

An Open Door Out of Poverty

Literacy, Math, and English Language Skills and High School Certification Programs for Adults Support Success in Community College

The Open Door Collective¹
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In 2021, the effort to end poverty in the U.S. may finally secure both the attention and the commitment it deserves. Discussions about ways to end poverty will include calls for higher enrollment and completion rates in community college certification programs leading to higher paying career pathways. These discussions will consider ways to reduce or eliminate the cost of a community college education, thereby providing the opportunity for all students to receive their degrees.

A community college degree or technical certificate usually leads to employment with wages and benefits above the poverty line,² but this door out of poverty is not open to all. While increased funding for community college students is essential, in order for them to succeed in an academic or occupational program they must have sufficient basic skills, which include reading, writing, math and digital literacy. In addition, before entering a community college program, potential students must possess strong English language skills and, in most cases, a high school credential.³

How big is the population that faces barriers to success in a community college?

Over the last thirty years, the U.S. has assessed the literacy and math skills of adults (ages 16 to 65) five times. The latest assessment is referred to as the Program for the International Assessment of Adult Competencies (PIAAC).⁴ The US has implemented three rounds of PIAAC, the most recent in 2017. PIAAC also asked non-native English speakers to self-report their ability to speak, understand, read, and write English on a scale of *very well*, *well*, *not well*, or *not at all* and asked all respondents if they had a high school credential. This paper looks at PIAAC results for the U.S. subpopulation made up of 16- to 54-year-olds but excludes those who are age

¹ <http://www.opendoorcollective.org/>

² <https://www.google.com/url?q=https://cew.georgetown.edu/cew-reports/the-collegepayoff/&sa=D&ust=1592927260120000&usg=AFQjCNEhU3glSfz-YAG8w0O7PG07zn66yg>

³ This could be a regular diploma or an adult high school diploma earned by passing one of the currently recognized tests: The General Educational Development™ test (GED), the High School Equivalency Test™ (HiSET), or the Test Assessing Secondary Completion™ (TASC), through completing the National External Diploma Program, a recognized online adult diploma program, or an adult public charter high school program.

⁴ <https://nces.ed.gov/surveys/piaac/>

16 to 24 and still in school.⁵ This is the subpopulation that is most likely to enroll in a community college program. Of the 127.8 million people in this subpopulation, the PIAAC

assessment found that **one in three (42.1 million) US adults** report that they speak or write English *not well* or *not at all*, have low literacy or math skills, or do not have a high school credential. Any one of these conditions could lead to failure in a community college program, and some adults face more than one of these barriers.

Inadequate literacy and math skills may deter potential students from applying to a community college program or cause them to fail academically once they enroll. In addition, a low score on an entrance assessment of literacy and math skills may require entering students to take remedial classes before they can enroll in credit-bearing courses. The Community College Research Center at Columbia University found that remedial classes (referred to as developmental education) lengthen the time and increase the cost required to attain a community college credential and, for many students, become a barrier to graduation.⁶ The Center also found that 34% of the students who were required to take a developmental education course earned a degree within six years, while 40% of those who were not required to take a developmental education course earned a degree within the same time period.⁷ For community colleges to play a larger role in addressing employment and income inequality, a much larger percentage of their incoming students must enter with literacy and math skills strong enough to enable them to succeed in credit-bearing courses. In addition, the pool of potential community college students could expand if more adults developed strong English language skills or acquired a high school credential.

Who are the 42.1 million?

8 million adults do not speak or write English well enough to enter a postsecondary program. Some adults in this category may have well-developed literacy and math skills in another language and a secondary or postsecondary credential from their home country, but their lack of English language skills represents a barrier to success. When immigrants have literacy skills in their own language, which many do, those literacy skills make learning to read and write English much easier.⁸ The economic return from investment in this category is probably high, because instruction that builds English language skills helps immigrants make use of the job skills and knowledge they acquired before coming to this country.

⁵ The PIAAC statistics in this paper were calculated by Steve Reder using Round 3 of the US PIAAC data, which was collected in 2017. A report on these calculations will be added to the ODC website later this year.

⁶ Bailey, Thomas. 2009. "Challenge and opportunity: Rethinking the role and function of developmental education in community college." *New Directions for Community Colleges*. 145: 11-30.
<https://ccrc.tc.columbia.edu/media/k2/attachments/challenge-and-opportunity.pdf>

⁷ <https://ccrc.tc.columbia.edu/media/k2/attachments/developmental-education-introduction-policymakers.pdf>

⁸ Perfetti, Charles and Susan Dunlap. 2008. "Learning to Read: General Principles and Writing System Variations." In Koda, Keiko and Annette Zehler. *Learning to Read Across Languages: Cross-Linguistic Relationships in First- and Second-Language Literacy Development*. New York, NY: Routledge.

8.7 million adults speak English well but have very weak literacy or math skills. Some in this group are immigrants, but most were born in the U.S. Some of the native English speakers have physical or cognitive barriers to learning, while others have a long history of school failure for reasons that may be the result of the effects of poverty and racism, home environment, or learning differences. For this group, instruction focused on basic reading skills, along with

guided reading and writing practice, will help them make steady progress.⁹ This group might also benefit from assistive technology (such as software that reads text aloud or translates oral language into written text) that provides them with immediate help while they are building their skills.¹⁰ Some adults in this population might benefit from an apprenticeship or a preapprenticeship program that prepares them for success in an apprenticeship.¹¹

2.9 million adults speak English well but do not have a high school credential and have basic literacy and math skills that are insufficient for success in a high school credential program. Some in this category are immigrants who are still building their English literacy skills, but most are adults who were born in the US but who are undereducated. Undereducation occurs when a K-12 student does not spend enough time reading, writing, and using math to build strong skills. This could be caused by unaddressed learning differences, childhood trauma, or family problems. Adults in this category need direct instruction that builds their vocabulary, reading fluency (reading speed and accuracy), and reading comprehension. They also need to spend time reading and writing text that interests them and doing the same with math. Investment in this group could have a high return on both income and other social indicators. The most effective instruction would focus on building the necessary skills for a specific career track, including preparation for attaining a high school credential, and tasks related to students' personal, family, and civic life. Some adults in this population might also benefit from an apprenticeship or preapprenticeship program.

2.8 million adults speak English well, do not have a high school credential, but have strong literacy and math skills. Adults in this category have basic skills sufficient to acquire a secondary school credential and should engage in instruction that successfully prepares them to acquire that credential through one of several current certification programs. The return on investment could be significant if a large percentage of these students became successful in a community college program. However, students in this category may need training and assistance to make a successful transition to community college.

⁹ Strucker, John, Kentaro Yamamoto, and Irwin Kirsch. 2007. *The Relationship of the Component Skills of Reading to IALS Performance: Tipping Points and Five Classes of Adult Literacy Learners*. Cambridge, MA: National Center for the Study of Adult Learning and Literacy. Accessed March 25, 2014.

http://www.ncsall.net/fileadmin/resources/research/report_29_ials.pdf

¹⁰ Silver-Pacuilla, Heidi. "Assistive Technology and Adult Literacy: Access and Benefits." In Comings, Garner, and Smith (Eds.), *The Review of Adult Learning and Literacy, Volume 7*, Mahwah, NJ: Lawrence Erlbaum, 2007.

¹¹ <https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm#1f>

19.7 million adults speak English well, have a high school credential, but do not have literacy or math skills strong enough to succeed in postsecondary education. Adults in this category need instruction and practice that develop their literacy and math skills within a context that prepares them for a specific community college program. This group of adults may be required to take developmental education courses at a community college, with some failing to successfully transition to credit-bearing courses. Some community colleges are now contextualizing basic skills instruction by combining developmental education with credit-bearing courses offered within the context of preparing for a specific career. The contextualized basic skills approach should prove to have an economic rate of return sufficient to justify the investment, since students are trained for jobs that need workers. Some adults in this population might benefit from apprenticeships or pre-apprenticeships.

How can we help adults improve their skills and acquire high school certification?

One way to have a positive impact on the skills and credentials of these 42.1 million adults is to provide them with free, convenient, engaging, and effective instruction before they enroll in a community college degree program. Building these skills and credentials will help low income adults raise their families out of poverty, help their children do better in school, and allow them to participate in civic life with a deeper understanding of important issues. Without this investment, other investments addressing poverty will be swimming against a current that will make progress slow, or even impossible, for many low-income adults. Poverty eradication requires a constellation of services that address childcare, housing, counseling, job training, and other needs, however, at this time, public funding for these services is insufficient. Spending on social services and education will be repaid when adults improve their income and succeed in all aspects of their lives, thereby diminishing their need for social services and increasing their tax payments.

Title II¹² (the Adult Education and Family Literacy Act) of the federal Workforce Investment and Opportunity Act (WIOA) funds adult basic education programs (including community-based volunteer programs) that serve adults who do not speak English, have low literacy and math skills, or do not have a high school credential. WIOA Title II funding is \$577 million in FY 2020; state governments contribute an additional \$500 million to these programs. Total federal and state funding for programs that serve a population of 42.1 million is less than \$27 for each adult who needs services. Given that only 1.5 million adults participate in WIOA Title II funded programs each year, average spending per participant is less than \$750.

A much larger and more effective public investment in WIOA Title II funded programs, therefore, could ensure that more U.S. adults are better prepared to succeed in community college programs. In addition, PIAAC found that more than 60% of these 42.1 million adults are workers or entrepreneurs. Higher literacy skills could open up career opportunities that would result in higher incomes for those adults who do not enter a community college program. All

¹² Administered by the Department of Education's Office of Career Technical and Adult Education.

adults, even those who are unemployed, must manage their health and the health of their family, help their children succeed in school, manage their money, participate in improving their communities, and be active citizens. All of these personal, family, and civic responsibilities require strong English language, literacy, and math skills.

Do these programs work?

Assessing the impact of adult basic skills programs is difficult for two reasons. First, adults find it difficult to stay in a program for a long period of time. Often, adult students drop out of programs because their job schedule changes, someone in their family needs their care, or their car is broken. Programs count them as failures, but a longitudinal study conducted in Portland,

Oregon¹³ found that adult students use episodes of program participation and self-study, over several years, to eventually meet their goals. One person might be counted three or four times as a failure and only once as a success. Second, gains in skills often do not show up until many years after program participation. The same Portland study followed adults for ten years and found that adults, who participated for at least 100 hours in basic skills programs, made substantial gains on a literacy test that was similar to PIAAC.¹⁴

Gains in income may not show up immediately, either. A study in Florida found that adults who acquired GED certification had income gains greater than those who did not, but their gains came several years after they earned the certification.¹⁵ Adults who decide to join an English language, basic skills, or high school credential program do improve their chances in the job market. However, these adults must wait until a better job opens up, and they may not be successful the first time they apply. They may even take a new job at the same or lower pay because they know that it will eventually lead to a much better job or may use their new skills and credentials to join a job training program or enroll at a community college. All of these actions, though positive, may not show up as greater income for several years. A more recent study found GED holders had modestly higher income after just one year, but in 2008 (a year of high unemployment), GED holders maintained their increasing income, while those without a high school credential or GED saw their income decline.¹⁵

How can these programs be directly linked to poverty alleviation programs?

¹³ Reder, S. (2014). *The Impact of ABS Program Participation on Long-term Economic Outcomes*. Washington, DC: U.S. Department of Education, Office of Career, Technical and Adult Education.

¹⁴ Reder, S. (2019). "Developmental trajectories of adult education students: Implications for policy, research, and practice." In D. Perin (Ed.), *Wiley Handbook of Adult Literacy* (pp. 429-450). Hoboken, NJ: Wiley Blackwell. ¹⁵

Tyler, John. 2005. "The General Educational Development (GED) Credential: History, Current Research, and Directions for Policy and Practice." In John Comings, Barbara Garner, Barbara, and Cristine Smith (Eds.). *The Review of Adult Learning and Literacy, Volume 5*. Mahway, NJ: Lawrence Erlbaum.

¹⁵ <https://files.eric.ed.gov/fulltext/ED541696.pdf>

Community and technical colleges in Washington state developed the Integrated Basic Education and Skills Training (I-BEST) program. I-BEST employs a team-teaching approach, in which an occupational skills teacher and a basic skills teacher work together. In each class, the basic skills instruction builds students' capacity to learn and communicate within the vocabulary and concepts of a specific career field. For both the basic skills and the occupational skills, students learn by doing. At the end of the program, students can enter employment or continue on to complete a two-year or four-year degree. The most popular career pathways are health care, aeronautics, advanced manufacturing, and information technology. Students have access to grants to cover their tuition, books, and supplies. The program provides tutoring, career advising, emergency child care, emergency transportation, and college success classes.¹⁶

Access to health care is a problem for families living in poverty. The Chicago Citywide Literacy Coalition established an empowerment-based health literacy program. The program is a collaboration between eight adult basic skills providers and federally qualified health centers. It builds partnerships between adult education programs and community outreach staff at the health

centers. Students take part in a tour of their local health center, and then the curriculum of their basic skills class addresses topics such as diabetes, heart disease, mental health, communication with doctors, and navigation of the health care system.¹⁷

Parents living in poverty often find it difficult to help their children succeed in school. A Denver area adult English language program integrated parent involvement skills and knowledge into instruction focused on helping Spanish-speaking mothers build oral and literacy skills in English. Instruction helped mothers learn ways to support their children to acquire strong literacy skills and complete their homework. Mothers also learned how to communicate with teachers and principals and gain access to school resources to help their children.¹⁸

These are just three examples of successful innovations taking place across the country. They could form the basis of a new comprehensive academic and life skills curriculum that would enable students to acquire the necessary services to persist in their studies and lift their families out of poverty.

How can these programs be improved?

It is essential that U.S. political leaders begin to see the 42.1 million adults who are not prepared to enter a community college program as a great national resource and commit to developing that resource. This commitment should have the following five components.

¹⁶ <https://www.sbctc.edu/colleges-staff/programs-services/i-best/>

¹⁷ <http://www.chicagocitywideliteracy.org/>

¹⁸ Waterman, R. (2008). "Communication is more than language: Adult ESL classes foster parent-school collaboration." *Bilingual Research Journal*, 31: 227-250, 2008.

1. Adults who seek to join a WIOA Title II funded program should have access to free, well-designed, engaging, and convenient programs that address their needs. This would require yearly incremental increases in funding.
2. Programs should draw from the research that shows that adults use episodes of program participation and self-study to address their learning needs and, therefore, should provide a coordinated set of online learning, in-person teacher directed instruction, and assistance from volunteers.
3. Students should have the supports they need to succeed. These supports include skills assessment, individualized plans that address learning needs, help with family responsibilities to free up time for study, full-time teachers, counseling to address problems that may be a barrier to learning, and assistance to transition from WIOA Title II programs to community college programs.
4. The U.S. and state governments should build the capacity of programs to offer effective and engaging online learning to complement in-person learning or provide alternative ways to learn when in-person learning is not possible. Comfort and competence with online learning is particularly important during the COVID-19 pandemic, but it will remain important after the pandemic has passed. PIAAC offered test participants both

computer-based and paper-based options for the assessment. Of those who opted for a paper-based test, some had never used a computer, some had used a computer but chose not to, and some failed an initial test of keyboard and mouse skills. For the overall population of adults in the 16 to 54-year-old age range of 127.8 million, 6.5% opted for a paper test, but for the 42.1 million not prepared for success in a community college, 25.6% opted for a paper test. For each of the subcategories of the 42.1 million, in order, 29.4%, 44.1%, 24.8%, 19.8%, 14.5% opted for a paper test. This data suggests that adult basic skills programs should be equipped to help students become ready to learn on digital devices.¹⁹

5. Academics and adult basic skills practitioners know a lot about how to serve students in each of these categories, however, they also know that they need a larger, targeted research and development effort that focuses on both improving impact and lowering cost. Presently, the adult basic skills education infrastructure that trains teachers, evaluates programs, and develops effective policies is underfunded in comparison to the K-12 system. Additional investment in expanding and improving adult basic education services will be much more productive with an expanded research effort and improved

¹⁹ The IDEAL Consortium is an existing collaboration among sixteen states working on blended (online and inperson) instruction led by a national nonprofit, World Education. A collaboration of all the states and territories could build on this existing effort. <https://edtech.worlded.org/professional-development/ideal-consortium/>²¹
Center for Labor Market Studies Northeastern University. (2014). Net annual fiscal contributions of U.S. adults Aged 18-64 by education attainment, 2009-2012: The fiscal advantages of high school and college graduates in the nation and the 15 largest States. Council for Advancement of Adult Literacy (CAAL), New York City. <http://www.caalusa.org/NetFiscalContributions09-12.pdf>

infrastructure. In addition, the system needs a formative evaluation program that assesses program improvement and identifies and develops ways to include groups of adults who need services but are underrepresented in adult basic skills programs.

Why spend money on this policy rather than something else?

The governments of the emerging economies in Eastern Europe, Asia, Africa, and South America have less educated populations than does the U.S. However, PIAAC findings suggest that young adults in some of these countries are making more rapid progress in skills improvement than are youth in the U.S. Investing now in skills and credentials for out of school youth and adults could ensure that the U.S. remains competitive in the global marketplace in the future.

An analysis of Massachusetts data by the Center for Labor Market Studies at Northeastern University²¹ looked at all the ways in which adults pay to support government through their taxes and receive funding from government through social services. They found that adults who did not have a high school credential received \$1,802 per year more than they put in, while those with a high school credential provided government with \$4,599 more than they received. Those with some postsecondary education but no credential provided \$8,028 more, and those with a community college credential provided \$10,571 more to government each year. Investing in education that helps adults improve their basic skills, acquire a high school credential, and achieve success in a community college produces a substantial return on investment. In addition,

the Portland, Oregon longitudinal study (mentioned above) found that after ten years, participants in adult basic education programs had a 53% income gain, while those who did not participate had a 2% drop in income. Those participants who completed at least 100 hours of study averaged \$10,000 more in annual income compared with the non-participants.²²

The door out of poverty is not open for all adults. Opening that door requires breaking down barriers related to race, gender, ethnicity, religion, legal status, and disabilities. It also requires increased government spending on a widely available, effective, and accessible program that enables adults to learn English, improve their literacy and math skills, acquire a high school credential, and enter a community college program prepared to be successful.

Increasing funding for Title II to \$1 billion in FY2022 and committing to 20% increases each year for the next four years would provide the stability that the U.S. states and territories need to expand and improve services.

This direct investment in our country's greatest resource, its people, will open the door out of poverty for millions of our fellow citizens and will ensure that our country has the skilled workforce it needs to succeed in the global economy. Providing an opportunity to learn English, improve basic skills, and acquire a high school credential is not a handout; it is an opportunity for adults to improve their life chances. That is something all Americans should support.

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²² https://lincs.ed.gov/publications/pdf/ABS_EconomicOutcomes.pdf