



# PROVIDING PATHWAYS OUT OF POVERTY AND INTO CAREERS: THE CASE FOR INTEGRATED EDUCATION AND WORKFORCE TRAINING FOR UNDERSERVED ADULTS

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Eighty percent of good jobs require at least some postsecondary education.<sup>1</sup> And yet, despite this growing need for an educated and highly trained labor force, the U.S. is falling short in preparing a large segment of its population for the future of work. The traditional K–12 system has lost over 26 million adults who have not attained a high school credential, and postsecondary education has not been realistically available for millions more.<sup>2</sup> The shortcomings of our educational system are further reflected in the fact that nearly 40% of U.S. adults have below a basic level of English literacy, and nearly as many have not yet acquired the digital literacy required for today’s good jobs.<sup>3</sup> Equity issues are an intrinsic part of the problem. Adults who have been underserved by traditional educational systems are disproportionately people of color, more likely to be living in poverty, less likely to have access to high-speed internet and technology, and in need of improved English skills. Some of these adults dropped out of high school and want to obtain their secondary credential or pass a high school equivalency test to become eligible for workforce training programs. Many want to improve their skills so that they can transition into such programs and perhaps to college. What they have in common is that the traditional educational system has not served their needs.

Underserved adults do not have the luxury of time, flexibility, and financial resources for lengthy educational programs to improve their outcomes. They need accelerated forms of learning that allow them to improve basic skills, obtain their secondary credential, and gain occupational skills that will help them earn family-sustaining wages. The unique challenges these adults face related to poverty and other barriers also call for a more supportive and comprehensive approach to workforce development that will allow participants to fulfill their potential as employees in the modern workplace.

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## Workforce Development Models That Work for Underserved Adults

There are limited resources available to underserved adults to help them acquire the foundational skills needed for accessing education, occupational training, and support services. However, some relatively new models have shown promise. Title II of the Workforce Innovation and Opportunity Act (WIOA 2014) authorizes and funds basic literacy, academic, and language skills programming for adult learners,<sup>4</sup> with an emphasis on supporting adults' postsecondary education, their enrollment in occupational training programs, and their attainment of credentials in high-demand industry sectors or occupations. Reflecting this priority, WIOA codified a new type of program called Integrated Education and Training (IET).<sup>5</sup> In contrast to the sequential approach used in traditional adult learning and workforce training programs, IET programs aim to accelerate adult learners' progression on a career pathway by simultaneously providing basic skills education, workforce preparation activities,<sup>6</sup> and occupational skills training. Often, these programs also provide wraparound services to support participation and improve program outcomes.

A study of approaches to IET conducted soon after WIOA authorization found that IET programs varied widely in the models used, the types of organizations providing each component of the program, the sectors or occupations targeted, and the specific learner populations served.<sup>7</sup> From federal accountability data, we know that enrollment in IET has been growing steadily, although IET participants remain a small percentage (4%) of the roughly 1.3 million adults enrolled in programming funded through Title II.<sup>8</sup> We also know from these data *who* is participating in IET. Half of all IET participants are 25 to 44 years old, and nearly a quarter (23%) are 19 to 24 years old, indicating that the programs tend to serve college-age or working-age adults. IET participants tend to be enrolled in adult basic education (ABE) programs for English-proficient adults who have low academic skill levels at program entry.<sup>9</sup> However, the second largest group of IET participants consists of Integrated English literacy and civics education (IELCE) enrollees. These adults are learning English and civics and may range in educational level from below high school to holding advanced degrees from their home countries. Unlike programs designed for adults with less developed academic skills, IET for higher level IELCE participants focuses more on enhancing their English skills and helping them transfer their more advanced job skills to the U.S. market.

We reviewed the research on IET models designed specifically for adult learners and found three that appeared promising based on a small body of evidence. These models all use a co-teaching approach where participants receive basic skills and workforce-related instruction simultaneously, but they vary somewhat in the proportion of co-teaching. All three models provide wraparound services to some extent. These supports may include financial assistance; referrals for childcare, food, or transportation assistance; and academic and nonacademic advising on topics such as job readiness or coping skills. These models can also include flexible delivery approaches, such as evening or weekend courses or community-based courses in addition to courses held on a formal campus.



The three models identified had positive impacts on outcomes like obtaining a high school equivalency (HSE) diploma, literacy skills gains, postsecondary credits, workforce credentials, and (less often) employment and wages. The three models are:

- Integrated Basic Training and Skills Training Program (I-BEST)
- Accelerating Connections to Employment (ACE)
- Accelerating Opportunity

Research on longer term employment and earnings is still underway for the I-BEST model; additional findings will be released soon.

Below, we describe the features of models and the impacts they have had on a range of outcomes (Exhibit 1). We then discuss the key takeaways from the research on IET and propose areas of promise for future research and practice.

**Exhibit 1. Overview of Integrated Education and Training Model Components and Impacts**

Component	I-BEST	Accelerating Connections to Employment	Accelerating Opportunity
<b>Instruction</b>			
Foundational skills	●	●	●
Occupational training	●	●	●
<b>Supports</b>			
Academic supports	●	●	●
Non-academic supports	●	○	●
Financial assistance	○		○
<b>Connections to employment</b>			
Work experience during training	○	●	○
Employment services after training		●	○
<b>Impacts</b>			
Earned postsecondary credits	+ Significant	Not measured	Not measured
Earned a postsecondary degree	Nonsignificant	Not measured	Not measured
Earned an occupational credential	+ Significant	+ Significant	+ Significant
Employment rate	TBD	+ Significant	Mixed
Earnings	TBD	+ Significant	Mixed

Sources: Adapted from Gardiner & Juras (2019) for I-BEST and updated with information from Anderson et al. (2016) for Accelerating Connections to Employment and from Modicamore et al. (2017) for Accelerating Opportunity. TBD indicates impacts that will be reported on in the future as part of an ongoing evaluation.

Key: ○ = Component included; ● = Major emphasis.

## I-BEST

The I-BEST approach was initially developed for implementation in three community colleges in Washington, with funding coming primarily from the state. It is now in wide use in Washington, including in four correctional facilities.

The target population for I-BEST has been adult learners or community college students whose skills are too low to qualify them for entry into traditional occupational training programs and who can benefit from an integrated basic skills and occupational skills approach. For 50% of the class time, basic skills and workforce specialists work together (co-teach) to accelerate learning. One teacher provides instruction on English language or literacy, mathematics, digital literacy, and employability or “soft” skills. The other teacher, an industry expert, teaches the workplace knowledge and skills specific to the occupation and credential. Each program has a “navigator” who provides learners with wraparound services such as academic and career advising and connects them to financial support as needed to defray the cost of tuition.

Local demands determine the occupational focus of the programs, which range from welding to healthcare to office work. The programs are usually relatively short (one or two semesters) and offer credits toward a workforce certificate. Upon completion, learners are encouraged to continue their coursework and to follow pathways that may lead to an associate’s or bachelor’s degree.

I-BEST has been the focus of several studies. Most notably, it is one of the models being tested as part of the federally funded Pathways for Advancing Careers and Education (PACE) evaluation.<sup>10</sup> Early findings show an impact on earning college credits and postsecondary certificates. Longer term employment and earnings and the findings from a cost-benefit analysis will be reported at 3 and 6 years after random assignment.

## Accelerating Connections to Employment (ACE)

Funded in 2012 through the U.S. Department of Labor Workforce Innovation Fund, the Accelerating Connections to Employment (ACE) program was piloted by nine local Workforce Investment Boards in collaboration with community colleges across Maryland, Texas, Connecticut, and Georgia. ACE was based on the I-BEST model of integrated basic skills, occupational skills, and job readiness training; wraparound services, including academic and transportation support; optional internship or clinical placements; and long-term career navigation. Each ACE program is aimed at preparing job seekers for high-demand occupations that offer a career pathway.

The target population for the ACE program consists of job seekers whose limited English proficiency and/or low literacy and numeracy skills make them ineligible for traditional workforce training programs. Local implementers of the program have the option of focusing efforts on specific groups of individuals—for example, TANF recipients, non-custodial parents, immigrants, or youth aging out of foster care.

Features of ACE that differ from the I-BEST model include a 100% co-teaching approach and its deep connection to local employers. Decisions on the focus of career training are made at the local level to reflect community needs and ensure a strong connection to potential employers. Employers give input on

occupations and skills needed, advise on curriculum and project design, create internships and clinical placements, interview candidates for appropriate job opportunities, and provide ongoing feedback.

A 4-year study of ACE found impacts on participants' occupational credentialing rates, employment rates, and earnings.<sup>11</sup> Gains in earnings were greater after 2 years, indicating that ACE offers long-term benefits to participants.

## Accelerating Opportunity

The Accelerating Opportunity (AO) model was initiated in Illinois, Kansas, Kentucky, and Louisiana at 54 community and technical colleges and has enrolled over 8,000 learners. It has subsequently been expanded to seven more states. The program is based on the I-BEST model but has less co-teaching—

about 25%, compared to 50% for I-BEST. Decisions about career pathways to include are determined by local workforce needs.

Similar to other models based on I-BEST, AO programs seek to accelerate participants' attainment of industry-recognized credentials for in-demand occupations. Academic and wraparound supports such as tutoring, childcare, and transportation are provided. Programs at each site develop partnerships with local employers and provide career counseling to facilitate participants' successful entry into the workforce.

AO targets adults assessed at the 6th- through 12th-grade

level with the goal of helping them enter career and technical education (CTE) courses concurrently with high school equivalency (HSE) completion programs. Participants include adult education learners and developmental education (i.e., underprepared college-level) learners studying primarily healthcare or manufacturing.

A study of AO found impacts on credential attainment in all four participating states and on employment and earnings in many, but not all, cases.<sup>12</sup> Employment and earnings impacts varied by state, subgroup, and time at which they were measured.

## What Have We Learned About Effective IET Programs?

We know from our work in the field and from existing research that—by design—IET programs are implemented very differently across the country, tailored to local or regional industry needs and learner needs. To meet stakeholder needs, program providers have discretion to choose where the programs are delivered (e.g., within a community college or elsewhere); what careers they lead to and how industry engages with the programs; the instructional models used; and the amount of advising and wraparound support offered to learners.



Studies of IET models implemented in these diverse contexts also yield several key takeaways about programs designed to improve educational and employment opportunities for underserved adults:

- Programs with **strong connections to local workforce agencies and employers** can help adults learn skills needed for local jobs, get work-based experience, gain entry into high-demand occupations, and increase earnings.
- **Coordination between adult basic education and workforce training providers can be challenging—largely due to the amount of planning time required.** Access to prepared curricula and support for program planning could help address this critical barrier. In addition, the field can benefit from further evidence on:
  - Professional development for teachers in co-teaching situations and for administrators that supports the planning necessary for quality, integrated curriculum.
  - Models that provide integrated adult basic education and workforce training in cost-effective ways.
  - Models and curricula (or curricular components) that are effective across providers.
- **Learner recruitment and retention bring several implementation challenges:**
  - Successful recruitment and retention strategies must be tailored to the program’s location and the intended learner population.
  - Potential participants need to hear about the program and experience a relatively easy application and enrollment process (e.g., in-person options supplementing online applications).
  - Classes need to be offered at convenient times, and (as has been shown during the pandemic) if classes are provided virtually, the program may need to supply equipment and hot spots.
  - New strategies for recruiting and retaining learners need to be created and tested. For example, text messaging and apps (e.g., WhatsApp, FaceTime) may help make the connections necessary to successfully recruit and enroll learners—and maintaining those connections may help motivate learners to persist in the program.
  - Programs are more likely to retain learners when they provide strong wraparound services, like childcare, advising, and financial support for tuition and transportation.
- **Effective strategies for employer engagement need to be identified and tested.** The field is hungry for information on how to effectively engage employers in identifying areas of need, informing curricula, and transitioning learners to jobs along a viable career pathway. Navigating employer-recognized credentials is another important area for further exploration.

Currently, no rigorous research exists on IET models other than I-BEST or variations of I-BEST. This existing body of work has documented the high cost of implementing these programs, so **there is strong demand in the field for models of IET that are less costly.**

## What Do We Still Need to Learn?

The following questions indicate priority areas for future research on IET programs for underserved adults:

- Given the proliferation of IET programs, what are the most cost-effective IET models? Which models should be considered “promising” or “gold standard”?<sup>13</sup> How can we identify and study these models and tease out what differentiates those models from others? What data are available or can be collected to show how these programs have opened access to underserved learners and improved completion rates, credentialing, and employment outcomes for their participants?
- What are the longer term impacts of successful IET programs for their graduates, the workforce, their communities, and the larger region? What are the career and earning trajectories of adults who complete IET programs? What are their educational trajectories? Do they acquire multiple credentials? Do they complete 2- and 4-year programs?
  - Do the impacts differ by characteristics of learners (i.e., those who learn English as part of participation, women vs. men, younger vs. older adults)? Do they differ by career/occupational focus?
- To what extent do successful IET programs provide an economic or social “boost” to the communities that host them—what is their impact on the regional economy, the tax base, public benefits, etc.?
- What knowledge and skills do teachers and administrators need to help them meet the needs of underserved adults? How can the field support those needs?
- How can technology be better used to help adult learners move forward in their education and their careers? What can we learn from IET programs that were able to go virtual during the pandemic? How can we best support adoption of those practices?
- What do networks or partnerships contribute in setting up IET programs? What are the funding streams that contribute to implementation? Are some funding streams more cost-effective than others? What implications do different funding streams have for program sustainability?

AIR stands ready to partner with programs, practitioners, funders, and others to continue to advance the knowledge base on promising IET approaches for underserved adults.

## Notes

- <sup>1</sup> Georgetown University Center on Education and the Workforce. (2018). *Three educational pathways to good jobs: High school, middle skills, and bachelor's degree*.
- <sup>2</sup> U.S. Census Bureau & U.S. Bureau of Labor Statistics. (Updated in 2020). Current Population Survey, Educational Attainment in the United States, Table 1. <https://www.census.gov/data/tables/2020/demo/educational-attainment/cps-detailed-tables.html>
- <sup>3</sup> Mamedova, S., & Pawlowski, E. (2018). *A description of U.S. adults who are not digitally literate* (NCES 2018-161). U.S. Department of Education. National Center for Education Statistics.
- <sup>4</sup> Adult learners are individuals who are aged 16 and above, are out of school, and have not yet attained basic literacy, numeracy, and English proficiency and/or a secondary credential.
- <sup>5</sup> The federal adult education program administers IET as a subset of its four main programs—Adult Basic Education (ABE), Adult Secondary Education (ASE), English Language Acquisition/English as a Second Language (ESL), and Integrated English Literacy and Civics Education (IELCE). ABE/ASE programs are intended to serve adults who are English proficient but need to improve basic literacy or other types of skills needed to function in everyday life, qualify for a high school equivalency, and/or progress in education and training. ESL and IELCE programs serve adults who need to improve their English proficiency and may need to prepare for naturalization testing (citizenship); these adults may or may not have been educated in their home countries, and have a wide range of pre-existing academic and occupational skills.
- <sup>6</sup> WIOA defines workforce preparation activities as activities, programs, or services designed to help an individual acquire a combination of basic academic skills, critical thinking skills, digital literacy skills, and self-management skills.
- <sup>7</sup> For example, see Bergson-Shilcock (2016) for a scan of approaches being used across the U.S. soon after WIOA was authorized, at <https://www.nationalskillscoalition.org/resource/publications/integrated-education-and-training-policy-50-state-scan/>
- <sup>8</sup> As of program year 2018–19, IET enrollment under Title II reached 52,000, up from 23,000 in program year 2015–16. This represents only 4% of the total number of participants in federally funded adult education programs. From <https://nrs.ed.gov/index.php/rt/reports/aggregate/2018/all/table-3>
- <sup>9</sup> ABE participants make up 47% of all IET participants. IELCE participants have the second highest enrollment in IET, at 32%. ASE and ESL participants enroll in IET less frequently, representing 14% and 7% of IET enrollment, respectively.
- <sup>10</sup> Gardiner, K., & Juras, R. (2019). *Pathways for Advancing Careers and Education (PACE) cross-program implementation and impact study findings* (OPRE Report #2019-32). U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. [https://www.acf.hhs.gov/sites/default/files/documents/opre/pace\\_cross\\_program\\_implementation\\_and\\_impact\\_study\\_findings\\_final.pdf](https://www.acf.hhs.gov/sites/default/files/documents/opre/pace_cross_program_implementation_and_impact_study_findings_final.pdf)
- <sup>11</sup> Modicamore, D., Lamb, Y., Taylor, J., Takyi-Laryea, A., Karageorge, K., & Ferroggiaro, E. (2017). *Accelerating Connections to Employment volume 1: Final evaluation report*. ICF. <http://resources.baltimorecountymd.gov/Documents/EconomicDevel/acevolume1.pdf>
- <sup>12</sup> Anderson, T., Kuehn, D., Eyster, L., Barnow, B., & Lerman, R. (2017). *New evidence on integrated career pathways: Final impact report for Accelerating Opportunity*. The Urban Institute. [http://www.urban.org/sites/default/files/publication/91436/ao\\_final\\_impacts.pdf](http://www.urban.org/sites/default/files/publication/91436/ao_final_impacts.pdf)
- <sup>13</sup> A federally-funded study of innovative IET models and similar programs provides a recent approach to identifying promising models and is available at <https://lincs.ed.gov/sites/default/files/compendium-of-innovative-practices-ae-bridge-iet-programs.pdf>



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