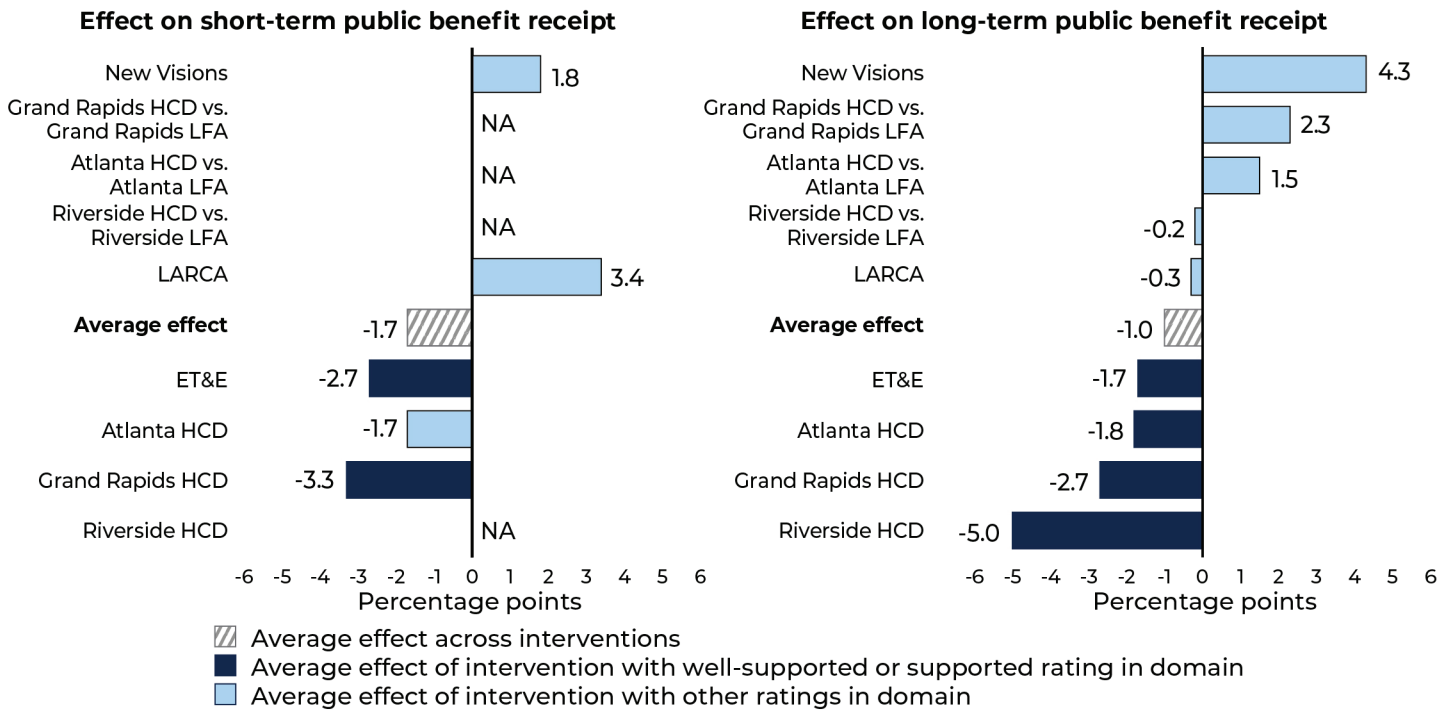
ET&E and Grand Rapids HCD reduced the proportion of people receiving public benefits in both the short and long term. Grand Rapids HCD showed the largest reduction in short-term public benefit receipt (3.3 percentage points). The four interventions that decreased public benefit receipt in the long term were Atlanta HCD, Grand Rapids HCD, Riverside HCD, and ET&E. Riverside HCD reduced the proportion of people receiving public benefits in the long term by the largest amount (5.0 percentage points).

**The amount of annual public benefits received decreased by an average of \$169 in the short term**

**and decreased by an average of \$137 in the long term, on average, relative to the comparison group.** Studies of eight education interventions estimated effects on public benefit amount (Exhibit 6). The ET&E Program and the Grand Rapids HCD program reduced the amount of public benefits received in the short term by \$226 and \$462, respectively. The four interventions that decreased public benefit receipt in the long term were Riverside HCD, Grand Rapids HCD, Atlanta HCD, and ET&E, which reduced the amount of benefits received by \$539, \$399, \$237, and \$132, respectively.

All four of the education interventions that reduced the proportion of people receiving public benefits in the short or long term or that reduced the amount of benefits received were studied among AFDC participants or applicants. These interventions were part of a set of related evaluations beginning in 1991.

**Exhibit 5.** Education interventions, on average, had little effect on the proportion of people receiving public benefits

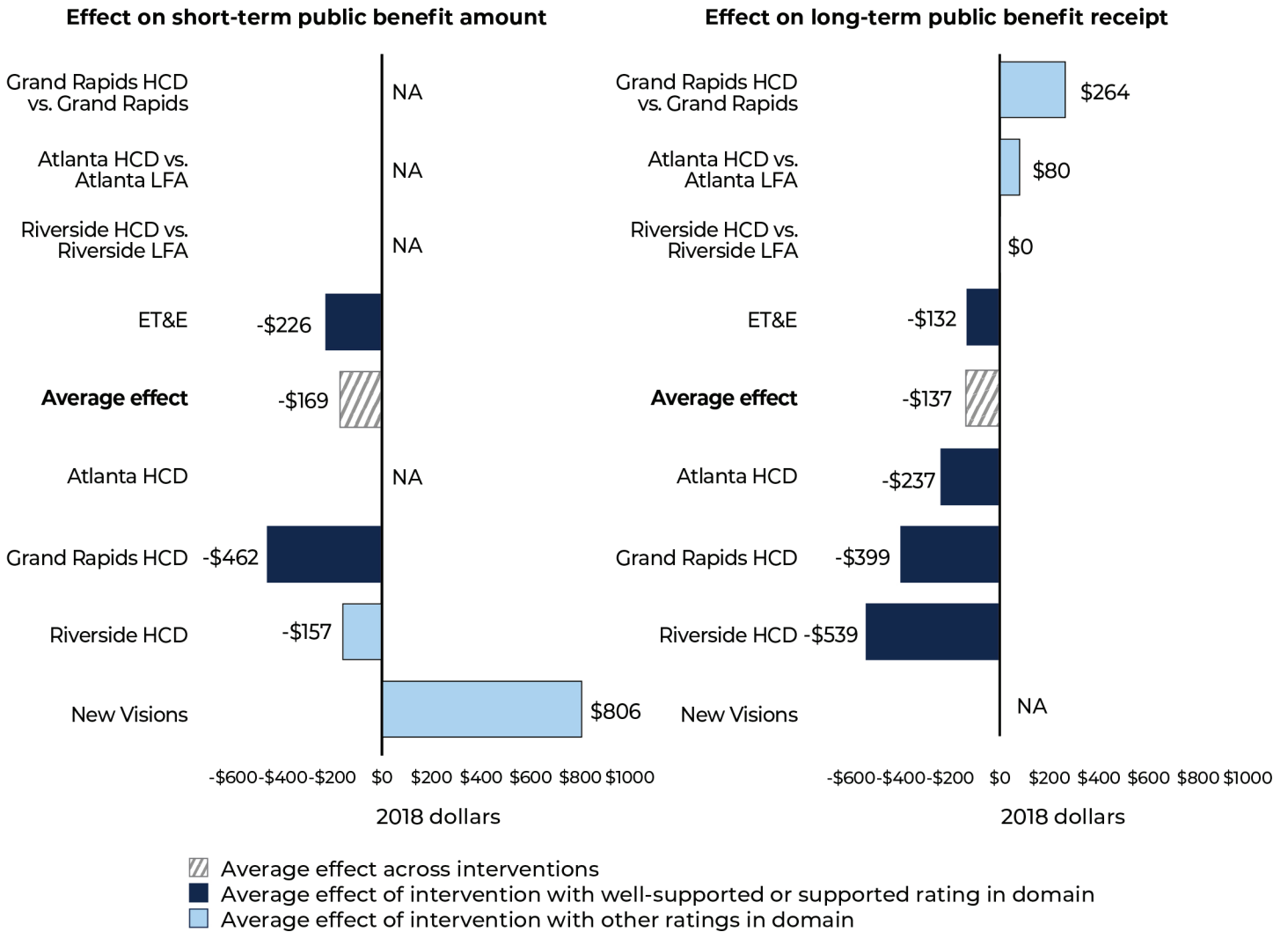


Interventions are sorted according to the size of the long-term effects because long-term effects better represent sustained increases in economic self-sufficiency. Supported interventions, meaning interventions with research indicating significant and favorable effects, are noted in darker blue.

NA means an intervention did not measure outcomes at the specified time period.

EfA = English for Advancement; ET&E = Oklahoma City's Education, Training, and Employment Program; HCD = Human Capital Development; LARCA = Los Angeles Reconnections Career Academy Program; LFA = Labor Force Attachment; New Visions = New Visions Self-Sufficiency and Lifelong Learning Project.

**Exhibit 6.** Education interventions, on average, decreased the amount of public benefits received<sup>14</sup>



Interventions are sorted according to the size of the long-term effects because long-term effects better represent sustained increases in economic self-sufficiency. Supported interventions, meaning interventions with research indicating significant and favorable effects, are noted in darker blue.

NA means an intervention did not measure outcomes at the specified time period.

EfA = English for Advancement; ET&E = Oklahoma City's Education, Training, and Employment Program; HCD = Human Capital Development; LARCA = Los Angeles Reconnections Career Academy Program; LFA = Labor Force Attachment; New Visions = New Visions Self-Sufficiency and Lifelong Learning Project.

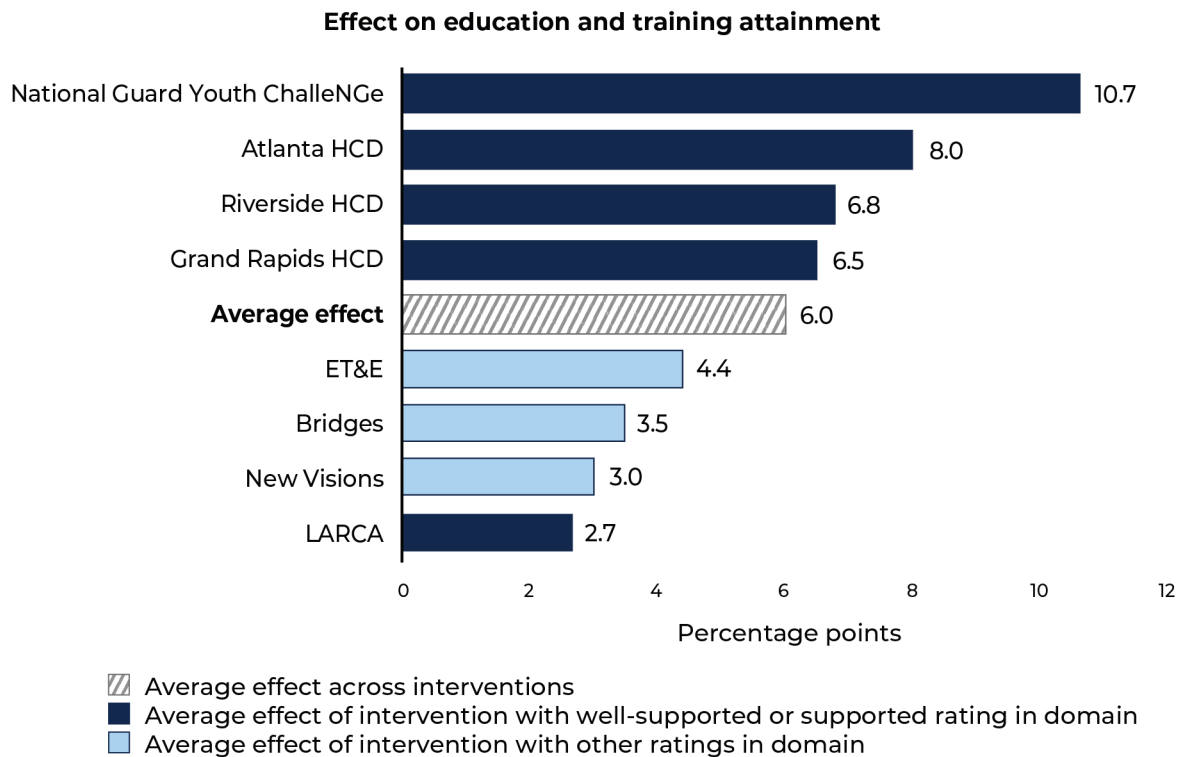
## Do education interventions increase education and training attainment?



Education and training attainment increased by an average of six percentage points for the eight education interventions that measured this outcome, compared with comparison group education and training attainment (Exhibit 7). Five interventions increased education and training attainment.

National Guard Youth ChalleNGe increased education and training attainment by 10.7 percentage points, and the three HCD programs each increased education and training attainment by at least 6.5 percentage points. LARCA increased education and training attainment by 2.7 percentage points.

**Exhibit 7.** Education interventions, on average, increased education and training attainment



Supported interventions, meaning interventions with research indicating significant and favorable effects, are noted in darker blue. Bridges = Bridges to Pathways; EfA = English for Advancement; HCD = Human Capital Development; ET&E = Oklahoma City's Education, Training, and Employment Program; LFA = Labor Force Attachment; LARCA = Los Angeles Reconnections Career Academy Program; New Visions = New Visions Self-Sufficiency and Lifelong Learning Project.

## Which are the most effective education interventions?

Two education interventions (National Guard Youth ChalleNGe and Grand Rapids HCD) had a favorable effect on three outcome domains examined by the Pathways to Work Clearinghouse, and one intervention (Riverside HCD) had a favorable effect on all four outcome domains. The two HCD interventions were found to be effective only when compared to a comparison group who received the typical services available in the community.<sup>15</sup> All three interventions increased employment and education and training attainment. Riverside HCD and National Guard Youth ChalleNGe also increased earnings (Exhibit 8). More specifically, Riverside HCD increased education and training attainment by 7 percentage points, long-term employment by 5 percentage points, and long-term earnings by \$1,130 annually; National Guard Youth ChalleNGe increased education and training attainment by 11 percentage points, long-term employment by 6 percentage points, and long-term earnings by \$2,991 annually; and Grand Rapids HCD increased education and training attainment by 7 percentage points and short-term employment by 4 percentage points. The two HCD programs also decreased long-term public benefit receipt, and Grand Rapids HCD decreased short-term public benefit receipt.

These interventions share some characteristics, but they also differ in interesting ways. Riverside HCD and Grand

Rapids HCD were developed and implemented as part of the same pilot of changes to AFDC in 1991. They provided services for two years to parents who had applied for or were receiving AFDC benefits in urban communities. In contrast, National Guard Youth ChalleNGe, which was studied beginning in 2005, provided services for one year to young adults without high school diplomas or GEDs in a variety of communities.

All three interventions offered education in combination with case management and other services. People who participated in the two HCD interventions could receive adult basic education, high school completion or GED preparation classes, or English language classes, depending on their needs. In addition to education and case management, they could also participate in job clubs; access job developers; and receive support with the costs of child care, transportation, and work-related supplies. Services were available for two years, and clients' cash assistance payments could be reduced if they did not participate. In contrast, youth participating in National Guard Youth ChalleNGe lived on-site for 22 weeks while they completed orientation, prepared for the GED exam, and engaged in positive youth development activities, such as soft skills training, community service, and job search assistance. Youth received structured mentoring for a year following the on-site phase.



**Exhibit 8.** Effects in 2018 dollars for the education intervention that improved outcomes in three domains

**Increase earnings**

	<a href="#">Grand Rapids Human Capital Development (HCD) Program</a>	<a href="#">National Guard Youth Challenge Program (ChalleNGe)</a>	<a href="#">Riverside Human Capital Development (HCD) Program</a>
<b>Short-term</b>	⊗↑ \$586 per year	⊗	⊗↓ -\$1,652 per year
<b>Long-term</b>	⊗↓ -\$628 per year	⊗↑ \$2,991 per year	⊗↑ \$1,130 per year

**Increase employment**

	<a href="#">Grand Rapids Human Capital Development (HCD) Program</a>	<a href="#">National Guard Youth Challenge Program (ChalleNGe)</a>	<a href="#">Riverside Human Capital Development (HCD) Program</a>
<b>Short-term</b>	⊗↑ 4% (in percentage points)	⊗	⊗↑ 0% (in percentage points)
<b>Long-term</b>	⊗↓ -1% (in percentage points)	⊗↑ 6% (in percentage points)	⊗↑ 5% (in percentage points)

**Decrease public benefit receipt<sup>a</sup>**

	<a href="#">Grand Rapids Human Capital Development (HCD) Program</a>	<a href="#">National Guard Youth Challenge Program (ChalleNGe)</a>	<a href="#">Riverside Human Capital Development (HCD) Program</a>
<b>Short-term</b>	⊗↑ -\$363 per year	⊗	⊗↑ -\$157 per year
<b>Long-term</b>	⊗↑ -\$308 per year	⊗	⊗↑ -\$473 per year

**Increase education and training**

	<a href="#">Grand Rapids Human Capital Development (HCD) Program</a>	<a href="#">National Guard Youth Challenge Program (ChalleNGe)</a>	<a href="#">Riverside Human Capital Development (HCD) Program</a>
<b>A single rating is assigned across all measurement periods</b>	⊗↑ 7% (in percentage points)	⊗↑ 11% (in percentage points)	⊗↑ 7% (in percentage points)

★ well-supported ⊗ supported ⊖ mixed support ⊗ not supported ⊗ insufficient evidence ⊗ no evidence

↑ Direction of the average effect is favorable ↓ Direction of the average effect is unfavorable

<sup>a</sup> The Pathways to Work Clearinghouse considered the proportion of people receiving public benefits and public benefit amount together based on effect sizes and assigned them a single, combined effectiveness rating. As a result, the effects shown here represent a combined effect in dollars across the proportion of people receiving public benefits and public benefit amount.

In addition to these three interventions that had favorable effects in three or more domains, three

interventions had favorable effects in two outcome domains, shown in Exhibit 9.

**Exhibit 9.** Education interventions with favorable effects on more than one outcome domain

Intervention	Increase earnings		Increased employment		Decrease public benefit receipt		Increase education and training
	Short-term	Long-term	Short-term	Long-term	Short-term	Long-term	All time periods
Atlanta HCD						↑	↑
EfA		↑	↑	↑			
Grand Rapids HCD			↑		↑	↑	↑
National Guard Youth Challenge		↑		↑			↑
Oklahoma City's ET&E	↑				↑	↑	
Riverside HCD		↑		↑		↑	↑

EfA = English for Advancement; ET&E = Oklahoma City's Education, Training, and Employment Program; HCD = Human Capital Development; LARCA = Los Angeles Reconnections Career Academy Program.

### Interventions with the greatest effect size

Another way to assess intervention effectiveness is to examine the greatest effects by domain. Across all education interventions:

- ET&E had the largest effect on short-term earnings (\$126).
- National Guard Youth Challenge had the largest effect on long-term earnings (\$2,991), and education and training attainment (10.7 percentage points).
- Bridges had the largest effect on short-term employment (15.9 percentage points).
- English for Advancement and National Guard Youth Challenge had the biggest effect on long-term employment (5.9 percentage points).
- Grand Rapids HCD led to the largest reduction in the proportion of people receiving public benefits and the largest reduction in the amount of public benefits received in the short term (-3.3 percentage points and -\$462, respectively).
- Riverside HCD led to the largest reduction in the proportion of people receiving public benefits and the largest reduction in the amount of public benefits received in the long term (-5.0 percentage points and -\$539, respectively).

## Needs for future research

Most of the studies profiled in this snapshot were conducted in the 1990s, and most involved recipients of or applicants to a cash assistance program that no longer exists (AFDC). The more recent studies included in this snapshot mainly served young people. This may reflect a shift in the focus of interventions that aim to improve the employment and related outcomes of adults with low incomes, including recipients of TANF; many of these more recent interventions emphasize training and work experience rather than general education.<sup>16</sup> Although a substantial body of research examines educational programs for adults, many of these studies examine programs not specifically delivered to or tested with adults with low incomes, making these studies ineligible for review by the Pathways to Work Clearinghouse. Additional research is needed to determine the short- and long-term benefits of education interventions serving adults with low incomes. Newer studies can also investigate the effects of current practices in delivering adult education, such as using technology to provide training that is self-paced, accessible remotely, and asynchronous. Evaluations of education interventions that are ongoing or that released findings after May 2022 are not included in this snapshot.

Because most education interventions offered multiple services, and because those additional services did not always differ substantially from those the comparison group received, further research should evaluate the effectiveness of specific services and should clearly distinguish the services each group receives. This additional research might clarify what types of education interventions for adults with low incomes are most effective, and which bundles of services are effective in increasing employment and earnings. In addition, all research included in this Evidence Snapshot was either conducted in urban settings or areas that included multiple settings. Further research might therefore help uncover which programs are effective for clients in rural or suburban settings.

## Endnotes

- <sup>1</sup> The Pathways to Work Clearinghouse’s definition of education does not include coursework that prepares clients for jobs in a specific industry, such as programs leading to an associate’s degree in manufacturing. Those activities are classified as occupational or sectoral training. If sector-specific education or training was the focus of an intervention, then the intervention’s primary service is occupational or sectoral training.
- <sup>2</sup> An intervention’s primary service is the principal service of the intervention. The primary service is (1) a component that a large proportion of intervention group members received and a large proportion of comparison group members did not, and (2) the component that was described by the study authors as most integral to the theory of change tested by the study. Interventions may provide multiple services, but only one service is designated as primary.
- <sup>3</sup> A high rating means there is strong evidence that the study findings are solely attributable to the intervention examined. A moderate rating means that readers can be somewhat confident that the study findings are attributable to the intervention, but other factors not accounted for in the study might also have contributed to the findings. Some education interventions might have been examined only in low-rated studies. These interventions were not included in this Evidence Snapshot. For more information, see the section “How does the Pathways to Work Clearinghouse calculate the average effect of an intervention?”
- <sup>4</sup> Evaluations of education interventions that are ongoing or that released findings after May 2022 are not included in this snapshot. The Pathways to Work Clearinghouse continues to review new studies and might produce updated snapshots as additional evidence becomes available.
- <sup>5</sup> Earnings data were reported in various timeframes, including quarterly and annual. The Pathways to Work Clearinghouse converted all the earnings estimates to annual estimates.
- <sup>6</sup> Nine interventions had studies measuring the effect on the proportion of people receiving public benefits or the amount of public benefits received. Studies of five interventions measured effects on the proportion of people receiving public benefits in the short term, and studies of nine interventions measured effects on the proportion of people receiving public benefits in the long term. Studies of four interventions measured effects on the amount of public benefits received in the short term, and studies of seven interventions measured effects on the amount of public benefits received in the long term. In contrast to considering public benefits amount and receipt separately, the Pathways to Work Clearinghouse considered public benefit amount and receipt together and assigned them a single, combined effectiveness rating. That means the ratings listed in this report might or might not line up with summary ratings in Exhibit 1 and on the website.
- <sup>7</sup> The Pathways to Work Clearinghouse includes measures of the attainment of educational degrees and other credentials of potential value in the labor market (for example, acquisition of a GED, associate’s degree, bachelor’s degree, or another certificate or credential). Studies might include other measures of education and training outcomes, such as decompositions of measures over time (for example, earned a GED within one year of service receipt) and measures of credit attainment, but the Pathways to Work Clearinghouse does not include such measures in its review.
- <sup>8</sup> Aid to Families with Dependent Children (AFDC), the predecessor to Temporary Assistance for Needy Families (TANF), was a federal assistance program in effect from 1935 to 1996 that provided financial assistance to families with children and no or low incomes. States set their own benefit levels, established (within federal limitations) standards for eligibility based on income and resources, and administered the program with federal and state funding.
- <sup>9</sup> The comparison group varies by study, so in this section, we present the statistics by percentage of studies and not the percentage of interventions.
- <sup>10</sup> The Pathways to Work Clearinghouse considers statistical significance to be support for the existence of an effect of an intervention. The Pathways to Work Clearinghouse considers an effect estimate statistically significant if the p-value of a two-sided hypothesis test of whether the effect is equal to zero is less than 0.05. A p-value is the probability of observing an effect estimate

as large or larger than the one observed, if there was no actual effect.

- <sup>11</sup> Specific definitions of these services are available in this glossary: <https://pathwaystowork.acf.hhs.gov/glossary>. Services were included if provided to the intervention group but not the comparison group, or if the services were provided more intensively or differently to the intervention group than the comparison group.
- <sup>12</sup> The study of LARCA reported two effects on short-term employment that are included in the Pathways to Work Clearinghouse. The first effect showed a higher percentage of LARCA participants than comparison group members were ever employed during the first year of the study. This effect is statistically significant, meaning that the effect is unlikely to be due to chance. The second effect showed that LARCA participants were employed for fewer total quarters during the first year of the study than were members of the comparison group. That finding is not statistically significant. Following the effectiveness rating requirements in the [Pathways to Work Clearinghouse protocol](#), LARCA earns a supported rating for short-term employment because there is one statistically significant favorable effect and no statistically significant unfavorable effects. The supported rating for employment is shown in Exhibit 1. The Pathways to Work Clearinghouse calculates an intervention's average effect in a given outcome domain and converts it to a percentage point change in rates of employment, public benefit receipt, or credential attainment; or to a dollar-value change in annual earnings or public benefit grant amount. The Pathways to Work Clearinghouse uses three steps to do this. First, we average the standardized effect sizes of all high- and moderate-rated outcomes in the domain in each higher moderate-rated study, weighting by the total sample size for each outcome. Next, we average the effects across studies into an intervention effect, weighting by the maximum sample size for each study. Finally, we convert the average effect size into percentage points or dollars. Following these calculations, LARCA's average effect for short-term employment is negative, as shown by the dark blue bar in Exhibit 4. Additional details on how the Pathways to Work Clearinghouse selects outcomes to review is described in the Pathways to Work Clearinghouse protocol. Further information on how the Pathways to Work Clearinghouse calculates effect

sizes and assigns effectiveness ratings is located in the Pathways to Work Clearinghouse [Frequently Asked Questions](#).

- <sup>15</sup> We report the proportion of people receiving public benefits and the amount of public benefits received separately in these exhibits for graphing purposes. When reporting intervention effectiveness ratings for the public benefit receipt outcome domain, the Pathways to Work Clearinghouse considers these outcomes together based on effect sizes and assigns them a single, combined effectiveness rating.
- <sup>14</sup> The Pathways to Work Clearinghouse adjusted the various estimated effects to account for inflation and other changes over time. This adjustment accounts for changes in the maximum amount of public benefits available because of the Great Recession and other policy changes.
- <sup>15</sup> Two HCD interventions (Grand Rapids HCD and Riverside HCD) had favorable effects in three or more outcome domains. These two interventions compared the outcomes of study participants who received the HCD intervention with the outcomes of participants in a comparison group who were not offered the intervention but who might have had access to other services available in the community. Studies of HCD that compared the outcomes of study participants who received the HCD intervention with the outcomes of study participants who received the LFA intervention did not produce any favorable findings across the four outcome domains.
- <sup>16</sup> Evaluations of education interventions that are ongoing or that released findings after May 2022 are not included in this snapshot.



## Goals of the Pathways to Work Clearinghouse

The Pathways to Work Clearinghouse systematically evaluates and summarizes the evidence on the effectiveness of interventions that aim to improve employment outcomes, reduce employment challenges, and support self-sufficiency for populations with low incomes. It has several goals:

- Conduct a transparent, comprehensive search to identify studies of employment and training interventions designed to improve employment, increase earnings, support self-sufficiency, or advance education and training for populations who have low incomes.
- Rate the quality of those studies to assess the strength of the evidence they provide on the different interventions.
- Determine the evidence of effectiveness for those interventions.
- Share the results, as well as other Clearinghouse products, on a user-friendly website to help state and local TANF administrators, policymakers, researchers, and the general public make sense of the results and better understand how this evidence might apply to questions and contexts that matter to them.
- Synthesize the overall state of evidence in the field by creating and disseminating a variety of reports, briefs, and other products.

For more information, see <https://pathwaystowork.acf.hhs.gov>.

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**Project officers:** Amelia Popham and Siri Warkentien

**Project monitor:** Clare DiSalvo

**Senior advisor:** Kimberly Clum

Office of Planning, Research, and Evaluation

Administration for Children and Families

U.S. Department of Health and Human Services

**Project director:** Diana McCallum

Mathematica

1100 First Street, NE, 12th Floor

Washington, DC 20002-4221

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