BEYOND THE GED

PROMISING MODELS FOR MOVING HIGH SCHOOL DROPOUTS TO COLLEGE

Elizabeth Zachry Rutschow
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BUILDING KNOWLEDGE TO IMPROVE SOCIAL POLICY

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Overview

Nearly 39 million adults in the United States do not have a high school diploma. Roughly two-thirds of them eventually obtain a high school equivalency credential like the General Educational Development (GED) certificate, with the hope of then obtaining a job. But in today's changing economy, possessing a GED certificate — while helpful for finding employment — often isn't enough, and many GED recipients will continue to struggle in the labor market. Postsecondary education is also helpful to improve their employment prospects, but fewer than 5 percent of GED recipients go on to enroll in college or other adult education programs.

Emphasizing results from quasi-experimental and experimental research, this literature review identifies the most promising approaches for increasing dropouts' rate of attaining a GED certificate or other high school credential and making a successful transition to college. The report divides these recent interventions into three primary types of adult education reforms: (1) efforts to increase the rigor of adult education instruction and the standards for achieving a credential; (2) GED-to-college "bridge" programs, which integrate academic preparation with increased supports for students' transition to college; and (3) interventions that allow students to enroll in college while studying to earn a high school credential.

Though rigorous research on these reforms is limited, two available studies suggest that programs that contextualize basic skills and GED instruction within specific career fields and that support students in their transition to college show promise in increasing the rate of students' persistence, earning a high school credential, and entering and succeeding in college. In comparison with traditional adult education programs, these models tend to (1) provide more coherent and relevant instruction through curricula that better align with students' career goals; (2) provide increased connections with colleges and vocational training programs; and (3) build in an advising component that fosters students' engagement in the program and supports their transition to college.

While these innovations represent promising strides for the field, adult education is still in critical need of reform across a number of areas if the field is to see larger-scale improvements in dropouts' academic success. First, programs will need to consider how to advance students with lower skills, as few college-readiness adult education programs are available to those with skills below the ninth-grade level. Promising programs, such as LaGuardia Community College's GED Bridge program in New York City and the state of Washington's I-BEST program, which enroll lower-skilled students, may serve as models. Alternately, programs might consider building "prebridge" models that help prepare students for these more advanced programs. Second, the fragmented funding streams and agencies upon which adult education programs rely should be streamlined, allowing for a more coherent focus on college- and career-readiness skills. Promising models have been suggested in the Adult Education and Economic Growth Act and revisions to the Perkins Act. In addition, statewide reform efforts in states such as Indiana and Washington could serve as models for achieving interagency integration and coordination.

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Preface

As globalization and technological change remake the labor market, it has become increasingly clear that the United States must create better educational and workforce training programs if we are to remain competitive. In order to help disadvantaged and low-skilled workers advance in the new labor market, educational opportunities are needed that can boost their ability to succeed in high-demand career areas that pay better wages.

America's federally funded adult education programs represent an underutilized resource in meeting this goal. Targeting the nearly 39 million adults in this country who have yet to earn a high school credential, these programs have served as a lifeline for decades in helping millions of high school dropouts build their reading, writing, and math skills. However, despite their promise, such programs have generally been less successful in helping students make the transition into postsecondary education and training required for better-paying jobs. As a result, many students who have obtained an alternative high school credential such as the General Educational Development (GED) certificate have remained on the sidelines as our labor market has moved forward into the 21st century.

This report provides a much-needed review of innovations in the adult education field aimed at helping high school dropouts overcome these barriers and make the transition to postsecondary education and training. Highlighting results from rigorous studies, the report documents reforms that have a number of promising methods for promoting dropouts' transition to college, including the development of new, more rigorous college- and career-readiness curricula; enhanced supports such as assistance with college admissions and applying for financial aid; and increased on-the-ground connections with postsecondary institutions. The review finds that the most promising program reforms integrate basic skills and GED instruction within specific career fields and provide enhanced supports to ease students' entry into college.

While the current research is promising, much more needs to be investigated — and at a much higher level of rigor than has been standard in adult education practice. Policymakers must make it a priority to better understand what types of program reforms are most effective for different subsets of students, such as students with lower-level skills or those who can only attend programs part time. Armed with this knowledge, adult education has the potential to serve as a foundation for building the skilled workforce needed in today's and tomorrow's marketplace.

Gordon L. Berlin
President

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The Authors

Executive Summary

Postsecondary education has become a critical pathway to help improve adults' labor market chances. As the U.S. labor market has shifted toward jobs that require more critical thinking and specialized skills, the real earnings of those with only a high school credential have decreased.[1] Higher-level academic abilities are now crucial even in traditional blue-collar jobs such as machining and manufacturing, given how technological advances have changed the skill requirements of work.[2] The past decade has thus seen an increasing push toward improving individuals' college- and career-readiness skills, particularly by increasing their access to and success in postsecondary education and training. For instance, both the federal government and major national foundations have called for dramatic increases in the number of college graduates over the next 10 to 15 years, and have invested millions of dollars in efforts to improve students' levels of college entry and success once there.[3]

Despite this push, far less attention has been paid to those who have yet to achieve a critical milestone needed for college entry: a high school diploma. Approximately 39 million adults, representing nearly 18 percent of the U.S. adult population, have yet to earn this credential, barring most of them from starting on a pathway toward the workforce credentials and college degrees needed for higher-paying jobs in today's marketplace.[4] At the same time, traditional adult education and General Educational Development (GED) programs, which have served as the main vehicle for preparing older adolescents and adults to earn a high school credential, have been unable to help large numbers of students achieve this goal and make a successful transition

[1]Frank Levy and Richard J. Murnane, *The New Division of Labor: How Computers Are Creating the Next Job Market* (Princeton, NJ: Princeton University Press, 2004); Frank Levy and Richard J. Murnane, *Dancing with Robots: Human Skills for Computerized Work* (Washington, DC: Third Way, 2013); Robert Half International, "The Specialist Economy: How Businesses and Professionals Can Prepare for the Trend Toward Specialization," White Paper (New York: Robert Half International, 2013); Economic Policy Institute, "Hourly Wages by Education, 1973-2011 (2011 dollars)," *The State of Working America* (Washington, DC: Economic Policy Institute, 2012).

[2]Levy and Murnane (2004).

[3]Bill & Melinda Gates Foundation, *Postsecondary Success* (Seattle, WA: Bill and Melinda Gates Foundation, 2009); Lumina Foundation for Education, *Lumina Foundation's Strategic Plan: Goal 2025* (Indianapolis, IN: Lumina Foundation for Education, 2009); Office of the Press Secretary, "Excerpts of the President's Remarks in Warren, Michigan and Fact Sheet on the American Graduation Initiative," Press Release, July 14 (Washington, DC: White House, 2009).

[4]This statistic is from the 2010 U.S. Census, as reported in GED Testing Service, *2011 Annual Statistical Report on the GED Test* (Washington, DC: GED Testing Service, American Council on Education, 2012a). It refers to the percentage of the U.S. population above age 16 who lacked a high school credential and were not enrolled in any educational program at that point in time.

to college.[5] In addition, researchers have argued that recipients of GED certificates, particularly those who dropped out of school, tend to have poorer social and emotional skills than traditional high school graduates. These poorer skills are often manifested in a number of counterproductive behaviors such as tardiness and poor attendance.[6] Many of these individuals thus are in need of supports to develop the "soft skills" necessary for success in college and their careers.

Fortunately, a number of adult education practitioners and organizations have been attempting to help by creating new instructional programs aimed at helping nongraduates obtain a high school credential and successfully make the transition to college and higher-level workforce training programs. This report identifies three primary types of adult education reforms: (1) efforts to increase the rigor of adult education instruction and the standards for achieving a credential; (2) GED-to-college "bridge" programs that provide stronger connections among adult education, college, and workforce training; and (3) interventions that allow students to enroll in college and programs that offer workforce credentials while concurrently completing the requirements for a high school degree. Though rigorous research (employing random assignment or quasi-experimental designs) on these reforms is extremely limited, two studies in particular have useful findings: they suggest that programs that integrate basic skills and GED instruction within specific career fields and support students in their transition to college show promise in increasing students' rates of program persistence, earning a high school credential, and college entry and success.[7] Additional reforms, such as developing programs for low-skilled individuals, streamlining adult education funding and management, and increasing the research on adult education programs' effectiveness, would also strengthen the field.

What Is Adult Education?

Since 1964, with the passage of the Economic Opportunity Act, America's federally and state-funded adult basic skills programs have been the primary vehicles for helping dropouts improve

[5]GED Testing Service (2012a); Jizhi Zhang, Anne Guison-Dowdy, Margaret B. Patterson, and Wei Song, *Crossing the Bridge: GED Credentials and Postsecondary Education Outcomes: Year 2 Report* (Washington, DC: GED Testing Service, American Council on Education, 2011); John Tyler, "The General Educational Development (GED) Credential: History, Current Research, and Directions for Policy and Practice," *Review of Adult Learning and Literacy* 5 (2005): Chapter 3, 45-84.

[6]James J. Heckman, John Eric Humphries, and Nicholas S. Mader, "The GED," IZA Discussion Papers 4975 (Bonn, Germany: Institute for the Study of Labor [IZA], 2010); Richard Murnane, "U.S. High School Graduation Rates: Patterns and Explanations," *Journal of Economic Literature* 5, 2 (2013): 370-422.

[7]Vanessa Martin and Joseph Broadus, "Enhancing GED Instruction to Prepare Students for College and Careers: Early Success in LaGuardia Community College's Bridge to Health and Business Program," Policy Brief (New York: MDRC, 2013); Davis Jenkins, Matthew Zeidenberg, and Gregory S. Kienzl, "Educational Outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis," CCRC Working Paper No. 16 (New York: Community College Research Center, Teachers College, Columbia University, 2009).

their skills and earn a high school credential.[8] Enrolling over two million students in the 2010-2011 program year (the most recent year for which data are available), federally funded adult education programs comprise three different courses of instruction: adult basic education (ABE), for individuals with skills below the ninth-grade level; adult secondary education (ASE), for individuals with high school-level skills;[9] and English literacy (EL), for adults who lack proficiency in English.[10] Each year, approximately 1.2 million students enroll in ABE and ASE programs, which together form a primary way that adult learners prepare for earning a high school credential and going to college.

Though a number of pathways exist for obtaining a high school credential, students most commonly take the GED exam for that purpose. Developed by the nonprofit American Council on Education (ACE), which has operated it for more than 40 years, the GED exam is now the product of a joint partnership between ACE and Pearson, Inc., a for-profit publishing company.[11]

What Are the Challenges to Moving Students Forward?

The students in adult education programs are quite diverse, ranging from highly skilled, highly motivated immigrants who need to learn English to U.S. high school dropouts, who often distrust the educational system. Thus, adult education systems often confront a variety of student and programmatic issues, including:

1. **Low-level student skills:** Nearly 80 percent of the students who enter ABE and ASE programs have skills below the ninth-grade level, with over 40 percent entering with skills below the sixth-grade level. Many of these students have key deficits in reading, writing, or math, and often a limited background in other important subject areas that are necessary for achieving a high school credential, such as social studies and science.[12]

[8]Claudia Tamassia, Marylou Lennon, Kentaro Yamamoto, and Irwin Kirsch, *Adult Education in America: A First Look at Results from the Adult Education Program and Learner Surveys* (Princeton, NJ: Educational Testing Service, 2007).

[9]ASE generally includes programs that help students prepare for the General Educational Development (GED) certificate or adult diploma through a school system.

[10]U.S. Department of Education, Office of Vocational and Adult Education, *Adult Education and Family Literacy Act of 1998: Annual Report to Congress, Program Year 10-2011* (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2013a). This report focuses on students attending ABE and ASE programs.

[11]American Council on Education, "ACE and Pearson Collaborate to Transform GED Test, Aligned with Common Core State Standards, Based on GED 21st Century Initiative" (Washington, DC: American Council on Education, 2011). Web site: www.acenet.edu.

[12]U.S. Department of Education, Office of Vocational and Adult Education (2013a).

2. **At-risk population:** Students attending adult education programs tend to face multiple life challenges, including single parenthood, poverty, and heavy work schedules among those who are employed.[13]

3. **Transient program participation and engagement:** Individuals frequently drop out of adult education programs or "stop out" (meaning they leave programs and then return after a period of time).[14] In order to make up for this transient attendance, programs often implement open enrollment systems, allowing new students to enter classes on a weekly or even daily basis.[15] This continual influx of new students tends to complicate teachers' efforts to develop more coherent sets of lessons that build from day to day.

4. **Financial constraints:** Though both federal and state grants provide funding for adult education, these resources tend to be very limited and place a number of restrictions on the types of students who can be served and the timing of programs.[16] Given these issues, most adult education programs survive on very small budgets, which amount to less than 10 percent of the resources spent on the average student in kindergarten through grade 12 (K-12).[17]

5. **Teachers:** A large number of adult education programs hire part-time instructors, and programs typically provide little to no paid professional development time for instructors to increase their knowledge.[18]

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[13]Beth Lasater and Barbara Elliot, *Profiles of the Adult Education Target Population* (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2005); John Comings, Andrea Parrella, and Lisa Soricone, "Persistence Among Adult Basic Education Students in Pre-GED Classes," NCSALL Report No. 12 (Cambridge, MA: National Center for the Study of Adult Learning and Literacy, Harvard Graduate School of Education, 1999).

[14]Comings, Parrella, and Soricone (1999); Ajit Gopalakrishan, "Learner Retention in Adult Secondary Education: A Comparative Study," *Adult Basic Education and Literacy Journal* 2, 3 (Fall 2008): 140-150.

[15]Hal Beder and Patsy Medina, "Classroom Dynamics in Adult Literacy Education," NCSALL Reports No. 18 (Cambridge, MA: National Center for the Study of Adult Learning and Literacy, Harvard University Graduate School of Education, 2001).

[16]U.S. Department of Education, Office of Vocational and Adult Education, *Investing in America's Future: A Blueprint for Transforming Career and Technical Education* (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2012); Council for Advancement of Adult Literacy, *Reach Higher, America: Overcoming Crisis in the U.S. Workforce, Report of the National Commission for Adult Literacy* (New York: Council for Advancement of Adult Literacy, 2008).

[17]U.S. Department of Education, Office of Vocational and Adult Education, *Adult Education and Family Literacy Act: Program Facts* (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2005).

[18]Christine Smith, Judy Hofer, Marilyn Gillespie, Marla Solomon, and Karen Rowe, "How Teachers Change: A Study of Professional Development in Adult Education," NCSALL Report No. 25 (Cam-

6. **Content and pedagogy:** Unlike K-12 schools, which often base instruction on particular content standards or curricula, adult education programs generally have fewer supports and, even when they are available, have few resources to implement these standards. Instead, instruction is often based on lectures using test preparation materials from commercially available GED, pre-GED, or other test-preparation workbooks.[19]

7. **Fragmented funding, management, and administration:** Adult education programs tend to subsist on a complicated array of federal and state funding streams, which are managed by numerous government agencies.[20] For instance, at least four different federal agencies oversee the initiatives and grants that are used to fund adult education programs, with multiple entities overseeing local adult education programs in individual states.[21]

Where Are We Now? Current Reforms for Improving Students' Success

Given the challenges described above, innovators have been seeking to develop more coherent systems for increasing dropouts' rates of earning a high school credential and making a successful transition to college. As outlined below, these reforms fall into three broad types of interventions.

Standards-Based Reforms

In an effort to better prepare students for college, adult education policymakers, practitioners, and researchers have begun pushing for more rigorous standards for adult education instruction and high school credentialing. Generally, those efforts have tried to align adult education instruction with the Common Core State Standards (CCSS), a set of competencies and procedures in English language arts and math in K-12 that have been adopted by 45 states nationwide.[22] For example, the U.S. Department of Education's Office of Vocational and Adult

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bridge, MA: National Center for the Study of Adult Learning and Literacy, Harvard Graduate School of Education, 2003).

[19]Beder and Medina (2001).

[20]Kermit Kaleba and Rachel Gragg, *Training Policy in Brief: An Overview of Federal Workforce Development Policies* (Washington, DC: National Skills Coalition, 2011).

[21]For a description, for example, of the system in Indiana, see Patrick J. Kelly, *Recommended Policies and Practices for Advancing Indiana's System of Adult Education and Workforce Training* (Boulder, CO: National Center for Higher Education Management Systems [NCHEMS], 2009).

[22]National Governors Association Center for Best Practices, Council of Chief State School Officers, *Common Core State Standards* (Washington, DC: National Governors Association, Council of Chief State School Officers, 2010). Web site: www.corestandards.org/the-standards.

Education (OVAE) is aiming to align adult education instruction with the CCSS through its Promoting College and Career Readiness Standards in Adult Basic Education project.[23] Additionally, the GED Testing Service (GEDTS) has been focused on reforming the GED exam so that it tracks with the CCSS, with a new test scheduled to take effect in January 2014.[24]

Though not yet passed, other efforts are also under way to promote more concrete connections among adult education, postsecondary education, and workforce training. Initiatives include President Obama's establishment of the Interagency Adult Education Working Group, which was charged with highlighting new methods for improving adults' transition to postsecondary education and employment;[25] the development of the Adult Education and Economic Growth Act, which seeks to consolidate the multiple agencies serving low-skilled adults and refocus education and workforce training on college- and career-readiness skills;[26] and calls to revise the Carl D. Perkins Career and Technical Education Act so that it aligns career and technical education programs with college- and career-readiness standards.[27]

GED-to-College Bridge Programs

Other interventions have sought to integrate academic preparation with increased supports for students' transition to college. Often called college bridge, GED bridge, GED-to-college bridge, or college transition programs, these efforts generally integrate more rigorous academic curricula with intensive supplemental supports for college entry, such as one-on-one advising on careers, introductions to the college admissions process, and step-by-step supports for completing college entrance requirements. In addition, these programs often provide more exposure to workforce or career training by structuring the content of their courses around industry-specific skills or direct job-training opportunities. GED-to-college bridge programs range from full-time models geared toward youth to part-time programs focused on specific industries or careers.

Despite the proliferation of these programs, very little evidence exists about their success. The one exception is a small-scale random assignment study of LaGuardia Community

[23]U.S. Department of Education, Office of Vocational and Adult Education, *Promoting College and Career-Ready Standards in Adult Basic Education,* Adult Basic and Literacy Education Fact Sheet (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2011b).

[24]American Council on Education (2011).

[25]U.S. Department of Education, Office of Vocational and Adult Education, *Bridges to Opportunity: Federal Adult Education Program for the 21st Century,* Report to the President on Executive Order 13445 (Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education, 2008).

[26]Council for Advancement of Adult Literacy (2008).

[27]U.S. Department of Education, Office of Vocational and Adult Education (2012).

College's GED Bridge program, which showed promising increases in students' course persistence, GED pass rates, college matriculation, and college success.[28]

Programs Promoting Concurrent Enrollment in Adult Education and College

A number of efforts are also under way nationwide to allow dropouts to concurrently enroll in college classes while they are still preparing to earn their high school credential. These programs tend to have attributes that are similar to those of GED-to-college bridge programs, with the added benefit of allowing students to earn college credits before they have earned their high school credential. College classes range from nontransferable courses, such as developmental education or "college success" courses (which teach students how to navigate through college life, including teaching them study skills, how to access various student resources, and so forth), to transferable, credit-bearing classes, often in specific industries or career fields. The most advanced of these programs are nested within college or statewide credentialing pathways programs, which consist of a series of successive certificate and degree programs through which students advance as they build their skills.

As with GED-to-college bridge programs, rigorous research on these programs is limited. However, one quasi-experimental study of the state of Washington's I-BEST program reported increases in students' adult education program persistence, GED pass rates, and matriculation into college, which, if confirmed by additional and more rigorous studies, would be encouraging.[29] Further rigorous evaluations of initiatives such as Accelerating Opportunity, Innovative Strategies for Increasing Self-Sufficiency (ISIS), and YouthBuild's Postsecondary Education Initiative are also expected to add to this research base in the coming years.[30]

How Far Have We Come? Assessing the Progress of Current Reforms

The standards-based reforms, GED-to-college bridge programs, and concurrent college and adult education programs highlighted above have helped the field advance in a number of ways, including:

[28]Martin and Broadus (2013).

[29]Jenkins, Zeidenberg, and Kienzl (2009).

[30]Randall Wilson, Robert Lerman, Lauren Eyster, Maureen Conway, and Burt Barnow, "Accelerating Opportunity Evaluation: Planning the Evaluation with the Accelerated Opportunity States," PowerPoint presentation (Boston: Jobs for the Future, 2012); David J. Fein, "Career Pathways as a Framework for Program Design and Evaluation: A Working Paper from the Innovative Strategies for Increasing Self-Sufficiency (ISIS) Project," OPRE Report No. 2012-30 (Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2012).

1. **Developing more coherent and relevant instructional models.** GED-to-college bridge and concurrent enrollment programs tend to be centered around a continuous set of lessons, which integrate basic skills preparation into contextualized or college-readiness curricula that better align with students' career goals. Instruction is often facilitated by short-term managed enrollment processes, which permit new students to enter programs only during set time periods, thereby allowing teachers to develop more coherent lesson cycles that can build upon students' day-to-day learning.

2. **Cultivating connections with postsecondary education.** Most of the college bridge and concurrent enrollment programs highlighted in this report have developed more concrete connections to postsecondary institutions, thereby reducing the isolation and fragmentation that often typifies adult education programs. Most have done this by housing programs within colleges; however, a few community-based organizations have facilitated these connections through partnerships with local postsecondary institutions.

3. **Integrating supplemental supports to foster engagement and transition.** GED-to-college bridge and concurrent enrollment programs have also addressed students' transient engagement by integrating college transition counseling, advising, and other supports into their programs. Such supports are designed to help students better manage the complicated college enrollment process and build their understanding of college expectations. In addition, many programs provide supplemental supports such as help with financial, legal, and health needs, which assist at-risk students in remaining engaged in school.[31]

How Much Further Do We Have to Go? Overcoming Continuing Barriers

While innovators have made a number of advances, adult education is still in critical need of reform across a number of areas if the field is to see larger-scale improvements in academic success among high school dropouts. Key issues, along with promising ways of overcoming these challenges, are highlighted below.

[31] Martin and Broadus (2013).

Students with Low-Level Skills

Many of the innovations in adult education limit program participation to students with skills at the ninth-grade level or above, which effectively bars lower-skilled students from receiving services. Given the large proportion of low-skilled individuals in adult education programs, leaders in the field should make it a priority to develop programs that incorporate this student population. The promising advances made by programs that have enrolled lower-skilled students, such as LaGuardia Community College's GED Bridge and the state of Washington's I-BEST programs, reveal that these students can be successful when given the opportunity to participate in these reforms.[32] College bridge and concurrent enrollment programs might thus consider lifting their skill-level restrictions. In addition, programs might consider building prebridge models that help prepare students for these more advanced programs.

Fragmented Funding Streams

Many adult education programs remain hampered by the fragmented funding streams and agencies upon which they depend for support, with a confusing array of services offered within one community or city. Additionally, while a number of policy measures have been drafted in an effort to reform this fragmentation, these initiatives have often been frustrated by the slow-moving political process or a lack of will to enact such changes. Given the important role that management and finance has for implementing adult education reforms, practitioners, policymakers, and researchers should continue to push for reframing the policies that govern adult education funding and administration. Promising models for this work have been suggested in the Adult Education and Economic Growth Act and proposed revisions to the Perkins Act, both of which seek to reorganize adult education around workforce training and education milestones relevant for the 21st century labor market.[33] In addition, statewide reform efforts like the one taking place in Indiana, which seek to align and integrate adult education with workforce development programs across the state, could serve as models for how such state and local interagency integration and coordination could be achieved.[34]

[32]Martin and Broadus (2013); Jenkins, Zeidenberg, and Kienzl (2009).

[33]Council for Advancement of Adult Literacy (2008); U.S. Department of Education, Office of Vocational and Adult Education (2008, 2012).

[34]Indiana Department of Workforce Development, "WorkINdiana Frequently Asked Questions" (Indianapolis: Indiana Department of Workforce Development, 2013a); Indiana Department of Workforce Development, "WorkINdiana One Pager" (Indianapolis: Indiana Department of Workforce Development, 2013b).

Developing a Better Knowledge Base

Developing better knowledge systems for understanding adult education program innovations and their effectiveness is also critical to the adult education reform agenda. Efforts to build this knowledge base should focus on the practices described below.

- **Enrich the data by tracking student participation across multiple educational institutions, including information on program type and time to completion for students of differing skill levels.**

The U.S. Department of Education has developed a rich database, known as the National Reporting System, to track adult education student outcomes, including information such as students' skill levels, high school credentialing, workforce participation, and college enrollment.[35] Researchers and policymakers should look to expand this data system in the following ways.

First, policymakers should work to build more wide-ranging educational data systems that can be used to longitudinally track students' participation in multiple education programs, including secondary, postsecondary, and adult education. Second, the ability to link student outcome data with program characteristics, such as the subject areas taught and curricula used, would help to provide a clearer picture of how different program models may be connected with student outcomes. Finally, the field should develop timelines of average time to completion of particular milestones, such as movement from one skill level to another or high school completion, for students of varying skill levels. Tracking of the time to completion of such milestones would help practitioners in the field gain a better understanding of the level of resources needed to support students of differing abilities as well as track the promise of new initiatives.

- **Strive for a common language about adult education.**

Adult education reformers should seek to better understand the different types of adult education program models and assess more carefully the varying effects they may have on different groups of students. For instance, an adult education program that provides only modest supports for college transition and limited instruction, or serves primarily lower-skilled students, is likely to have different effects from one with more intensive services aimed at higher-skilled students. Differentiating factors such as the level of instruction, support services offered, and the skill of the students served would provide clearer indicators of what types of programs may hold the most promise for advancing students' skills.

[35]U.S. Department of Education, Office of Vocational and Adult Education (2013a).

- **Build more rigorous research designs.**

Policymakers, researchers, and practitioners should make it a priority to develop a research agenda that can expand the field's knowledge about the effectiveness of new adult education reforms. Such investigations might begin with quasi-experimental analyses, which attempt to control for certain factors such as students' background characteristics, to understand the associations between particular program reforms and students' achievement. When possible, however, more rigorous, experimental analyses, which use random assignment methodology, should also be explored. Such investigations would allow for a causal link to be established between new adult education reforms and any resulting changes in students' achievement.

In considering a research agenda, researchers and policymakers should seek to analyze those programs that appear to hold the most promise for rapidly decreasing the amount of time students spend preparing to earn a high school credential and increasing their successful transition to college. A demonstration that focuses on several permutations of program reform, differentiating by aspects such as the intensity of instruction (for example, part-time versus full-time programs), student skill levels (such as those offered for lower-skilled students versus the higher-skilled), or level of college access (for instance, models that offer concurrent college and GED program enrollment versus a sequential GED-then-college approach), would add to an understanding of the types of programs that may be most beneficial for various adult populations.

Conclusion

While there is debate about the rate of growth of middle-skills/middle-wage jobs that provide better pay than unskilled jobs, these middle-skills jobs generally require education and training that are similar to what is offered as part of vocational certificate and associate's degree programs.[36] This need underscores the importance of advancing the skills of high school dropouts and tackling the barriers to educating this population. Developing innovative education models such as the reforms that are highlighted in this report and building a better research base on their effectiveness represent two important steps that U.S. policymakers can take to help dropouts — and the country — build their success in a higher-paying, skills-based marketplace.

[36]Harry J. Holzer and Robert I. Lerman, *America's Forgotten Middle-Skill Jobs: Education and Training Requirements in the Next Decade and Beyond* (Washington, DC: Workforce Alliance, 2007); Paul Sommers and Drew Osborne, *Middle-Wage Jobs in Metropolitan America* (Washington, DC: Brookings Institute, 2009); David H. Autor, Lawrence F. Katz, and Melissa S. Kearney, "Trends in U.S. Wage Inequality: Revising the Revisionists," *The Review of Economics and Statistics* 90, 2 (May 2008): 300-323.

Chapter 1

Introduction

Postsecondary education has become a critical pathway for improving adults' labor market chances. As the U.S. labor market has shifted toward jobs that require more critical thinking and specialized skills, the real earnings of those with only a high school credential have decreased.[1] Higher-level academic abilities are now necessary even in traditional blue-collar jobs such as machining and manufacturing, given the technological advances in these industries over the past few decades.[2] The early 21st century has thus seen an increasing push toward improving individuals' college- and career-readiness skills, particularly by improving their access to and success in college as well as in college-based workforce training programs. For instance, as of 2013, both the federal government and major national foundations have called for dramatic increases in the number of college graduates in the next 10 to 15 years and have invested millions of dollars in efforts to improve on the number of students entering college as well as their success once there.[3]

Despite this push, far less attention has been paid to those who have yet to achieve a critical milestone needed for college entry: a high school diploma. Approximately 39 million adults, representing nearly 18 percent of the U.S. adult population, have yet to earn this credential, barring most of them from starting on a pathway toward the workforce credentials and college degrees they need in today's marketplace.[4] At the same time, traditional adult education and General Educational Development (GED) programs, which have served as the main avenue for preparing older adolescents and adults to achieve a high school credential, have been unable to help large numbers of students achieve this goal and make a successful transition to college.[5] In addition, researchers have argued that recipients of the GED certificate, particularly those who dropped out of school, tend to have poorer social and emotional skills than traditional high school graduates. These poorer skills are often manifested in a number of counterproductive behaviors such as tardiness and poor attendance.[6] Many of these individuals thus need support in developing the "soft skills" necessary for success in college and their careers.

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[1] Levy and Murnane (2004); Robert Half International (2013); Economic Policy Institute (2012).

[2] Levy and Murnane (2004).

[3] Bill & Melinda Gates Foundation (2009); Lumina Foundation for Education (2009); Office of the Press Secretary (2009).

[4] This statistic is from the 2010 U.S. Census, as reported in GED Testing Service (2012a). It refers to the percentage of the U.S. population above age 16 who lacked a high school credential and were not enrolled in any educational program at that point in time.

[5] GED Testing Service (2012a); Zhang, Guison-Dowdy, Patterson, and Song (2011); Tyler (2004).

[6] Heckman, Humphries, and Mader (2010); Murnane (2013).

Fortunately, a number of colleges, community-based organizations, and alternative education providers have been seeking new ways to help non-high school graduates better prepare for a high school credential and subsequent transition into postsecondary education. Their efforts include a range of different strategies, from improving the standards and curriculum in adult education classes to providing intensive advising on the college entry process and college expectations. This report aims to develop a better understanding of these reforms and their effectiveness at helping these individuals achieve two goals: (1) earning a high school credential, and (2) making a transition to and succeeding in postsecondary education. In addition, because of the paucity of data on program effectiveness, this report aims to identify a research agenda that would help increase practitioners' understanding of what program components, if any, may be most effective in improving students' success.

What Is Adult Education?

Since the passage of the Economic Opportunity Act in 1964, America's federally funded adult basic skills programs have been the primary vehicle for helping undereducated adults improve their skills and prepare for earning a high school credential.[7] Enrolling 2 million students in the 2010-2011 program year (the most recent year for which data are available), adult education programs comprise three different courses of instruction: adult basic education (ABE), for individuals with below-ninth-grade skills; adult secondary education (ASE), for individuals with high school-level skills;[8] and English literacy (EL), for adults who lack proficiency in English.[9]

ABE and ASE are subdivided into six educational functioning levels (see Table 1.1), ranging from beginning adult basic education literacy (for those with less than second-grade skills) to high adult secondary education (for those with eleventh- to twelfth-grade skills).[10] As can be seen in the table, a large proportion of the nearly 1.2 million students enrolling in ABE and ASE programs have lower skills, with nearly 80 percent possessing skill levels below the ninth-grade level and over 40 percent with skills below the sixth-grade level.[11]

A number of other education and training programs also exist for low-skilled adults, many of which fall outside of the scope of this report. For instance, most community colleges and some four-year colleges provide developmental, or remedial, education services to high school graduates who are not ready for college. In recent years, the distinction between these

[7]Tamassia, Lennon, Yamamoto, and Kirsch (2007).

[8]ASE generally includes programs that help students prepare for the General Educational Development (GED) certificate or adult diploma through a school system.

[9]U.S. Department of Education, Office of Vocational and Adult Education (2013a). This chapter focuses on students attending ABE and ASE programs.

[10]U.S. Department of Education, Office of Vocational and Adult Education (2013b).

[11]U.S. Department of Education, Office of Vocational and Adult Education (2013a).

Table 1.1

National Reporting System Adult Education Skill Level Classifications, Associated Grade Level, and Enrollment

Adult Education Classification	Approximate Grade Level	Enrollment (2010-2011)	Percentage of Total
Adult basic education			
Beginning adult basic education literacy	0-1.9	60,929	5
Beginning basic education	2-3.9	183,774	16
Low intermediate basic education	4-5.9	311,403	26
High intermediate basic education	6-8.9	370,059	32
Adult secondary education			
Low adult secondary education	9-10.9	142,513	12
High adult secondary education	11-12	104,086	9
Total		1,172,764	100

SOURCES: U.S. Department of Education, Office of Vocational and Adult Education (2013a; 2013b).

developmental services and adult education has become blurry, particularly as colleges have explored moving lower-skilled developmental education students into adult basic education classes. (See Box 1.1.) In addition, a number of training programs for job seekers, the unemployed, and older youth also exist, including initiatives such as WorkAdvance, JobStart, and the Youth Service and Conservation Corps.[12] However, most of these programs focus on high school credentialing as one of many services and are not explicitly targeted toward helping students make the transition to college.

Operating independently of ABE and ASE programs, the GED exam serves as one of the primary vehicles by which non-high school graduates earn a secondary credential. Originally created in 1942 to allow World War II veterans to achieve a high school diploma, the GED exam served over 700,000 individuals in 2011 and is currently the mostly commonly accepted

[12]For more information on WorkAdvance, JobStart, and the Youth Service and Conservation Corps, see, respectively, Center for Economic Opportunity (2013b, 2013c); Cave, Bos, Doolittle, and Toussaint (1993); and The Corps Network Web site (www.nascc.org).

Box 1.1

Where Is the Line? Distinguishing Adult Basic Education from Developmental Education

Adult basic education and developmental education represent two distinct educational systems. Adult basic education stems from the passage of the 1964 Economic Opportunity Act, and these programs have traditionally served high school dropouts, adults with low literacy, and immigrants seeking to improve their English language skills. Adult basic education students typically pay little or no tuition, as programs are funded almost entirely by federal, state, and local grants, and remain small with long waiting lists.[*] Finally, adult education is generally not eligible for federal financial aid, even when programs are housed in postsecondary institutions.

Developmental, or remedial, education classes have traditionally served students who have a high school credential but do not possess college-level skills upon beginning postsecondary education.[†] Colleges generally place students into developmental education classes based on their scores on a placement assessment, which students take upon entering college. Most colleges provide developmental courses in reading, writing, and math. Depending on their assessed needs, students may be required to take one to four semesters of courses in these subject areas. Though developmental courses do not count toward a degree and are generally not transferable to four-year institutions, tuition is charged for these classes. Students can, however, use financial aid to support the incurred costs.

Recent years have seen a blurring of the line between adult education and developmental education classes. For instance, a number of states and institutions have been experimenting with developing a basic-skills cutoff within developmental education and moving individuals who score below this cutoff into adult basic education classes.[‡] Similarly, some colleges have developed blended adult basic education and developmental education classes for students with

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[*]Foster (2012); National Council of State Directors of Adult Education (2010, 2011).

[†]For more information, see Rutschow and Schneider (2011); Foster, Strawn, and Duke-Benfield (2011).

[‡]Collins (2011); Clancy and Collins (2013).

Box 1.1 (continued)

very low skills, allowing developmental education students to take tuition-free classes to build their skills.[§]

While the melding of these two systems may seem intuitive, their combination may present steep costs for adult education programs and students, given that adult education programs have traditionally had lower levels of funding and far more constraints than postsecondary programs. For example, even without the addition of developmental education students, most states have long waiting lists for adult education services, with only a fraction of the students who are eligible being served by these programs.[**] Additionally, adult education systems tend to face even more difficult instructional challenges than do developmental education programs, with part-time teachers and few resources to support the implementation of instructional or programmatic reforms.

[§]An example of such an effort is Baltimore City Community College's Promise Academy (Brown, 2011).

[**]National Council of State Directors of Adult Education (2010, 2011).

alternative high school credential in the country.[13] The test takes over seven hours to complete and consists of individual exams in five subject areas: Language Arts — Reading, Language Arts — Writing, Social Studies, Science, and Math. The minimum passing scores for these tests are set individually by each state and thus vary from place to place.

Though some GED test takers do participate in ABE or ASE programs, a large proportion of those attempting the GED exam do not participate in any type of preparatory program.[14] This situation may result in part from the fact that the ABE and ASE education programs are run independently from the GED exam and also that few states require any supplemental study before sitting for the GED exam.[15] Students' lack of preparation may become more worrisome in the immediate future, as the GED Testing Service plans for a ratcheting up of the test's standards in 2014 to meet higher-level college- and career-readiness standards (discussed in

[13]The information in this paragraph comes from GED Testing Service (2010, 2012a) and Tyler (2004).

[14]In a GED Testing Service study of over 90,000 people who took the GED exam in 2004, more than half of the study sample did not participate in a preparatory program (McLaughlin, Skaggs, and Patterson, 2009).

[15]GED Testing Service (2012a).

greater detail in Chapter 2).[16] Such issues further highlight the urgency of developing adult education programs that will better prepare students for success in college.

What Are the Outcomes?

Under the current regulations governing ABE and ASE programs (as laid out in the Adult Education and Family Literacy Act of 1998), adult basic skills programs are expected to provide educational services to adults focused on three key goals: improving students' (1) basic literacy skills, (2) ability to participate in their children's educational development, and (3) high school credentialing rates.[17] All programs are required to track their students' progress by providing regular updates to the National Reporting System for Adult Education (administered by the Division of Adult Education and Literacy in the Office of Vocational and Adult Education at the U.S. Department of Education). Students' educational progress is tracked according to five key outcomes, including educational gain (defined as movement from one educational functioning level to another), high school completion, entry into postsecondary education or training, entry into employment, and retention of employment. Educational gain is generally monitored through one of several standardized assessments, such as the Test of Adult Basic Education (TABE) and the Comprehensive Adult Student Assessment System (CASAS). High school credentialing, postsecondary education, and labor market outcomes are monitored using a variety of methods, including student surveys, analysis of unemployment insurance (UI) wage records, or statewide longitudinal education data.

Analyses of National Reporting System data have generally shown adult basic skills programs to be accomplishing many of their intended goals. For instance, in the 2010-2011 program year, 42 percent of ABE and ASE students had progressed one education level, while 61 percent and 56 percent of students participating in federally funded adult education programs who sought to complete a high school credential and enter college, respectively, did so. (See Table 1.2.) However, these analyses mask a number of underlying difficulties with adult education students' performance. First, a number of these measures, including those tracking high school completion and entry into postsecondary education, have traditionally been tracked against students' stated goals upon entry. Thus, completion of a high school credential and entry into postsecondary education or training are tracked against a small subpopulation of students with this intended goal, resulting in much higher rates of attainment than are seen for the entire population under study. As shown in Table 1.2, far fewer students are seen as earning a high

[16]GED Testing Service (2012b).

[17]Information in this and the following paragraph comes from U.S. Department of Education, Office of Vocational and Adult Education (2013a).

Table 1.2

Adult Education Students' Outcomes Based on National Reporting System (NRS) Data, Program Year 2010-2011

Outcome	Number	Percentage Who Stated Outcome as a Goal and Achieved It	Percentage of Those Enrolled in Adult Education
Completing one NRS educational level or more (ABE/ASE students only)[a]	444,261	NA	42
Receipt of a high school credential (i.e., diploma or GED certificate)	161,549	61	8
Enrollment in postsecondary education or vocational training program	48,825	56	2
Unemployed students who got a job[b]	78,486	48	4
Students who remained employed[b]	77,634	62	4

SOURCE: U.S. Department of Education Office of Vocational and Adult Education (2013a).

NOTES: [a]ABE = adult basic education. ASE = adult secondary education. Students enrolled at the highest level of ASE are not included in the denominator for this percentage, as the NRS does not identify exit scores for completion of this level.
[b]One quarter after program exit.

school credential (8 percent) and entering postsecondary education or training (2 percent) when measured against all students enrolled in these programs.

Other research studies have also found challenging results. For instance, a nine-year longitudinal study following a random sample of 1,000 high school dropouts, ages 18 to 44, found that participation in adult education programs showed no impact on student literacy proficiency when participants were compared with a similar group of students not enrolled in these programs.[18] Experimental studies, which employed control group comparisons, and quasi-experimental analyses, which used statistical controls to account for background differences, also show similar results.[19] For instance, an analysis of the U.S. National Adult Literacy Survey found no significant differences in the literacy proficiency of adults participating in basic skills programs compared with that of nonparticipants, when controlling for other background charac-

[18]Reder (2011).
[19]Beder (1999).

teristics.[20] Though these studies confirmed that participation in adult education was linked to an increase in students' literacy and numeracy practices, such as reading books and using math at home, this relationship did not lead to increases in proficiency that could be attributed to participation in adult basic skills programs.[21]

Though some may argue that these studies provide an unfair assessment of adult education programs, which have multiple goals beyond just high school completion, these outcomes raise important questions about adult education programs' ability to help large groups of students move toward higher-level education and workforce opportunities. Additionally, the nation's need for a workforce with higher-level skills is not likely to subside in the near future. This need, along with the upcoming changes to the GED exam (discussed in greater detail in Chapter 2), underscores the urgency of developing new alternatives for helping dropouts successfully make the transition to college.

What Are the Challenges to Moving Students Forward?

Despite the vital need for reform, adult education programs face a number of critical challenges in advancing students to higher levels of education. Several of the most prominent barriers these programs face are highlighted below.

Student Skills

As noted above, nearly 80 percent of the students who enter adult education and GED programs have skills below the ninth-grade level, with many of them exhibiting key deficits in reading, writing, or math, and limited exposure to other important subjects, such as social studies and science.[22] In addition, adult education programs see a higher incidence of learning disabilities than generally found in traditional kindergarten through grade 12 (K-12) classrooms.[23]

At-Risk Population

Students attending adult education programs also tend to face multiple life challenges, including poverty, single parenthood, and, among those who are employed, heavy work schedules. For instance, one study found that 70 percent of students enrolling in adult education programs have children, and nearly 40 percent are single parents.[24] Other findings indicate that ap-

[20]Sheehan-Holt and Smith (2000).
[21]Reder (2011); Sheehan-Holt and Smith (2000).
[22]U.S. Department of Education, Office of Vocational and Adult Education (2013a).
[23]Krudinier (2002).
[24]Comings, Parrella, and Soricone (1999).

proximately 70 percent of those who are employed work 40 hours or more each week.[25] In another study, just over one-fourth of the adult education target population live below the poverty line, and over 50 percent do not participate in the labor force.[26]

Program Participation and Engagement

Few students attend adult education programs for a lengthy period of time, with many students dropping out or stopping out (leaving and reentering programs at a later date).[27] For instance, an examination of 150 students attending pre-GED classes found that only 52 percent of these students were still attending these same classes four months later.[28] In order to keep enrollments and revenues even, many adult education programs operate using "open" enrollment systems, by which new students are enrolled in classes on a monthly, weekly, or even daily basis. The makeup of an individual classroom is thus continuously changing, making it difficult for teachers to build on students' day-to-day learning.[29]

Financial Constraints

While the federal government granted $68.1 billion for U.S. education in 2012, only $606.3 million, or less than 1 percent, of this funding went toward adult literacy and adult secondary education programs.[30] Though states are required to match these funds, and many provide much higher levels of support, nearly half of the states in the country do not fully match these grants.[31] Indeed, previous comparisons have shown that most adult education programs survive on less than 10 percent of the resources spent to support the average K-12 student, with the majority of adult education programs operating on annual budgets of less than $200,000.[32]

Teacher Training

Adult education programs also tend to have challenges hiring experienced, full-time staff and providing continuous training to build instructors' skills.[33] A large number of adult education programs hire part-time instructors and provide little to no paid professional development time to either part-time or full-time instructors.[34] Instructors who do receive professional

[25]Comings, Parrella, and Soricone (1999).
[26]Lasater and Elliot (2005).
[27]Comings, Parrella, and Soricone (1999); Gopalakrishnan (2008).
[28]Comings, Parrella, and Soricone (1999). Thirteen percent had earned a GED certificate.
[29]Beder and Medina (2001).
[30]U.S. Department of Education (2012).
[31]Council for Advancement of Adult Literacy (2008).
[32]U.S. Department of Education, Office of Vocational and Adult Education (2005).
[33]Chisman (2011).
[34]Smith et al. (2003); Sabitini et al. (2000).

development typically receive fewer than 20 hours per year, and training typically takes place in off-site workshops rather than in more intensive, on-site formats.[35]

Content of Instruction

Unlike K-12 schools, which often base instruction on particular content standards or curricula, adult education has traditionally been highly idiosyncratic and lacked strong curricular supports on which to base instruction. Instead, instruction has tended to be linked to commercially developed GED, pre-GED, or other test-preparation materials and has had less engagement with authentic texts, narratives, or compositions.[36]

Pedagogy

Though a number of research studies have highlighted the value of authentic materials and collaborative learning methods, few adult education classrooms have been found to employ these activities, with many classes based upon traditional stand-and-deliver lecture techniques.[37] For instance, three large-scale studies of over 300 adult education classrooms found that only a handful of classes or programs attempted to use original texts during their lessons, and only one-fifth or fewer of classrooms promoted collaborative learning among students.[38]

Familiarity with College Expectations

Given their low skill levels and often limited involvement with educational institutions, many adult education students are unfamiliar with expected college norms and practices, such as self-directed learning, large reading loads, research papers, and projects. In addition, students are often unaware of the many steps required for college entry, including college admissions processes, financial aid applications, and entrance exams.[39]

Fragmented Funding, Management, and Administration

Another difficulty that adult education programs face, in addition to the classroom-level challenges noted above, is that their administration and management are highly fragmented, which often leads to a confusing array of programs within one locality. Adult education programs within one city or state may be managed by a multitude of different government or educational entities, including state departments of education, departments of labor or workforce

[35]Smith et al. (2003).
[36]Beder and Medina (2001).
[37]Purcell-Gates, Degener, Jacobson, and Soler (2000); Beder and Medina (2001).
[38]Purcell-Gates, Degener, Jacobson, and Soler (2000); Beder and Medina (2001); Purcell-Gates, Degener, and Jacobson (1998).
[39]Martin and Broadus (2013).

development, family and social services departments, community colleges, community-based organizations, or K-12 systems.[40] In addition, multiple funding streams are often used to support individual programs, each with its own requirements and accountability systems. (See Table 1.3.) While most adult education programs are financed through the Adult Education and Family Literacy Act (Title II of the Workforce Investment Act, or WIA),[41] programs may also receive subsidies based on other federal grants, each grant carrying with it differing restrictions regarding the educational population to be served, the length of program allowed, and the accountability measures to which they must adhere.[42] Such fragmentation often results in a variety of similar programs being offered within one area, with few coherent mechanisms to distinguish between their differing services and opportunities.

Overcoming the Challenges: Moving Adult Education Toward College

While substantial obstacles exist, a number of adult education efforts provide innovative mechanisms for helping dropouts earn a high school credential and succeed in college. The reforms identified fall into three broad categories, including:

1. **College-readiness standards and curriculum reforms:** This set of reforms includes efforts currently under way to align adult education content, instruction, and credentialing methods with current college- and career-readiness standards. Most commonly, these movements have focused on aligning programming with the Common Core State Standards, a set of competencies and procedures in English language arts and math in K-12 that have been adopted by 45 states nationwide.[43] However, some efforts are also focused on a deeper integration of adult education with career, technical, and workforce training programs.

2. **GED-to-college bridge programs:** Often called GED bridge, GED-to-college bridge, or college transition programs, these programs generally provide intensive college-level academic skill building in core content areas such as English language arts and math. However, they also provide supplemental supports for college entry, such as intensive advising on careers, college expectations, college-course taking, one-on-one case management, or success courses. Finally, these programs often provide exposure to career building or workforce training through contextualized, career-specific curricula, internships, or entry-level jobs in specific, in-demand careers.

[40]For example, Kelly (2009) describes the system in Indiana.
[41]Glickman (2010).
[42]For more information on the funding streams listed, see Kaleba and Gragg (2011).
[43]National Governors Association Center for Best Practices (2010).

Beyond the GED

Table 1.3

Federal Funding Streams Available to Adult Education and Training Programs

Name	Description	Target Population	Managing Entity
Workforce Investment Act (WIA) Title I	Provides funding to state and local Workforce Investment Boards for One-Stop Career Centers and training services.	Job seekers: adults, dislocated workers, and youth	Department of Labor
WIA Title II (Adult Education and Family Literacy Act)	Provides funding for adult basic and secondary education programs, as well as English as a Second Language programs.	Individuals 16 years and older who lack a high school diploma or proficiency in the English language	Department of Education
WIA Title III (Wagner-Peyser Act)[a]	Funds Employment Service programs that provide job search assistance and reemployment services. Also provides recruitment services to employers.	Job seekers and unemployment insurance claimants	Department of Labor
WIA Title IV (Vocational Rehabilitation Act)	Supports employment and training for individuals with documented disabilities.	Individuals with disabilities	Department of Education
Supplemental Nutrition Assistance Program Employment and Training (SNAP E&T)	Supports operating costs of local education and training programs, support services for participants, and retention services.	SNAP recipients who are not also receiving TANF	Department of Agriculture
Temporary Assistance for Needy Families (TANF)	Provides funding for education and training services that are directly related to employment preparation.	Individuals who are receiving or eligible for TANF	Department of Health and Human Services
Trade Adjustment Assistance Community College and Career Training Grant	Makes grants to expand and improve the ability to deliver education and career training programs that can be completed in two years or less.	Workers who have lost jobs or hours as a result of increased imports	Department of Labor; Department of Education

(continued)

Table 1.3 (continued)

Name	Description	Target Population	Managing Entity
Carl D. Perkins Career and Technical Education Act	Through state Career and Technical Education boards, funds secondary and postsecondary programs that build academic, career, and technical skills.	Programs must ensure access for disadvantaged populations	Department of Education

SOURCES: Kaleba and Gragg (2011); Glickman (2010).

NOTES: Authorizing the nation's public workforce development system, the Workforce Investment Act (WIA) has five titles that provide funding for different programs. Titles I to IV are listed in this table; Title V covers general provisions. "WIA" is commonly understood to reference Title I, while the other titles are referred to by the programs they authorize.

[a]Though WIA Title III is a separate funding stream from WIA Title I, services are provided under the One-Stop system.

3. **Concurrent enrollment in adult education and college:** Like GED-to-college bridge programs, this set of reforms focuses on providing more academically rigorous curricula and supports for college transition. However, in addition, programs in this category allow adult education students to concurrently enroll in college courses while still working toward their high school credential. The courses students may take vary, ranging from noncredit or nontransferable courses, such as developmental or continuing education courses, to credit courses in specific majors or fields.

This report seeks to provide a framework for understanding these reforms, including how their components, structure, and goals differ from one another, as well as their effectiveness in increasing students' high school credentialing and postsecondary success.

Methods

Research for this report encompassed reviews of journals focused on adult education, reports from major adult education and GED research institutions, and descriptions and studies of GED and adult education reform initiatives as well as one-on-one research with individual programs. (See Appendix A.) Reviews were conducted of journals such as *Adult Basic Education* and *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education,* as well as reports by adult education research organizations, such as the National Center for the Study of Adult Learning and Literacy, Office of Vocational and Adult Education, Council for

the Advancement of Adult Literacy, the Community College Research Center, and the General Educational Development Testing Service.

This report also relies on reports and program descriptions from national, state, and local adult education program and reform networks, such as the Literacy Information and Communication System, the National Adult Education Professional Development Consortium, and the National College Transition Network. Information on individual programs and initiatives was also gathered through reviews of Web sites and research reports studying the implementation and/or effects of such reform initiatives. Finally, the authors conducted telephone interviews and communicated via e-mail with representatives of the programs highlighted in the report in order to further understand the programs' components, their funding and management, and the existing research on their effectiveness.

In this research, attention was paid to both the components of individual programs and any research that had been undertaken to assess effectiveness. In particular, the report seeks to capture impacts documented through rigorous studies employing experimental or quasi-experimental designs that controlled for differences between participating and nonparticipating students. However, because few rigorous studies exist, studies noting promising trends in students' achievement were also tracked, particularly among more recent, innovative designs.

General statistics describing the current or past state of adult education were also noted, as well as theoretical work on promising practices or strategies to promote adult students' completion of a credential and success in postsecondary education. The statistical studies were used to outline larger trends in adult education or to describe the characteristics of particular student populations, such as the skill levels of adult education students. The theoretical studies, published by both researchers and practitioners, were reviewed in order to better understand the theoretical foundations of a particular practice and its intended outcomes.

Structure of the Report

The rest of this report is divided into four chapters. Chapter 2 investigates the current efforts to move adult education toward higher-level college- and career-readiness standards. Chapter 3 examines GED-to-college bridge programs aimed at creating a stronger link between high school credential preparation and college entry through academic and transition supports. Chapter 4 examines programs that allow for concurrent enrollment in college and adult education. Chapter 5 presents a synthesis of these models, the strides they have made in overcoming barriers to adult education reform, and suggestions for overcoming continuing challenges in the field.

Chapter 2

Laying the Foundation: Adult Education's Move Toward College and Career Readiness

The first decade of the 21st century saw an increasing focus on students' lack of preparation for college and a push toward reforms that reduce the gap between secondary and postsecondary education. In kindergarten through grade 12 (K-12) education, the Common Core State Standards (CCSS) Initiative, begun by the National Governors Association and the Council of Chief State School Officers in 2010, has been one of the most prominent of these reforms. The CCSS Initiative is aimed at setting out "clear and consistent goals for learning that will prepare America's children for success" and delineates a set of competencies and procedures in English language arts and math that have been adopted by 45 states nationwide.[1]

Recently, adult education has also seen a proliferation of efforts aimed at improving students' college readiness, many of which seek to tie adult education standards and credentialing practices to the CCSS. For instance, the General Educational Development Testing Service has made a highly publicized move toward implementing a new CCSS-aligned GED exam in 2014, while the U.S. Department of Education's Office of Vocational and Adult Education (OVAE) has recently focused on developing adult education instructional standards aligned with the CCSS.[2] Such efforts represent a marked change from previous goals for adult education, which typically have included college entry as one of many adult education outcomes.

This chapter examines adult education's recent moves toward implementing college-readiness standards and the success of these interventions. The key findings from this chapter are:

- **Most of the standards-based reforms in adult education have focused on aligning instruction with the Common Core State Standards.** However, selected examples of efforts to better integrate adult education with career, technical, and workforce education can also be found.
- **While clearer benchmarks for adult education are being developed, the field still faces critical challenges to implementing these more rigorous**

[1]National Governors Association Center for Best Practices (2010).

[2]American Council on Education (2011); U.S. Department of Education, Office of Vocational and Adult Education (2011).

standards and raising students' achievement. Currently, few frameworks exist for the successful implementation of these new standards, particularly within the current limitations of adult education. It remains to be seen whether and how these standards may succeed in improving students' success.

Where Do We Begin? Current Frameworks for Adult Education Instruction

While much adult education instruction has been based on test preparation materials, researchers have been focused on improving adult education reading, writing, and math instruction for a number of years. During the late 20th and early 21st centuries, a variety of research centers were developed to study and disseminate best practices, including the National Center for the Study of Adult Learning and Literacy (1996 to 2007); the National Institute for Literacy (1991 to present); the Literacy Information and Communication System (1994 to present); the National Center on Adult Literacy, University of Pennsylvania (1990 to present); the Institute for the Study of Adult Literacy, Penn State (1985 to present); and the Center for the Study of Adult Literacy, Georgia State University (2012 to present).[3] Additionally, a number of independent adult education organizations, such as the Council for Advancement of Adult Literacy and the National Center for Family Literacy, have helped contribute to a growing research base in adult education.[4] These centers have produced scores of quantitative and qualitative research studies for improving a variety of adult education practices, ranging from program administration and professional development to pedagogical approaches.

In addition to these research efforts, the federal government has provided substantial support for implementing research-based practices in adult education. For instance, in 2003, OVAE established the Adult Education Content Standards Warehouse Project, with the express aim of assisting "states in building capacity to develop, align, and implement adult education content standards for English language acquisition, mathematics, and reading."[5] A key component of this project was the development of a Web site that serves as repository of English language arts, math, and reading content standards developed by 26 states and organizations. In addition, OVAE has provided training for states interested in developing their own standards for adult education programs, including a manual that outlines the tasks involved in this process.

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[3]See www.ncsall.net; https://federalregister.gov/agencies/national-institute-for-literacy; http://lincs.ed.gov; www.literacy.org; www.ed.psu.edu/educ/isal; http://ies.ed.gov/funding/grantsearch/details.asp?ID=1343.

[4]For more information, see www.caalusa.org and www.famlit.org, respectively.

[5]The information in the rest of this paragraph comes from U.S. Department of Education, Office of Vocational and Adult Education (2005). See www.adultedcontentstandards.ed.gov/about_warehouse.asp for more information.

Until recently, however, research and supports for improving adult education have focused mainly on enhancing reading, writing, and math instruction. Most of this research has been qualitative or descriptive in nature, providing a snapshot of different reading, writing, or math approaches in adult education; in addition, a handful of experimental studies document the effectiveness of particular instructional techniques.[6] Finally, a number of studies have focused on adapting rigorous research findings on K-12 math, reading, and writing instruction to adult education settings.[7] However, in general, these studies have tended to focus on more isolated instructional practices rather than on aligning adult and postsecondary education.

Movement Toward the Future: Developing College- and Career-Readiness Standards in Adult Education

Despite its largely traditional focus, the adult education field has made several advances toward aligning with postsecondary education. In 2011, for example, OVAE began the Promoting College and Career Readiness Standards in Adult Education project, which aims to align adult education standards with the Common Core State Standards.[8] The key goals of this project are to (1) develop and validate a set of college- and career-readiness (CCR) standards to assist states and adult education programs in updating their current standards; (2) align the CCR standards with the six educational functioning levels in adult basic education (ABE) and adult secondary education (ASE); and (3) update the Adult Education Content Standards Warehouse. The standards for English language arts and mathematics were released in 2013,[9] and OVAE is currently working on a guide to assist states in their implementation.[10]

In addition, some efforts have been made to develop better links among adult education, postsecondary education, and workforce training programs. As an example, in 2007, the president established the Interagency Adult Education Working Group (IAEWG), which was charged with highlighting new ways in which the federal government could improve adults' transition to postsecondary education and employment.[11] The group's report, published in 2008, recommended five steps for improving the efficiency of adult education and workforce training programs, including recommendations such as creating a centralized entity for coordinating

[6]Krudinier (2002); Gillespie (2001); and American Institutes for Research (2006), respectively.

[7]See, for example, Greenberg, Ehri, and Perin (1997) and American Institutes for Research (2010). Additional examples are documented in Krudinier (2002); Gillespie (2001); and American Institutes for Research (2006).

[8]The information in the remainder of this paragraph comes from National College Transition Network (2013) and U.S. Department of Education, Office of Vocational and Adult Education (2011b, 2013c).

[9]See Pimentel (2013).

[10]See www.adultedcontentstandards.ed/gov/StandardsInAction.asp.

[11]The information in the remainder of this paragraph comes from U.S. Department of Education, Office of Vocational and Adult Education (2008).

adult education programs and broadening the measures used to evaluate the efficacy of adult education programs.[12] Similarly, from 2006 to 2008, the National Commission on Adult Literacy (NCAL), an initiative funded by the Dollar General Corporation and a number of other foundations, argued for the passage of the Adult Education and Economic Growth Act, which was to focus on overhauling adult education programming and increasing its funding. Similar to the IAEWG, NCAL advocated for consolidating the multiple agencies serving low-skilled adults and refocusing adult education and workforce training on college- and career-readiness skills.[13] Finally, OVAE has also pushed for improving the connections among adult education, college, and workforce training through revisions to the Carl D. Perkins Career and Technical Education Act (Perkins Act), the major funding source for secondary and postsecondary career and technical education programs.[14] Though none of these reforms has been enacted to date, they represent substantial efforts to highlight and improve adult education's alignment with post-secondary education and workforce training.[15]

Changing Credentialing Standards: Reforming the GED

Organizations that provide alternative high school credentials to nongraduates have also been pushing toward more rigorous standards for dropouts' high school certification. The most prominent of these reforms is the revision of the GED credential to assess test takers' college- and career-readiness. With the advent of its GED 21st Century Initiative in 2011, the American Council on Education announced a partnership with Pearson publishing company to develop a new GED exam aligned with the Common Core State Standards.[16] Scheduled for release in January 2014, this new exam is expected to "measure a foundational core of knowledge and skills that are essential for career and college readiness." Students will continue to be assessed in similar content areas, including math, social studies, science, and literacy (a combination of the original English and reading exams); however, more rigorous assessment targets, derived from the Common Core State Standards, will be used. In addition, students will be required to demonstrate critical thinking and reasoning skills, such as the ability to analyze information and evaluate complex texts presenting opposing perspectives, and demonstrate real-world mathematical problem-solving skills. Finally, the essay portion of the exam will be revised from a personal narrative to a composition that requires examinees to demonstrate their ability to develop an argument using text-based evidence.

[12]Example programs include College Yes, Colorado Success Unlimited, and National Guard Youth Challenge.

[13]Council for Advancement of Adult Literacy (2008).

[14]U.S. Department of Education, Office of Vocational and Adult Education (2012).

[15]Foster (2011); National Skills Coalition (2013).

[16]The information in the remainder of this paragraph comes from American Council on Education (2011); GED Testing Service (2012b, 2012c); and Fain (2012).

While intended to provide further support for adults' transition to college, the new GED exam has also created some anxiety among states and adult education programs, which are concerned that the new test will create a number of obstacles for low-skilled adults' high school certification. Key among these concerns have been (1) the development of more rigorous standards without adequate supports for preparing students; (2) the proposed increase in exam fees; and (3) the movement to online testing.[17] As a result, some states have been pursuing alternative high school certification options outside of the GED. For instance, New York State recently chose to adopt a new Test to Assess Secondary Completion (TASC), to be developed by CTB/McGraw Hill, while New Hampshire, Tennessee, and Montana have chosen to go with the Educational Testing Service's new High School Equivalency Test (HiSET).[18] Other states, such as Florida, Iowa, and Missouri, are also considering alternatives based on similar concerns.[19] However, it is expected that these new high school equivalency exams will also be aligned with the Common Core State Standards.[20]

Curricular Revisions: Adapting to the Common Core

A number of curriculum developers have also been making efforts to revise adult education curricula to align with the CCSS's college- and career-readiness standards. More than 14 publishers, including Kaplan, Houghton-Mifflin, and Peterson's, are working to develop commercially available materials to help prepare individuals for the new 2014 test, with most materials available as of fall 2013.[21] In the interim, some publishers have developed guides intended to reveal how their GED preparation workbooks align with the new Common Core-aligned assessment targets. Contemporary/McGraw-Hill, for example, has released a guide that introduces students to the expected assessment targets in the 2014 GED's new social studies, science, math, and literacy assessments and points out specific lessons in their existing workbooks aligned with these skills.[22]

Similar on-the-ground efforts to implement Common Core-aligned curricula are also under way in some adult education programs. The Learning Pathways Pilot being undertaken in the New York City Department of Education's (NYC DOE's) adult education programs represents an example. Funded by the MetLife foundation through a grant to the American Council on Education, the Learning Pathways Pilot is implementing CCSS-aligned writing and math curricula in NYC DOE's District 79-Alternative Schools and Programs (D79), which serves

[17]Clymer (2012); Massey (2012).
[18]Smith (2012); Fleisher (2013); Fain (2013).
[19]Smith (2012); Clymer (2012); Hollingsworth (2013); Fain (2013).
[20]New York State Education Department (2012); Fain (2013).
[21]GED Testing Service (2013).
[22]Contemporary/McGraw Hill (2012).

students under the age of 21, and Office of Adult and Continuing Education (OACE), which serves adults 21 and over. The writing curriculum is based on a revised version of the Writers' Express (WEX), which focuses on helping students strengthen areas such as their writing stamina, revising process, and use of evidence to support arguments.[23] In addition, a revised version of TERC's EMPower math curriculum, which focuses on helping students develop a deeper understanding of core math concepts, is being implemented in D79 and OACE classrooms.[24] The key goal of the pilots is to better prepare students for the 2014 GED exam and college entry.

How Effective Are Standards-Based Reforms?

Given the relative newness of college-readiness standards in adult education settings, it is not surprising that little rigorous research exists demonstrating their effectiveness. However, a handful of research efforts are attempting to evaluate the success of some of these curricular models. For instance, Abt Associates is currently undertaking a four-year random assignment study of the WEX curriculum. Though the setting is K-12 classrooms, this evaluation may help shed light on the effectiveness of WEX in improving students' writing more generally.[25] In addition, MDRC is currently conducting a qualitative and trend analysis of the D79 and OACE Learning Pathways Pilot initiatives. While not a rigorous analysis of student outcomes, this study will nevertheless allow for a deeper investigation of the successes and challenges of these curricula as they are implemented within these adult education settings.

[23]Amplify Learning (2013).
[24]TERC (2013).
[25]Institute of Education Sciences (2009).

Chapter 3

Building the Bridge: Helping Adults Make the Transition from the GED to College Entry

While aligning adult education content with college- and career-readiness standards is an important move toward preparing adult students for college, a number of other barriers also hinder these students' successful transition into postsecondary education. For adult students, many of whom have spent years away from school, the multitude of steps needed for college entry, from applying for financial aid and taking college placement tests to selecting majors and courses, can represent a bewildering array of requirements. In addition, students may have little understanding of how the courses they take connect with their career interests and real-world job opportunities.[1]

In order to meet these challenges, a number of adult education reform efforts have been focusing on developing programs that integrate intensive academic skill-building with numerous social supports aimed at improving students' transition to college. Often called college bridge, GED (General Educational Development) bridge, GED-to-college bridge, or college transition programs, the academic content within these programs is based on college-readiness standards similar to those discussed in Chapter 2 of this report.[2] However, in addition, GED-to-college bridge programs provide supplemental supports for college entry, such as one-on-one advising on careers, introductions to college admissions processes, and step-by-step guidance on completing college entrance requirements. Furthermore, college bridge programs often have a stronger emphasis on preparing students for the workforce through contextualized curricula that focus on skills within specific industries, on-the-job training opportunities, and supplemental career-exploration courses.

This chapter analyzes the components of GED-to-college bridge programs and the available evidence on their effectiveness, based on existing information from nine programs and initiatives across the country. Additional detail on the highlighted reforms is provided in Appendix B. The key findings from this chapter are:

- **Though programs differ in their intensity, most GED-to-college bridge models tend to include four key programmatic elements.** These compo-

[1]U.S. Department of Education, Office of Vocational and Adult Education (2007).

[2]Though programs may prepare students for alternative high school credentials other than the GED certificate, this chapter refers to these programs as GED-to-college bridge programs for ease of reference.

nents include more rigorous college- and career-preparatory curriculum, intensified college entry and transition supports, direct connections with postsecondary institutions, and managed enrollment that allows for more sequenced lessons than is typical in traditional GED and adult education programs.

- **Little rigorous research is available demonstrating the effectiveness of these programs.** However, two current research projects are under way that will help to improve the field's understanding of programs' effectiveness.

Changing the Status Quo: Four Program Elements

While most GED and adult education programs have typically focused on preparing students to gain a high school credential, GED-to-college bridge programs move a step further by developing more concrete connections to college and careers. The programs seek to overcome five key challenges to adult education program reform, including (1) the content of instruction; (2) pedagogy; (3) students' familiarity with college expectations; (4) fragmented funding, administration, and management; and (5) program participation and engagement. Though program models differ in their intensity and design, most GED-to-college bridge programs incorporate the following program elements as a means for better preparing their students for college and career entry. (See Table 3.1.)

More Rigorous Instruction and Pedagogy

College-Readiness Curricula

Like curricular interventions, GED-to-college bridge programs generally focus on developing the academic and social skills that will be needed for success in college. Programs accomplish this by setting higher academic expectations for students while providing more intensive instruction in reading, writing, math, and critical thinking. Further, unlike traditional adult basic education (ABE) and GED programs, which tend to focus on in-class learning, GED-to-college bridge programs expect students to work on projects and assignments outside of class time and meet more rigorous standards for attendance and class participation.

Additionally, many of the programs discussed in this chapter incorporate a number of the practices emphasized in the Common Core State Standards, a set of nationally recognized K-12 English language arts and math competencies thought to better prepare students for college. Many GED-to-college bridge programs, for example, focus on changing students' academic practices and approaches to problem solving by integrating strategies such as cooperative

Table 3.1

Components of GED-to-College Bridge Programs

Program Component	Description
College preparatory curriculum	Academic preparation based on college-readiness skills. Often focused on providing intensified instruction in critical skills (writing, reading, and math). Generally incorporates development in critical-thinking skills, and emphasizes high expectations for students.
Support services for college entry	Support services, such as individualized case management, advising, or counseling; and/or student success courses. Typically, assistance is provided with college applications, financial aid, and the course selection process.
Direct connections to postsecondary institutions	Programs are offered in a college setting or have partnerships with postsecondary institutions that allow exposure to the college environment.
Career preparation	Guidance on career options and exploration of different career fields; instruction contextualized in specific career fields; and/or direct job training.
Managed enrollment and program participation supports	Students may enter the program only at specified times, such as at the beginning of a semester or a multiweek lesson cycle period, effectively forming cohorts. In some programs, student cohorts may take multiple classes together, forming a learning community.

SOURCE: MDRC analysis of program documents, publications, and information obtained through telephone interviews and e-mail communication with program staff for the 9 GED-to-college transition programs and initiatives discussed in Chapter 3 and listed in Appendix B of this report.

learning (where students actively participate in group-focused learning activities and gain "meta-cognitive" skills such as monitoring their own learning) or project-based learning (which encourages students to explore challenging problems or questions that develop their investigative, problem-solving, and reflection skills). Similarly, GED-to-college bridge programs often incorporate self-directed learning, such as opportunities to conduct independent research or develop course portfolios.

Career Preparation

Though the intensity of programs' occupational content varies, most GED-to-college bridge programs also aim to introduce their students to specific careers or workforce training opportunities. In lower-intensity formats, programs provide students with guidance on career

options and help them explore different career fields within their classes or through individualized advising sessions. Other programs provide more intensive exposure to career issues by contextualizing academic instruction within specific career fields and teaching reading, writing, and/or math in an applied context.[3] Finally, a number of GED-to-college bridge programs provide students with direct on-the-job training opportunities, which are often built through partnerships with workforce training programs and local employers.

College Transition Supports

In addition to an enhanced academic curriculum, most GED-to-college bridge programs provide supplemental supports to better prepare students for college expectations and requirements. Most programs provide these services through individualized case management or advising to students, though some programs include specific "college success" or career guidance courses to meet this aim. These services generally aim to guide students through the college entrance process, including helping students complete college applications, submit financial aid forms and documentation, understand and prepare for college placement tests, and choose courses and majors aligned with their career objectives. In addition, supports focus on introducing students to college expectations, such as increased homework and responsibility for managing their own learning. In some cases, these transition supports may extend into students' first year of college.

Direct Connections with Postsecondary Education

Most GED-to-college bridge programs are offered in a college setting or allow students direct access to college through partnerships with postsecondary institutions. In addition, programs often incorporate elements of the college setting into their course management, such as the creation of semester-long instructional sequences or the integration of college-based services such as advising or tutoring within their classes.

Managed Program Participation

In contrast to the open enrollment policies that characterize many traditional GED classes, most GED-to-college bridge programs also manage students' entry into courses, allowing students to enroll only during particular intervals, such as at the end of a semester or the completion of a multi-week lesson cycle. This type of managed entry facilitates instruction, allowing teachers to develop a sequenced set of lessons that build from one session to the next and create clearer benchmarks for students' progress and learning.

[3] Perin (2011).

Managed program enrollment also facilitates the development of student cohorts, allowing students the opportunity to develop stronger bonds with one another and their instructor. Some programs take this model one step further by developing learning communities, in which the same group of students take multiple classes together over a period of time. Such models are thought to increase students' persistence and improve their academic outcomes.[4]

Example Programs

Below is a sampling of different types of GED-to-college bridge programs, differentiated by level of program intensity. (For more details on programs, see Appendix B.)

High-Intensity Programs

A number of GED-to-college bridge programs provide more intensive instructional models, offering full- or nearly full-time courses along with one-on-one case management and job opportunities. Though a few examples exist for adult students, these programs are typically geared toward older adolescents. For instance, YouthBuild, founded in 1990 and expanded in 2008 to include a Postsecondary Education Initiative, is an example of one such GED-to-college bridge model. Targeting youth aged 16 to 24, YouthBuild encompasses 273 programs across the country, most of which are sponsored by local community-based organizations.[5] Though individual programs vary, YouthBuild programs typically incorporate full-time academic preparation for a secondary credential, on-the-job skills training in the construction of affordable housing, and intensive life-, college-, and career-skill building supports.[6] The Postsecondary Education Initiative has focused a subset of 19 of these programs on college transition, including a realignment of the curricula to meet local postsecondary institutions' academic expectations, one-on-one college and career counseling, tours of local college campuses, and assistance with financial aid applications.[7]

Another full-time program, CUNY Prep,[8] in New York City — a collaborative initiative of the Mayor's Center for Economic Opportunity and the City University of New York — provides full-time instruction for adolescents aged 16 to 18.[9] Aimed toward students with reading skills at the eighth-grade level or above, the program offers academic instruction for at least

[4]See, for example, Engstrom and Tinto (2008); Tinto (1997).

[5]See YouthBuild Web site at https://youthbuild.org.

[6]YouthBuild programs generally offer preparation for a GED certificate or a traditional high school diploma as one of many components.

[7]See YouthBuild Web site at https://youthbuild.org; Jensen and Yohalem (2010).

[8]CUNY stands for City University of New York.

[9]Information in this paragraph comes from Jenny Ristenbatt, Director/Principal, CUNY Prep School, personal communication (April 8, 2013); CUNY Prep (2011).

five hours a day, five days a week, around a competency-based, standards-aligned program in humanities (history, social studies, and language arts), science, and math. Class size is limited to 15 to 20 students, and new students are enrolled only four times a year, allowing for three-month instructional cycles and the development of smaller student cohorts as students prepare to take the GED exam. Students also receive comprehensive social supports throughout the program, such as counseling, career advising, and case management. After earning the GED certificate, students may enroll in the College Transition Academy, which provides intensive supports for college entry such as assistance with the admissions process, financial aid, and college placement exams. Students may also enroll in CUNY Prep's College Now program, which offers dual enrollment in college and CUNY Prep courses. Additionally, students receive case management services through their first year in college.

A GED-to-college bridge program offered at Youth Empowerment Services in Philadelphia (YESPhilly) represents another intensive bridge model. Aimed at older adolescents aged 17 to 21, YESPhilly provides a 30-hour-a-week literacy, math, and technology-focused program, with two-month-long lesson cycles on particular topics. YESPhilly students progress through the program in small cohorts, with much of the instruction focusing on project- or group-based learning. In addition, the program provides students with college transition supports, such as advice on college admissions and financial aid as well as individualized meetings with counselors. As part of their work, students create a personalized "student development plan," in which they designate specific goals for their time in the YESPhilly program and track their progress toward achieving them. Finally, though these are not a part of its official GED program, YESPhilly also offers opportunities for students to enroll in selected college courses such as media arts, early childhood education, and psychology through a partnership with the Community College of Philadelphia.[10]

Lower-Intensity Programs

Lower intensity GED-to-college bridge programs offer instruction on a part-time basis and typically target a wider age range of students. An example is the Oregon Pathways to Adult Basic Skills (OPABS) initiative, which operates at nine community colleges in the state. OPABS programs offer two different levels of courses: "pre-bridge," for students at sixth- to eighth-grade reading levels, and "bridge," for students at ninth- to twelfth-grade reading levels. The goal for students in bridge-level courses is to attain a secondary credential and matriculate into college. Students in the pre-bridge program are preparing for entry into the bridge program. Students receive either 120 (in the pre-bridge courses) or 180 (in the bridge courses) hours of

[10]Interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YESPhilly (July 25, 2012); YESPhilly Web site (http://yesphilly.org).

instruction over the course of two terms, with a focus on developing college-level reading, writing, and math skills. Course content is contextualized within particular high-demand career fields, such as hospitality or health care, and the curriculum is standardized statewide. Students also enroll in a semester-long college- and career-readiness course and receive advising on college admissions, placement tests, and financial aid.[11] Finally, many OPABS programs are based on a learning community model, in which students take multiple classes together as a cohort for one or more terms.

Like OPABS, LaGuardia Community College's GED Bridge to Business and Health Careers initiative is a part-time instructional program aimed at helping students with skill levels as low as the seventh grade achieve a GED certificate within one semester.[12] The program is based on sector-specific themes in health or business, with contextualized curricula designed to develop college-level reading, writing, and math skills. Instruction is centered on active learning, with students undertaking a number of individualized tasks such as conducting research projects, writing college-style essays, and designing a course portfolio. Finally, as with other bridge models, the program provides college transition supports such as assistance with admissions and financial aid, educational case management, academic advising, and tutoring.[13]

Two additional GED-to-college bridge programs provide contextualized instruction to students within the manufacturing industry. Lake Land College Manufacturing Bridge Program in Mattoon, Illinois, enrolls students in a bridge course that contextualizes reading and math instruction using applied technology and manufacturing skills content. Cotaught by a basic skills and a technical instructor, courses meet five hours a week, for a total of 40 instructional hours, with students' employers paying for their time in the program. To support their transition to college, students receive support services, including academic advising, assistance with financial aid applications, and personal counseling.[14] Similarly, as part of the Shifting Gears initiative (see Box 4.1 in Chapter 4 for more information), Black Hawk College in Moline, Illinois, developed a 16-week bridge program that aimed to prepare GED and English as a Second Language (ESL) students to move into the college's Warehouse and Distribution Specialist (WDS) programs.[15] To achieve this goal, the program contextualized GED and ESL course content in the transportation, distribution, and logistics field, and provided comprehensive supports, in-

[11]Bagwell (2010, 2011); Alamprese (2012); Debbie Moller, Education Specialist, Oregon Department of Community Colleges and Workforce Development, telephone interview (April 16, 2013) and personal communication (May 13, 2013).

[12]LaGuardia Community College, located in Queens, New York, is part of the CUNY system.

[13]Martin and Broadus (2013).

[14]Office of Community College Research and Leadership (2012); Brian Haskins, Adult Education and Transition Coordinator, Lake Land College, personal communication (May 9, 2013).

[15]The information in this paragraph comes from Bragg, Harmon, Kirby, and Kim (2010).

cluding tutoring, targeted use of instructional software, career counseling, and advising to facilitate students' transition.

How Effective Are GED-to-College Bridge Programs?

Many of the GED-to-college bridge programs discussed in this chapter are too new to have built a strong evidence base, though two of these programs are in the beginning stages of rigorous evaluation. (See Box 3.1.) In addition, a few programs have reported positive trends in student outcomes based on internal evaluations.

Rigorous Research

While a number of rigorous studies of GED-to-college bridge programs are currently under way, one study has demonstrated positive effects on students' achievement. A small-scale random assignment study of LaGuardia Community College's GED Bridge to Business and Health Careers found that students were more likely to persist in the semester-long GED class (68 percent persistence versus 47 percent), earn a GED certificate (53 percent versus 22 percent), and matriculate into college (24 percent versus 7 percent), when compared with students in LaGuardia's traditional GED courses.[16]

In addition, a rigorous research study is under way of the YouthBuild program. MDRC is currently conducting a random assignment study of approximately 80 YouthBuild sites across the country, including most of the YouthBuild Postsecondary Education Initiative sites. Impact analyses will examine the program's effects on participants' educational attainment, including postsecondary outcomes, employment and earnings, involvement with the criminal justice system, and other outcomes. Findings are expected to be released in 2016.

Promising Trends

Some promising evidence also exists documenting the success of several GED-to-college bridge programs. For instance, CUNY Prep reports a GED pass rate of 80 percent among students who took the exam, which considerably exceeds New York City's 2010 pass rate of 48 percent.[17] Additionally, an estimated 45 percent of CUNY Prep graduates have en-

[16]Martin and Broadus (2013).
[17]Center for Economic Opportunity (2013a); Brannen (2011).

Box 3.1

Summary of Research on GED-to-College Bridge Programs

Rigorous Research

- **Findings**

  Positive outcomes have been observed, including higher rates of attendance and persistence in GED program, GED completion, and college entry.

- **Current Research**

  LaGuardia Community College GED Bridge Program:

  Vanessa Martin and Joseph Broadus, *Enhancing GED Instruction to Prepare Students for College and Careers: Early Success in LaGuardia Community College's Bridge to Health and Business Program* (New York: MDRC, 2013).

- **Future Research**

  YouthBuild: A report is scheduled for 2016 from MDRC.

Promising Trends

- **Findings**

  Positive outcomes include encouraging rates of GED certificate and high school diploma attainment. The results are mixed in terms of college persistence.

- **Current Research**

  CUNY Prep:

  Center for Economic Opportunity, *CUNY Preparatory Transitional High School Program (CUNY Prep): A Program of the City University of New York* (New York: Center for Economic Opportunity, 2013).

  YouthBuild Postsecondary Education Initiative:

  Emily Jensen and Nicole Yohalem, "On the Ground: YouthBuild Brockton," *Ready by 21, Credentialed by 26,* Series 2 (2010): 2-4.

  See, also, the YouthBuild USA Web site: https://youthbuild.org.

  Black Hawk College Warehouse and Distribution Specialist Program:

  Debra Bragg, Timothy Harmon, Catherine Kirby, Sujung Kim, *Bridge Programs in Illinois: Summaries, Outcomes, and Cross-Site Findings* (Champaign, IL: Office of Community College Research and Leadership, University of Illinois, 2010).

rolled in college.[18] Similarly, internal evaluations of the seven initial YouthBuild Postsecondary Education Initiative sites found that more than 70 percent of students attained a GED certificate or high school diploma, and nearly 40 percent of students enrolled in college.[19] In addition, almost two-thirds of the students who enrolled in college persisted into a second year.[20] Meanwhile, 85 percent of students participating in the Black Hawk College Warehouse and Distribution Specialist Program completed the program, and 100 percent of participating students made the transition to some form of postsecondary education, with about one-fourth moving into developmental education.[21] While these positive trends are encouraging, they should be approached with caution as they do not employ comparison groups or statistical controls that can account for factors such as background characteristics or motivation of students.

[18]Center for Economic Opportunity (2013a). However, CUNY Prep's postsecondary retention outcomes have been less promising, with only about a third of graduates persisting in college for more than two semesters and few completing college. As a result, the program's funder, the New York City Center for Economic Opportunity, has announced plans to reduce and ultimately discontinue funding for the program in fiscal years 2014 and 2015 (Center for Economic Opportunity, 2013b).

[19]See YouthBuild Web site at https://youthbuild.org.

[20]Jensen and Yohalem (2010).

[21]Bragg, Harmon, Kirby, and Kim (2010).

Chapter 4

Spanning the Divide: Concurrent Enrollment in College and Adult Education

While college bridge programs provide graduated steps toward college entry, these programs still may face a number of limitations in helping students without a high school credential make the transition to college and succeed there. Some have argued, for example, that earning the General Educational Development (GED) certificate is a poor predictor of students' success in college, a position that is buttressed by the large number of GED graduates who place into developmental, or remedial, education courses upon college entry.[1] Developmental education courses can present substantial barriers to students' college success, particularly for students who must complete multiple courses.[2] As a result, recipients of the GED certificate often face a long road to college completion, even among those who participate in GED-to-college bridge programs.

Fortunately, another subset of adult education reforms are attempting to address this barrier through programs that offer high school dropouts the opportunity to concurrently enroll in college while preparing for their GED. Unlike GED-to-college bridge programs, which generally stop short of college entry, concurrent enrollment programs allow students to take college courses and earn college credits while still working toward their high school credential, thereby minimizing the risk of student dropout. These programs often incorporate many of the same features as GED-to-college bridge programs, including college-readiness curricula, support services, and managed enrollment, but with the added benefit of direct college entry.

This chapter identifies a range of concurrent-program models, their benefits and challenges, and the available evidence on their effectiveness, based on a review of 16 programs and initiatives across the country. The key findings from this chapter are:

- **Concurrent enrollment programs vary in the amount of access they give to non-high school graduates.** Program models range from those allowing enrollment in noncredit, nontransferable courses such as developmental education or success courses to those allowing students to earn transferable college credits.

- **Concurrent enrollment programs often occur as part of career pathways models that are implemented throughout an institution or**

[1] Hamilton (1998).

[2] Adelman (2004); Attewell, Lavin, Domina, and Levey (2006); Jenkins, Jaggars, and Roksa (2009); Bailey, Jeong, and Cho (2010).

statewide. Career pathways programs provide students with sequenced, multistep credentialing opportunities as their education and skills increase, and are becoming an increasingly popular method of adult education reform.

- **Little rigorous research is available demonstrating the effectiveness of these programs.** However, several current research projects are under way that will help to improve the knowledge base about these programs' effectiveness.

Types of Concurrent Enrollment Programs

Concurrent enrollment programs fall into three primary categories, including those that allow students to enroll in (1) noncredit or nontransferable college courses, such as student success and developmental education courses; (2) college-level, credit courses; and (3) career pathways programs, which provide a set of sequenced credentialing milestones for students as their education and training increases. (See Table 4.1.) The key differences between these types of programs are highlighted below. Additional information on specific programs can also be found in Appendix C.

Noncredit Concurrent Enrollment Programs

Some concurrent enrollment programs allow students to take college courses, but only those that are noncredit or not transferable to four-year institutions. (See Table 4.1.) These courses facilitate students' preparation for and transition to college by bringing them into the postsecondary environment, building their academic and study skills, and, in some cases, providing opportunities to complete remedial requirements that might otherwise slow their progress once enrolled.

One noncredit concurrent enrollment model allows adult education students to enroll in a "student success" course while working toward their GED certificate or high school diploma. Student success courses, alternately called student development, study skills, orientation, or college guidance courses, seek to ease students' transition to college by orienting them to college systems and procedures, providing guidance on academic choices and career planning, and developing their study habits, time-management, and test-taking skills.[3] In some programs, the student success course is offered in addition to enrollment in other (credit or noncredit) college courses.

[3]Rutschow, Cullinan, and Welbeck (2012).

Table 4.1

Tiers of College Preparation: Components of GED-to-College Bridge and Concurrent Enrollment Programs

Program Component	Type of Program			
	College Bridge	Noncredit Concurrent Enrollment	Credit-Bearing Concurrent Enrollment	Concurrent Enrollment as Part of a Career Pathway
College preparatory curricula	Always	Always	Always	Always
College transition supports	Often	Always	Often	Always
Direct connection to postsecondary institution	Sometimes	Always	Always	Always
Managed enrollment	Often	Always	Always	Always
Transferrable college credit	Never	Never	Always	Always
General career awareness	Always	Always	Always	Always
Contextualized instruction	Sometimes	Sometimes	Often	Often
Enrollment in courses applicable to industry-specific credential	Never	Never	Often	Always

SOURCE: MDRC analysis of program documents, publications, and information obtained through telephone interviews and e-mail communication with program staff for the GED-to-college bridge programs and initiatives discussed in Chapter 3 and the concurrent enrollment programs and initiatives discussed in Chapter 4 of this report. A list and descriptions of the programs reviewed for Chapters 3 and 4 appear in Appendixes B and C, respectively.

Other noncredit concurrent enrollment programs allow adult education students to take developmental education courses at a community college. Concurrent enrollment in developmental education offers adult education students the benefit of fulfilling college remedial requirements while working toward a high school credential. Such opportunities may be particularly useful in light of recent research showing that developmental education courses can present substantial barriers to college students' academic progress.[4]

Example Programs

The Virginia Middle College program allows students to enroll in a college success course while working toward their GED certificate or Adult High School diploma. In operation at nine colleges throughout the state, the program provides students with customized, college skills-focused curricula that emphasize critical thinking and problem solving. Students also receive comprehensive support services, including academic coaching and career exploration, and work toward a state-recognized Career Readiness Certificate. While students may earn one credit for the success course, it does not count toward their credential completion requirements, nor is it transferable to a four-year institution.[5]

Similarly, Youth Empowered to Succeed (YES), a program at Portland Community College (PCC), provides GED preparation while allowing students to enroll in a nontransferable college, career, and guidance course at the college each semester. Curricula generally focus on overall academic preparation, though some classes base instruction upon contextualized curricula developed by the Oregon Pathways to Adult Basic Skills initiative, discussed in Chapter 3. Students in PCC's YES program also receive intensive counseling and support from "Resource Specialists," and have access to additional resources like tutoring and scholarships.[6]

Finally, New Haven Adult and Continuing Education's Transition: Post-Secondary Education and Training program allows GED students to enroll in developmental education classes at Gateway Community College, which are taught by college faculty on-site at the adult education agency. Students take a college placement test to assess their need for developmental education. The program's GED classes emphasize critical thinking and problem-solving skills, and work-readiness content is integrated into the GED curriculum in the form of applied prob-

[4]Adelman (2004); Attewell, Lavin, Domina, and Levey (2006); Jenkins, Jaggars, and Roksa (2009); Bailey, Jeong, and Cho (2010).

[5]Virginia Community College System (2013); telephone interview with Caroline Thurston, Director, Middle College and Adult Career Services, Virginia Community College System (November 16, 2012).

[6]Telephone interview with Jeff Laff, Manager, Portland Community College YES (December 6, 2012).

lems. In addition, students may enroll in a college-based student success course.[7] See Appendix Table C.1 for a comparison of different programs and their components.

College-Credit Concurrent Enrollment Programs

Another set of concurrent enrollment programs allow students to enroll in courses that bear transferable, college-level credit. The majority of concurrent enrollment programs allow students to enroll in career-specific college-level courses, with students earning credit toward an industry-specific occupational credential or certificate. Typically, the fields of occupational focus are determined by regional labor-market needs and careers in highest demand. Such programs thus allow students the opportunity to develop skills and gain credentials within their specific career field while they are working on their secondary credential.

Example Programs

A number of for-credit concurrent enrollment programs exist across the country. For instance, the PluggedInVA initiative provides students throughout the state with the opportunity to coenroll in GED and postsecondary classes that count toward an occupational credential in a regionally high-demand field. Students also receive ACT WorkKeys test preparation in order to obtain Career Readiness Certificates and instruction in digital literacy and professional soft skills.[8] All PluggedInVA programs must offer a minimum of 12 transferable credits at a partnering postsecondary institution.[9]

Programs are also being operated at individual community colleges. For instance, the Illinois Central College Manufacturing Bridge Program allows students to enroll in college courses while they take a GED preparatory course that contextualizes GED instruction with manufacturing content.[10] The bridge course uses a manufacturing curriculum designed by the Illinois Community College Board, and teaching is shared by two adult education instructors and a staff person from the college's career center. Additionally, in Charlotte, North Carolina, Central Piedmont Community College's Pathways to Employment program enrolls students in

[7]Nicholas Montano, Assistant Principal, New Haven Adult and Continuing Education, personal communication (May 14, 2013).

[8]ACT WorkKeys is a job skills assessment system used by employers.

[9]Telephone interview with James Andre, Specialist for Federal Programs, Virginia Department of Education Office of Adult Education and Literacy; Kate Daley, Instructional Specialist, Virginia Commonwealth University; and Randall Stamper, Assistant Vice Chancellor for Career Pathways and Workforce Programs, Virginia Community College System (November 15, 2012). See, also, the PluggedInVA Web site at www.pluggedinva.com.

[10]Many credit-bearing programs at the college are open to students without a high school diploma. Telephone interview with Kay Sutton, Dean of Public Services and Community Outreach, Illinois Central College (June 5, 2013).

college-level courses applicable to short-term occupational certificates while they concurrently take adult education courses to prepare for a secondary credential.[11] All occupationally oriented courses are team taught, and students also take a basic skills course contextualized to their chosen field.

Career Pathways Concurrent Enrollment Programs

A number of concurrent enrollment programs that allow students to take courses within a specific industry do so as part of a career pathways approach. Career pathways models typically consist of a series of articulated educational and training programs within a particular occupational field.[12] The pathway typically includes preparation for an entry-level certificate in fields generally suitable for students with lower skills. Students can then build on skills through a series of staged education and training certificate and degree programs within the field, which allow them to move toward successively higher-level positions. Students receive "stackable" education credentials that build upon each other as their education and skills increase.[13]

Career pathways programs have become an increasingly popular model for reforming adult education and workforce training programs in the past decade. Many of these approaches have been modeled on the state of Washington's Integrated Basic Skills and Training (I-BEST) program, which provides basic skills instruction integrated within occupational courses, with the goal of having students receive at least one year of college training that culminates in the award of a certificate or degree.[14] (See Box 4.1.) Though not all are geared toward high school dropouts, at least 22 states have implemented some form of a career pathways program statewide, many as part of cross-state initiatives funded by the Gates Foundation, the Joyce Foundation, and other private funders. (See Appendix Table C.2 for more detail on state career pathways models.) In addition, the U.S. Department of Education has argued that a revision of programs supported by the $1.14 billion Carl D. Perkins Career and Technical Education Act of 2006 should be based on these career pathways models.[15]

Example Programs

With programs in operation on 20 college campuses across the state, the Minnesota FastTRAC initiative provides contextualized instruction to adult basic education (ABE) students, in which students receive basic skills instruction that is integrated within career-specific

[11]Central Piedmont Community College (2013).

[12]See Clagett and Uhalde (2012) for a more detailed definition of career pathways.

[13]See Austin, Mellow, Rosin, and Seltzer (2012) for a discussion of "stackable" credentials.

[14]Wachen, Jenkins, Belfield, and Van Noy (2012); Wachen, Jenkins, and Van Noy (2010); Washington State Board for Community and Technical Colleges (2005).

[15]U.S. Department of Education, Office of Vocational and Adult Education (2012).

Box 4.1

National Initiatives Supporting the Development of Career Pathways Programs

Accelerating Opportunity.[*] A four-year initiative launched in 2010, Accelerating Opportunity (AO) aims to develop state and local career pathways systems in seven states.[†] AO pathways target students at the sixth-grade level or above; educational pathways begin with adult basic education and continue to at least a one-year college-level certificate in a high-demand field. In addition, programs employ acceleration strategies, dual enrollment, comprehensive student supports, partnerships with Workforce Investment Boards and employers, and longitudinal tracking of student progress. The initiative is managed by Jobs for the Future in partnership with the National College Transition Network and the Washington State Board for Technical and Community Colleges. Funding is currently provided to implement AO pathways in community colleges in the seven participating states. AO is funded by the Bill & Melinda Gates Foundation, Joyce Foundation, W. K. Kellogg Foundation, Kresge Foundation, and Open Society Foundation.

Shifting Gears.[‡] Shifting Gears was launched by the Joyce Foundation in 2007 to help six midwestern states reengineer their adult education, workforce development, and higher education policies to build pathways to postsecondary credentials for lower-skilled adults.[§] The initiative ended its foundation-funded phase in 2011 but the states continue their work. Many programs that were developed through the initiative contextualize adult education or offer concurrent enrollment in basic skills and workforce education. During its foundation-funded stage, national partner organizations included the Center on Law and Social Policy and the Workforce Strategy Center.

Career Pathways Technical Assistance Initiative.[**] Funded by the Department of Labor's Employment and Training Administration, the Career Pathways Technical Assistance Initiative was a two-year effort aimed at strengthening career

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[*]See www.acceleratingopportunity.org; Pleasants (2011).

[†]Georgia, Illinois, Kansas, Kentucky, Louisiana, Mississippi, North Carolina.

[‡]Roberts and Price (2012).

[§]Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

[**]Kozumplik et al. (2011).

Box 4.1 (continued)

pathways systems for low-skilled adults and adult workers through grants and technical assistance to nine states and two Native American entities.[††] The initiative developed a framework of key elements of career pathways, which include cross-agency and industry partnerships to align policies and procedures, a clear sequence of training, identification of funding sources, and measurement of system change and performance.

Alliance for Quality Career Pathways.[‡‡] A partnership between the Center on Law and Social Policy and 10 states that are leaders in implementing career pathways, this two-year initiative aims to develop a framework of quality benchmarks and metrics for career pathways programs nationwide, with a focus on adult education career pathways.

[††]Kansas, Kentucky, Maryland, Minnesota, Montana, New Mexico, Ohio, Pennsylvania, Virginia, Gila River Indian Community, Tucson Indian Center.

[‡‡]Center on Law and Social Policy (2012). Participating states: Arkansas, California, Illinois, Kentucky, Massachusetts, Minnesota, Oregon, Virginia, Washington, Wisconsin.

course content. The program has two main phases: bridge programming and Integrated Instruction. Integrated Instruction courses are jointly taught by ABE and career-technical instructors, with students receiving college-level credit leading to certifications in fields such as health care, manufacturing, and child development. Instruction is complemented by supports that include career advising as well as assistance in obtaining social services such as transportation or housing assistance, crisis intervention, and child care.[16] The overall goal of the FastTRAC program is to help students earn "stackable" credentials in high-demand fields, in which successive shorter-term certificates build upon one another as students receive further education and training.

Similarly, the North Carolina Basic Skills Plus initiative, now being implemented at 43 community colleges across the state, offers ABE students occupational courses leading to entry-level certificates in fields such as allied health, architecture and construction (including HVAC[17] and carpentry), and business (including accounting). In more than half of the programs, students receive college-level credit for the occupational courses. (In other programs, students receive

[16]Minnesota Department of Economic Development (2011); Minnesota FastTRAC (2012). See, also, the Minnesota FastTRAC Web site at www.mnfasttrac.org.

[17]HVAC stands for heating, ventilation, and air conditioning.

continuing education credit.)[18] The college credit courses emphasize job-specific training, and programs also include an employability skills component, which focuses on topics such as job retention strategies and computer literacy training and, in many cases, allows students the opportunity to earn a Career Readiness Certificate. In addition, to prepare for earning their high school credential, students take basic skills courses that directly align with the occupational courses in which they are enrolled. Some programs also offer students the opportunity to enroll in developmental education courses that are prerequisites for their specific program of study. Though programs participating in the North Carolina Basic Skills initiative operate within a common statewide framework, each participating college develops and customizes its own career pathways program and curricula, based on the needs within its own community.

While many career pathways programs are part of statewide initiatives, some also operate within individual organizations or partnerships within specific localities. For example, the Carreras en Salud program in Chicago is operated by the Instituto del Progreso Latino, a local community-based organization, and Wilbur Wright College's Humboldt Park Vocational Education Center (HPVEC).[19] The program seeks to prepare students for careers in the health care field. Students may enter the program at six different levels, with the lowest entry point targeting students with fifth- to sixth-grade literacy levels. Each segment can be completed in 16 weeks and is meant to prepare students for the next level of training. The programs are staged from (1) CNA (Certified Nursing Assistant) for Bilingual Students program; (2) LPN (Licensed Practical Nurse) Bridge Program; (3) LPN program. CNA courses take place at HPVEC. While in the LPN bridge segment, participants may take a customized GED course if they need the credential. After completing the LPN bridge segment, students move on to a for-credit LPN program at Wright College. (The LPN segment begins with 32 hours of prerequisite coursework in English, math, and biology to prepare students to formally apply to the LPN program.) Once students are admitted to the LPN program, they receive 26 hours of instruction leading to an accredited certificate that also allows them to transfer credit to approved associate's and bachelor's level nursing programs.

Research on Program Effectiveness

As with other adult education reforms, the research base demonstrating the effectiveness of these concurrent enrollment programs is thin. However, one rigorous research study is availa-

[18]Information in this paragraph comes from Clark Dimond, Director, Foundational Skills and Workforce Readiness, North Carolina Community College System, personal communication (April 9, 2013); North Carolina State Board of Community Colleges (2012a, 2012b).

[19]The information in the remainder of this paragraph comes from Jenkins and Kossy (2007) and Mirabal (2008).

ble, which reveals positive student outcomes. (See Box 4.2.) In addition, a number of promising trends have been noted in smaller research studies and internal evaluations.

Rigorous Research

While rigorous evaluations of concurrent enrollment programs are limited, a few rigorous studies have been conducted or are currently under way. The most well-known rigorous research study on a concurrent enrollment program is Community College Research Center's (CCRC's) quasi-experimental analysis of the state of Washington's I-BEST program. Using a multivariate logistic regression analysis and controlling for background characteristics such as socioeconomic status and previous schooling, the analysis found that I-BEST students were significantly more likely to advance into credit-bearing courses, persist in college, earn credits that counted toward a credential, earn occupational certificates, and make learning gains on basic skills tests than non-I-BEST students.[20]

In addition, a number of rigorous studies of concurrent programs are planned for the future. As a follow-up to the I-BEST research, Abt Associates will conduct a random assignment evaluation of the I-BEST model as part of the 10-year, multisite Innovative Strategies for Increasing Self-Sufficiency (ISIS) project. Carreras en Salud as well as eight other career pathways programs are included in the evaluation.[21] In addition, a rigorous evaluation of Jobs for the Future's (JFF's) Accelerating Opportunity is currently being conducted by JFF, the Urban Institute, and other independent evaluators. This study consists of an implementation study and cost-benefit analysis along with a quasi-experimental study that will use regression discontinuity and propensity score matching to analyze the outcomes of participating students compared with nonparticipating program applicants.[22] Findings are expected to be released in 2016.

Promising Trends

While rigorous research is limited, a number of programs have noted positive trends in student outcomes. For example, Virginia Middle College reports that across its nine programs, over 70 percent of students have received a GED certificate, nearly 50 percent of GED completers are enrolled in a postsecondary education program, and nearly 60 percent of GED completers earned a Career Readiness Certificate.[23] Similarly, Central Piedmont Community College (CPCC) reported that 50 percent of students enrolling in their Pathways to Employment

[20]Jenkins, Zeidenberg, and Kienzl (2009); Wachen, Jenkins, Belfield, and Van Noy (2012); Zeidenberg, Cho, and Jenkins (2010).

[21]For more information on ISIS, and a full list of participating sites, see Fein (2012).

[22]Wilson et al. (2012).

[23]Virginia Community College System (2013).

Box 4.2

Summary of Research on Concurrent Enrollment Programs

Rigorous Research

- **Findings**

  Positive outcomes include higher learning gains, enrollment in college credit-bearing courses, persistence in college, earned credits toward a credential, and earned occupational certificates.

- **Current Research**

  I-BEST:

  Davis Jenkins, Matthew Zeidenberg, Gregory S. Kienzl, "Educational Outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis," CCRC Working Paper No. 16 (New York: Community College Research Center, Teachers College, Columbia University, 2009).

  Matthew Zeidenberg, Sung-Woo Cho, Davis Jenkins, "Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness," CCRC Working Paper No. 20 (New York: Community College Research Center, Teachers College, Columbia University, 2010).

- **Future Research**

  Innovative Strategies for Increasing Self-Sufficiency (ISIS) programs: The ISIS project is a 10-year effort to evaluate existing career pathways programs. The evaluation is led by Abt Associates. Other partners include the American Public Human Services Association, BCT Partners, Berkeley Policy Associates, MEF Associates, the National Conference of State Legislatures, the National Governor's Organization, and the Urban Institute.[*]

  Accelerating Opportunity programs: "Accelerating Opportunity: A Breakthrough Initiative" is an initiative of Jobs for the Future. The Accelerating Opportunity evaluation team includes staff from Jobs for the Future, the Urban Institute, the Aspen Institute, and George Washington University. See www.acceleratingopportunity.org.[†]

(continued)

[*]See Fein (2012) or www.projectisis.org for more information.
[†]See Wilson et al. (2012) for more information.

Box 4.2 (continued)

Promising Trends

- **Findings**

  Positive outcomes include promising rates of GED completion, college enrollment, and receipt of certificates.

- **Current Research**

  Virginia Middle College:

  Virginia's Community Colleges, "Middle College," *Statewide Innovations* (Richmond, VA: Virginia's Community Colleges, n.d.).

  North Carolina Basic Skills Plus:

  SuccessNC, "Basic Skills Plus" (Raleigh, NC: North Carolina Community College System, n.d.).

  SuccessNC, "Basic Skills Plus Outcomes 2010-2012" (Raleigh, NC: North Carolina Community College System, n.d.).

  Central Piedmont Community College Pathways to Employment:

  Workforce Strategies Initiative, "Central Piedmont Community College: Pathways to Employment & ESL Pathways" (Washington, DC: Aspen Institute Workforce Strategies Institute, n.d.).

program without a GED certificate earned one, and that within 12 months of Pathways graduation, more than 25 percent of participants continued their studies at CPCC.[24] Finally, internal research on the North Carolina Basic Skills Plus program revealed promising initial results on students' completion of credentials and persistence in the Basic Skills Plus program. In particular, three semesters since the program's inception, 26 percent of all students enrolled were reported to have earned a college certificate or credential, and more than half of those who did not complete remained in the program.[25] However, as noted previously, these trends tend to be described in internal evaluations that do not have comparison groups, making it difficult to ascertain the program's true effects on student achievement.

[24]Aspen Institute Workforce Strategies Initiative (2007).

[25]Clark Dimond, Director, Foundational Skills and Workforce Readiness, North Carolina Community College System, personal communication (April 9, 2013).

Chapter 5

Conclusion

Finding new methods to help dropouts and lower-skilled adults achieve a high school credential and successfully matriculate into college remains a dire need in this country. While adult education programs have been able to assist some in reaching these milestones, far too few achieve these goals within our current system. Fortunately, a number of adult educators have been responding to this need by developing new and innovative models aimed at helping dropouts build their college- and career-readiness skills while also facilitating their entry into college. For instance, several leading adult education organizations, such as the Office of Vocational and Adult Education (OVAE) and the General Educational Development (GED) Testing Service, have been developing higher standards for adult education instruction by aligning practices with nationwide college- and career-readiness standards. In addition, there has been a proliferation of programs aimed at bridging dropouts' high school credentialing with college entry, including supports such as more rigorous academic curricula, transitional counseling, and direct access to college courses. On a larger scale, a number of states have been connecting these types of practices to statewide educational policy changes, including the development of systematic credentialing pathways that offer students a series of advancing credentials as their skills increase.

These adult education reform efforts represent an important step forward for the field. However, a number of critical challenges still remain for advancing these individuals' educational and workforce opportunities. For instance, many of the programs highlighted in this report serve only higher-level student populations, leaving many low-skilled dropouts and adults without access to these services. Additionally, little is known about the effectiveness of these new reform models, making it difficult to discern which programs or program components may be most essential in promoting adult learners' advancement into college. Finally, even when successful programs are identified, the field is limited in its ability to create large-scale programs because of the fragmented funding and administrative systems supporting their efforts. Adult education is thus still in need of fundamental rethinking in many areas.

With these issues in mind, this chapter seeks to assess the success and limitations of the current reforms that are outlined in this report, and to delineate several promising strategies for advancing dropouts' and low-skilled adults' movement toward college. The chapter begins with an examination of the progress that current reform efforts have made, highlighting the ways in which these new methods have provided innovative approaches to overcoming long-standing adult education challenges. The chapter then details a number of other reforms that could help further strengthen the field, concluding with an agenda for improving the knowledge base about the effectiveness of these reforms.

How Far Have We Come? Assessing Current Progress in the Field

As noted in Chapter 1, adult education faces a number of difficulties in advancing dropouts and low-skilled adults to and through postsecondary education. For instance, students entering adult basic education programs tend to have low skill levels, often below the ninth-grade level, and often face multiple life challenges, such as poverty, single parenthood, and heavy work and family commitments, making it difficult for them to attend programs for sustained periods of time.[1] In addition, adult education programs generally operate with limited budgets, with funding that represents only a fraction of the resources available for kindergarten through grade 12 (K-12) schools.[2] As a result, adult education programs have tended to employ a number of cost-saving measures in managing their work, including the hiring of part-time instructors and the use of open enrollment systems, with the result that new students continuously enter programs on a weekly or even daily basis. Finally, instruction in many adult education classrooms tends to be based on test-preparation content and offered in stand-alone lessons rather than as sequential learning that builds from one class to the next.[3] However, the reform efforts highlighted in this report have made strides toward addressing a number of these barriers, as highlighted below.

Short-Term Managed Enrollment and Instructional Sequences

Given the challenges that open enrollment policies pose for instruction, a number of the adult education reforms have implemented short-term managed enrollment systems to facilitate more systematic lesson planning and delivery. While some programs manage enrollment on a semester basis, meaning that new students enroll only at the beginning of each semester, others have shorter lesson cycle sequences, with new students entering programs in cycles of two months or less. For instance, Youth Empowerment Services in Philadelphia (YESPhilly) operates on a two-month cycle of enrollment, with lessons organized around a particular topic within each two-month period.[4] Such managed enrollment periods allow instructors to create coherent lesson plans that build upon one another and upon students' day-to-day learning, and to limit the repetition of previously covered skills that often occurs as new students enter the class.

[1]Comings, Parrella, and Soricone (1999); Lasater and Elliot (2005); U.S. Department of Education, Office of Vocational and Adult Education (2013a).

[2]U.S. Department of Education, Office of Vocational and Adult Education (2005).

[3]Beder and Medina (2001).

[4]Interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YESPhilly (July 25, 2012); YESPhilly (2013).

More Rigorous, Original Content

In addition to managed enrollment, many of the adult education reforms that are highlighted in this report also have developed curricula that align more concretely with college-level academic expectations and students' career goals. For instance, programs such as LaGuardia's GED Bridge, Oregon Pathways to Adult Basic Skills (OPABS), the Arkansas Career Pathways Initiative, and the Lake Land College Manufacturing Bridge Program each provide basic skills preparation within a tailored, industry-specific curriculum within high-demand careers, such as health, business, and manufacturing.[5] Furthermore, qualitative research on LaGuardia's GED Bridge program suggests that such contextualized instruction engages students more thoroughly in the learning process, as academic skill building is directly related to their career interests.[6]

In addition to contextualizing instruction, innovators have also sought to provide more rigorous college-readiness academic preparation. For instance, LaGuardia's GED Bridge, CUNY Prep, YESPhilly, and YouthBuild's Postsecondary Education Initiative each provide more intensive, competency-based instruction around college-level skills, such as essay writing, project- and team-based learning, and independent research.[7] In addition, these programs often incorporate higher standards for students' work (for example, demanding longer or more intensive at-home preparation), which mirror college course expectations and learning. Such efforts aim to combat the repetitive skill drill, lecture-based instruction undertaken in many adult education classrooms.

Strong Connection to College Environments

In addition to more rigorous curricula and standards, most of the programs highlighted in this report have also developed more concrete connections to postsecondary institutions. For instance, many of the programs profiled, such as Virginia Middle College, Portland Community College's (PCC's) YES program, and the North Carolina Basic Skills Plus initiative, are housed within postsecondary institutions and provide students with the opportunity to enroll in community college courses.[8] Similarly, programs that are housed in noncollege settings, such as New Haven Adult and Continuing Education's "Transition: Post-Secondary Education and Training" program and YESPhilly, have developed partnerships with local community colleges, which allow students to concurrently enroll in college-based courses while working toward their sec-

[5]Martin and Broadus (2013); Bagwell (2010); Leach (2008); Illinois Office of Community College Research and Leadership (2012).

[6]Martin and Broadus (2013).

[7]Westat/Metis (2008); interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YES Philly (July 25, 2012); Jensen and Yohalem (2010).

[8]Virginia Community College System (2013); Portland Community College (2013); North Carolina Community College System (2012a).

ondary credential.[9] Such advances may help these programs and their students overcome the isolation typical in many adult education programs. In addition, they often help programs better manage their resource limitations, as program leaders are able to draw on faculty knowledge as well as better-funded college supports and resources.

Supplemental Supports to Foster Engagement and Transition

In addition to building more concrete avenues for postsecondary enrollment, most of the reforms highlighted in this report have built counseling, advising, and other supports into their programs in order to aid students in the complicated transition between adult education and college. For example, many programs, such as the Urban League of Greater Hartford's College Achievement Program, provide assistance with completing financial aid forms, college tours, and introductory courses or sessions on college expectations.[10] Other programs go even further, providing one-on-one case management along with social and financial supports for students to overcome other life barriers. Full-time programs such as YESPhilly, the YouthBuild Postsecondary Education Initiative, and CUNY Prep, for example, provide intensive counseling and advising to students, helping them overcome financial, legal, and housing issues that may interrupt their education while also assisting in the development of individualized college enrollment and career plans.[11] Examples of these services also exist in part-time programs, such as PCC's YES program and LaGuardia Community College's GED Bridge, each of which provide educational case management and assistance with college admissions.[12]

How Much Further Do We Have to Go? Overcoming Continuing Barriers

While these innovations have helped advance the field, a number of additional innovations could help strengthen dropouts' access and success in postsecondary education and college-based workforce training programs.

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[9]Zafft, Kallenbach, and Spohn (2006); interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YESPhilly (July 25, 2012).

[10]Telephone interview with Kathy Reilly, Director of Education and Youth, Urban League of Greater Hartford (April 19, 2013); Urban League of Greater Hartford (2013).

[11]Interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YESPhilly (July 25, 2012); Jensen and Yohalem (2010); Jenny Ristenbatt, Director/Principal, CUNY Prep School, personal communication (April 8, 2013).

[12]Telephone interview with Jeff Laff, Manager, Portland Community College YES (December 6, 2012); Martin and Broadus (2013).

Supports for Implementation

With their relatively limited operating budgets, many adult education programs may find it difficult to implement the more rigorous college- and career-readiness standards being promoted in new reforms, given their limited operating budgets. To help with this, adult education reformers should seek to assist programs in finding cost-effective ways to support programs' implementation. The efforts of OVAE to provide practitioner guides for implementing its Promoting College and Career Readiness Standards in Adult Basic Education project represent one promising move forward in this arena. Additionally, the development of curricula aligned with the Common Core State Standards (CCSS), such as Writers' Express (WEX) and EMPower, as well as home-grown contextualized basic skills and GED preparatory curricula, such as those developed for OPABS and LaGuardia's GED Bridge program, also represent promising strides. Making such resources more widely available at minimal or no cost might assist other adult education programs in implementing these innovative models. In addition, policymakers should continue to push for more coordinated funding to support professional development in adult education.

Financing College Tuition

Concurrent enrollment programs, which allow students to jointly enroll in adult education and college, face a unique set of financial challenges in helping students pay college tuition and fees. Until recently, most students who enrolled in these programs were eligible to receive financial aid through the federal Pell Grant program, which allowed students without a high school diploma to receive federal financial aid if they demonstrated an "ability to benefit" from a college education. However, as part of the Consolidated Appropriations Act of 2011, Congress eliminated this provision, restricting federal financial aid to only those students who hold a secondary credential.[13] As a result, concurrent enrollment programs must find other avenues to support students' college expenses.

Some promising inroads into this dilemma have been made in states that have flexible state funding streams. For example, PCC's YES program is supported through local school district allocations, which allow local education funds to be used to support older adolescents' education up to a certain age (usually 21 years).[14] Similarly, in 2010, North Carolina enacted legislation that allows community colleges to use up to 20 percent of their State Literacy Funds to provide employability skills or occupational or developmental education instruction. Colleges

[13]Choitz, Strawn, and Foster (2012).

[14]Telephone interview with Jeff Laff, Manager, Portland Community College YES (December 6, 2012); Allen and Wolfe (2010).

may also waive tuition and fees for students enrolled in such programs.[15] Other states and localities seeking to implement these reforms might consider enacting similar funding moves.

Students with Low-Level Skills

While current reforms provide accelerated or enriched educational programs, many also limit their programs to students with higher-level skills. For instance, programs such as Virginia Middle College, North Carolina Basic Skills Plus Initiative, and PluggedInVA restrict enrollment to students with skill levels at the secondary level (that is, ninth grade and above).[16] While programs enact these restrictions in an effort to ensure that students can succeed, these limitations also bar large proportions of dropouts and low-skilled adults from receiving more accelerated or enriched instruction. These limitations are of critical concern when considering that nearly 80 percent of the adult education target population have skills below the ninth-grade level.

A few promising models exist for serving lower-skilled students. One approach is to provide pre-program services to these individuals. For example, programs such as CUNY Prep and Minnesota's FastTRAC program allow students who do not meet the skill-level requirements to participate in pre-program models to build their skills.[17] Other programs allow immediate entry for lower-skilled students. For instance, Lake Land College's Manufacturing Bridge Program, the state of Washington's I-BEST program, and LaGuardia's GED Bridge have each allowed entry for students with skills at the sixth- or seventh-grade level. Furthermore, rigorous research on two of these programs (LaGuardia's GED Bridge and I-BEST) found promising successes in students' GED attainment and college enrollment, despite the fact that many of the students who enrolled had below-ninth-grade skills.[18] Given these findings, programs might consider loosening the restrictions they place on program entry.

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[15]North Carolina State Board of Community Colleges (2012a); Clark Dimond, Director, Foundational Skills and Workforce Readiness, North Carolina Community College System, personal communication (April 9, 2013).

[16]Telephone interview with Caroline Thurston, Director, Middle College and Adult Career Services, Virginia Community College System (November 16, 2012); Clark Dimond, Director, Foundational Skills and Workforce Readiness, North Carolina Community College System, personal communication (April 9, 2013); James Andre, Specialist for Federal Programs, Virginia Department of Education Office of Adult Education and Literacy, personal communication (April 19, 2013).

[17]Westat/Metis (2008); Debbie Moller, Education Specialist, Oregon Department of Community Colleges and Workforce Development, personal communication (May 13, 2013); telephone interview with Judy Mortrude, State Program Administrator for FastTRAC, Minnesota Department of Economic Development; Nola Speiser, State Program Administrator for FastTRAC, Minnesota Department of Economic Development; and Melanie Burns, Management Analyst, Minnesota State Colleges and Universities (May 3, 2013).

[18]Martin and Broadus (2013); Jenkins, Zeidenberg, and Kienzl (2009).

Programs serving lower-skilled students also generally offer supplemental academic and social supports to help these students advance their skills more quickly. For instance, some programs, such as the Illinois Central College Manufacturing Bridge program, offer supplemental, Web-based learning modules that allow students to continue to build their skills outside of class time.[19] Other courses provide preparatory work for college-level occupational courses within the college-level courses themselves. For example, the Southeast Arkansas FastTrack program accelerates its curriculum by integrating prerequisite content into nursing courses, enabling students to complete the Licensed Practical Nurse program in a shorter time.[20] Adult education innovators might consider implementing similar supports when opening their doors to lower-skilled students.

Despite these advances, two critical issues remain for serving lower-skilled students: reaching students with elementary school skill levels and managing student learning disabilities. With the exception of the Minnesota FastTRAC program, which offers pre-program instruction to students with levels as low as the first and second grades, few programs can be found serving students with skills below the sixth-grade level.[21] Though these students are a challenging population to educate, adult education reformers should seek to identify and develop promising methods for helping to advance these individuals' skills. In addition, innovators should also consider how to manage the likely prevalent existence of learning disabilities within this population. Though significant resources exist to diagnose and support these students in the K-12 system, few resources exist for them in adult education.

Fragmented Funding Streams

Many adult education programs still remain hampered by the fragmented funding streams and agencies upon which they depend for support. Some politicians and policymakers have been engaged in trying to develop a more streamlined and coherent approach to adult education and workforce training; however, these initiatives have often been frustrated by the slow-moving political process or a lack of will to enact such changes. For instance, practitioners and community college leaders have been advocating since 2008 for passage of the Adult Education and Economic Growth Act, which would allow for substantial increases in adult education funding and more rigorous program standards.[22] Similarly, recommendations from the President's Interagency Adult Education Working Group in 2007-2008 called for a plan to increase the efficiency and efficacy of the government's multiple agencies serving low-skilled

[19]Telephone interview with Kay Sutton, Dean of Public Services and Community Outreach, Illinois Central College (May 3, 2013).

[20]Leach (2008).

[21]Minnesota Department of Economic Development (2011).

[22]Council for Advancement of Adult Literacy (2008)

adults, while the U.S. Department of Education has pushed for substantial revisions to the Perkins Act, that would better align career- and technical-education programs with college- and career-readiness standards.[23] However, despite this advocacy, none of these revisions has been enacted.[24]

Highlighted below are a few promising strategies for streamlining adult education financing and management and better integrating it with workforce training.

Program-Based Funding Solutions

Though most adult education programs are supported primarily through Workforce Investment Act (WIA) funds and state grants, the programs highlighted in this report have also raised supplementary funds from other federal, state, and local agencies, as well as private foundations.[25] As noted in Table 1.3 (in Chapter 1), a number of other federal grants support the education and training of different subsets of the low-skilled population, such as parents (Temporary Assistance for Needy Families), the unemployed (WIA incentive grants; the Department of Labor's Trade Adjustment Assistance Community College and Career Training grant), and postsecondary education students (Carl D. Perkins Career and Technical Education Act). In addition, a number of foundations, such as the MetLife Foundation, the Bill & Melinda Gates Foundation, and the Joyce Foundation, have each sponsored the curricular development or implementation of adult education reform initiatives.[26]

Many of the programs that are described in this report have used an amalgamation of these funds to support innovations in their work. For instance, YESPhilly uses funding from the City of Philadelphia Department of Human Services and the Philadelphia Youth Network, as well as private grants from over 10 different foundations to support its programming.[27] Similarly, Oregon's OPABS programs have used WIA incentive funds,[28] resources from the Oregon Department of Community College and Workforce Development, and a grant from the Gates Foundation to further develop their model.[29]

In addition to receiving monetary supports from agencies and private foundations, adult education reforms that are located in or have close partnerships with postsecondary institutions

[23]U.S. Department of Education, Office of Vocational and Adult Education (2008, 2012).

[24]Foster (2011); National Skills Coalition (2013).

[25]See Table 1.3 for a description of the federal funding sources mentioned in this paragraph.

[26]See Chapter 2 for more information on the MetLife-sponsored Learning Pathways Pilot, and Box 4.1 for more information on the Gates-funded Accelerating Opportunity Initiative and Joyce Foundation-funded Shifting Gears Initiative.

[27]YESPhilly (2013).

[28]WIA incentive funds are made available to states that exceed their WIA performance benchmarks.

[29]Alamprese (2012); Oregon Department of Community Colleges and Workforce Development (2010).

may also be able to use these institutions' funding streams and in-kind resources to support their programs. A good example of this is LaGuardia's GED Bridge program, which is able to draw on college faculty's content knowledge and expertise as well as make use of classroom space at the college, both of which are covered in LaGuardia's overall college budget.

Policy-Based Funding Solutions

Given the important role that management and finance has for implementing adult education reforms, practitioners, policymakers, and researchers should continue to push for a reframing of the policies governing adult education funding and administration. Promising models for this work have been suggested in the Adult Education and Economic Growth Act and revisions to the Perkins Act, both of which seek to reorganize adult education around workforce training and education milestones relevant for the 21st century labor market.[30] Statewide reform efforts that seek to align and integrate adult education with workforce development programs across the state, such as one currently under way in Indiana, could serve as models for how such interagency integration and coordination could be achieved.[31]

Building a Stronger Foundation: Increasing the Knowledge About Promising Program Reforms

Developing better knowledge systems for understanding adult education programs and their effectiveness is critical to the adult education reform agenda. Though the U.S. Department of Education's National Reporting System has increased programs' accountability, little is yet known about the actual structure, instruction practices, and outcomes of adult education programs across the country.[32] Highlighted below are a few key ways that the field could advance its knowledge about adult education program practice and the effects that the provided services may have on increasing students' skills and successful transition to college.

Enrich the Data

As discussed in Chapter 1, the U.S. Department of Education has developed a nationwide database, known as the National Reporting System (NRS), to track adult education student outcomes.[33] Based on data submitted by states, outcomes such as changes in students' skill lev-

[30]Council for Advancement of Adult Literacy (2008); U.S. Department of Education, Office of Vocational and Adult Education (2008, 2012).

[31]Indiana Department of Workforce Development (2013a, 2013b).

[32]U.S. Department of Education, Office of Vocational and Adult Education (2013b).

[33]The NRS covers programs funded by the Workforce Investment Act Title II (Adult Education and Family Literacy Act). Information in this paragraph comes from U.S. Department of Education, Office of Vocational and Adult Education (2013a).

els, high school credentialing, workforce participation, and college enrollment can be monitored. In addition, updates to the NRS system in 2012 are likely to provide even clearer measures of students' high school credentialing, as regulations now ask that credentialing rates be measured against the numbers of those who are enrolled in adult secondary education programs, attempted the GED, or attempted another certificate program, rather than against students' self-reported goals.

However, a number of further updates would also strengthen the current NRS system, which still has a number of limitations for understanding students' abilities and the influence programs may have on their skill development. First, in many states, NRS data are divorced from other educational and training databases, such as systems tracking K-12, postsecondary education, or workforce training outcomes, making it difficult to assess whether and how students' progress through these systems — let alone what effect these different educational environments might have.[34] Additionally, though states are required to report students' program participation rates, studies that use NRS data rarely estimate how program participation or students' skill levels may be related to their outcomes.[35] Thus, little information currently exists on the length of time needed for a student at a particular skill level to progress toward key NRS goals, such as improving his or her academic abilities, obtaining a high school credential, making the transition to postsecondary education, or entering the workforce.

Given these limitations, researchers and policymakers should look to further expand upon the NRS data in the following ways:

1. **Track student participation across multiple educational institutions:** States and the federal government should look to build more wide-ranging educational data systems that allow students' participation in multiple education programs to be tracked over time. OVAE's Policy to Performance initiative, aimed at helping eight states develop longitudinal databases to track learner outcomes across adult and postsecondary education, represents one promising step in this direction.[36] A number of state systems could also serve as models for these more integrated databases; examples include Connecticut's use of unique student identifiers, enabling the tracking of students across numerous adult education settings and Florida's robust K-20 Educa-

[34] Alamprese and Limardo (2012).

[35] See, for example, U.S. Department of Education, Office of Vocational and Adult Education (2011a, 2013b) and National Council of State Directors of Adult Education (2011).

[36] Alamprese and Limardo (2012). The Policy to Performance Initiative was a three-year, OVAE-funded effort to provide technical assistance in support of the development and implementation of state policy to support transition from adult basic education to postsecondary education and employment. The participating states were Alabama, California, Louisiana, Massachusetts, New York, Texas, Virginia, and Wisconsin.

tion Data Warehouse, which integrates data on individuals' participation in elementary, secondary, postsecondary, and adult education, as well as in vocational training programs.[37]

2. **Track program type:** The ability to link student outcome data with program characteristics, such as the subject areas taught and curriculum used, would help to provide a clearer understanding of how different program models may be connected with student outcomes. While this report has attempted to describe the general status of adult education programming and pedagogy, it has had to rely on small-scale studies of individual programs and case studies. Integrating data about program characteristics along with student attendance and outcomes in the NRS data would help facilitate a better baseline understanding of the general types of instructional and program models that students are experiencing.

3. **Estimate time to completion:** Currently, reports using NRS data have not tracked the time to completion for students participating in adult education programs, making it difficult to estimate the length of time needed to reach certain milestones.[38] Analyzing the different timelines for students of varying skill levels and abilities would help the field better understand the amount of time needed to prepare these students while also providing a baseline to estimate the promise of new reforms. Combining such analyses with program information would also help determine what types of current adult education programs may already be making promising advances in increasing their students' skills.

Strive for a Common Language About Adult Education

One of the key ways that research about programs' effectiveness is able to advance is by having a concrete understanding of differing program models and their components as well as the populations they serve. For instance, an adult education program that provides only modest supports for college transition and limited instruction or that serves primarily lower-skilled students is likely to have differing effects than one with more intensive services aimed at higher-skilled students. Differentiating the level of instruction and support services offered, as well as the skill levels and abilities of the students served, provides a critical means of understanding what types of programs may most effectively advance students' skills.

[37]Gopalakrishnan (2008); Florida Department of Education (2013).

[38]See for instance, U.S. Department of Education, Office of Vocational and Adult Education (2011a, 2013b); National Council of State Directors of Adult Education (2011).

While this report has attempted to develop a baseline typology for distinguishing between different adult education reforms, the adult education landscape does not lend itself easily to this kind of categorization. Adult education programs tend to be highly diverse in terms of the settings in which instruction is offered, the number of instructional hours, the types of advising or case management provided, student skill levels, and the types of students served. However, when assessments of these programs are undertaken, the widely ranging models are rarely distinguished from one another and instead lumped together under one umbrella. Such is true even with evaluations of current reforms. For instance, evaluations of Accelerating Opportunity, a multi-state career pathway initiative sponsored by Jobs for the Future, and I-BEST each include a wide range of program models.[39] While helpful for assessing high-level program effects, such models do little to distinguish what type of program may be most effective for what type of student, a key issue for the adult education field.

In order to further advance the field, policymakers, practitioners, researchers, and funders should assess the varying effects that different program types may have on student subgroups. Given the diversity in the field, these efforts should begin with establishing a baseline typology of adult education programs and reforms. As in this report, such a typology might distinguish between differing levels of access to college and the supports that differing models afford students. However, other important program components might be identified, such as the intensity of instruction, the age group, or the skill levels of the students served.

An example of this type of framing could be taken from the demonstrations that MDRC has led to evaluate different program interventions. For instance, the Learning Communities Demonstration, which enrolled cohorts of students in two or more linked classes with mutually reinforcing themes and assignments, analyzed the effects of this intervention across six different community colleges. The demonstration provided a differentiated analysis based on the program model, which ranged from less intense models (for example, paired courses) to more intensive collaboration between instructors, as well as the targeted student population, which varied from those needing developmental courses to those at the college level. This research was thus able to distinguish which type of program models were most effective for which students.[40]

Develop More Rigorous Research Designs

Given the lack of funding for adult education in general, it is not surprising that limited rigorous research on these programs is available. However, policymakers, researchers, and practitioners should make it a priority to pursue a research agenda that can expand the field's knowledge about the effectiveness of new adult education reforms. Such investigations might

[39]Wilson et al. (2012); Jenkins, Zeidenberg, and Kienzl (2009).
[40]Visher et al. (2012).

begin with quasi-experimental analyses, which attempt to control for certain factors such as students' background characteristics, to understand the associations between particular program reforms and students' achievement. When possible, however, more rigorous, experimental analyses, which use random assignment methodology, should also be explored. Such investigations would allow for a causal link to be established between new adult education reforms and any resulting changes in students' achievement.

In considering a research agenda, researchers and policymakers should look to analyze those programs that appear to hold the most promise for rapidly decreasing the amount of time students spend preparing for a high school credential and increasing their successful transition to college. A demonstration around several permutations of program reform, differentiating by aspects such as the intensity of instruction (for example, part-time versus full-time programs), student skill levels (for example, those offered for lower-skilled students versus those for the higher skilled), or level of college access (for example, models that offer concurrent college and GED program enrollment versus those that offer a sequential GED-then-college approach), would allow for a better understanding of the types of programs that may be most beneficial for different adult populations.

Summing Up and Looking Ahead

While spurring innovation in adult education may seem relatively straightforward, a more nuanced understanding of adult education program models and reforms — and a more rigorous understanding of their effectiveness — will likely mean an important sea change in how adult education programs have traditionally viewed themselves and their mission. A stronger focus on outcomes, particularly those aimed at high school completion and college entry, may be a challenge for a number of adult educators who see their primary mission as improving students' ability to manage their day-to-day lives. Similarly, rigorous evaluations of programs' effects are likely to be difficult, given the high levels of transiency in most adult education programs.

However, despite this, the push for higher-level skills and postsecondary credentials is not likely to disappear from the nation's workforce demands anytime soon. While there is debate about the growth rate of middle-skills/middle-wage jobs, which offer better pay than unskilled jobs, low-income U.S. workers need to be prepared for these middle-skills jobs if they are to have any chance at upward mobility. And these jobs generally require education and training similar to that offered as part of vocational certificate and associate's degree programs.[41] As a result, policymakers have been urged to bolster those educational and workforce training opportunities that will enable more job-seekers to fill these industry needs, particularly

[41] Holzer and Lerman (2007); Sommers and Osborne (2009); Autor, Katz, and Kearney (2008).

as aged workers retire and demand increases.[42] Without such supports, economists estimate that the supply of skilled workers will fall short of labor market demands, causing hardship for both local industries, which will incur greater costs to fill job vacancies, and lower-skilled workers.[43]

This economic forecast further underscores the need to advance the skills of high school dropouts and overcome the challenges facing this population. The adult education reforms that are highlighted in this report, with their attention to more rigorous curricula and supports, work-force training, and access to postsecondary education, represent a marked stride forward in this direction. These programs' relatively modest tweaks to the linear path of high school followed by college provide a promising avenue for dropouts to gain access to the coveted skills and education needed to access higher-paying jobs. Developing innovative education models such as these and building a better research base on their effectiveness represent two key steps that U.S. policymakers can take to help dropouts — and the country — build their success in today's skills-based marketplace.

[42]Holzer and Lerman (2007; Sommers and Osborne (2009); Levy and Murnane (2004).
[43]Holzer and Lerman (2007); Sommers and Osborne (2009).

Appendix A

Journals, Organizations, Initiatives, and Programs Reviewed

Research for this report included review of the following journals, organization Web sites and reports, and adult education reform initiatives and programs.

Journals Reviewed

- *Adult Basic Education*
- *Adult Basic Education and Literacy Journal*
- *Educational Assessment*
- *Journal of Adolescent and Adult Literacy*
- *Journal of Educational Computing Research*
- *Journal of Educational Psychologies*
- *Journal of Higher Education*
- *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education*
- *Journal of Vocational and Technical Education*
- *Reading Research Quarterly*
- *Scientific Studies in Reading*

Organization Web sites and Reports Reviewed

- Abt Associates
- American Council on Education (ACE)
- American Institute for Research (AIR)
- American Youth Policy Forum
- Center for Law and Social Policy (CLASP)
- Center for an Urban Future
- Civic Enterprises
- Community College Research Center (CCRC)
- Council for Advancement of Adult Literacy (CAAL)
- GED Testing Service (GEDTS)
- Georgetown Center for Education and the Workforce
- Illinois Office of Community College Research and Leadership
- Institute of Education Sciences
- Jobs for the Future
- Literacy Information and Communication System (LINCS)
- MDRC

- MPR Associates
- National Adult Education Professional Development Consortium (NAEPDC)
- National Association of Workforce Boards
- National Center for Adult Literacy (NCAL)
- National Center for Family Literacy
- National Center for Higher Education Management Systems (NCHEMS)
- National Center for the Study of Adult Learning and Literacy (NCSALL)
- National Center for Education and the Economy
- National College Transition Network
- National Commission on Adult Literacy
- Literacy Research Initiative
- National Council for Workforce Education
- National Council of State Directors of Adult Education (NCSDAE)
- National Research Center for Career and Technical Education
- National Skills Coalition
- Skills2Compete
- U.S. Department of Education, Office for Vocational and Adult Education (OVAE)
- Workforce Strategy Center
- World Education

Specific Adult Education Reform Initiatives and Programs Reviewed

- Academy for College Excellence
- Accelerating Opportunity (Jobs for the Future)
- Alliance for Quality Career Pathways
- Arkansas Career Pathways Initiative
- Back on Track: Pathways Through Postsecondary (Jobs for the Future)
- Boosting College Completion for a New Economy
- Breaking Through (Jobs for the Future)
- California Career Advancement Academies
- Career Ladders Project
- Career Pathways Technical Assistance Initiative (U.S. Department of Labor Employment and Training Administration)

- Carreras en Salud
- Community College of Denver: Fast Start Program
- CUNY College Transition Initiative
- CUNY Prep
- Cuyahoga Community College's Pre-STNA and Plus Programs
- Durham Technical Community College Adult Basic Education Program
- Gateway to College
- GED to College: Building On Ramps to Postsecondary Education for Low-Income Adults (Jobs for the Future)
- Illinois Central College Manufacturing Bridge Program
- Improved Solutions for Urban Systems
- LaGuardia Community College GED Bridge to Business and Health Careers
- Lake Land College Manufacturing Bridge Program
- Minnesota FastTRAC
- New Haven Adult and Continuing Education's Transition: Post-Secondary Education and Training Program
- North Carolina Basic Skills Plus
- Ohio Stackable Certificates
- Olive-Harvey College's Transportation, Warehousing, and Logistics Bridge Program
- Oregon's Pathways for Adult Basic Skills
- Pathways to Advancement (National Governors Association)
- Pathways to Employment at Central Piedmont Community College
- PluggedInVA
- Portland Community College's Youth Empowered to Succeed
- Prairie State College Manufacturing Bridge Program
- Rio Salado College ABE Transitions Program
- Shifting Gears (Joyce Foundation)
- Skill Up Kentucky

- South Texas College/Pharr–San Juan–Alamo Independent School District College, Career, and Technology Academy
- Southeast Arkansas Fast Track
- Statway
- Student Achievement in Reading (STAR) (Office of Vocational and Adult Education)
- Urban League of Greater Hartford College Achievement Program
- Virginia Middle College
- Virginia Race to the GED Initiative
- Washington State's I-BEST
- Wisconsin RISE
- WorkINdiana
- Working Poor Families Project
- X-cel Adult Education College Transition Program
- Youth Corps/Service and Conservation Corps (The Corps Network)
- Youth Empowerment Services Philadelphia (YES Philly)
- YouthBuild

Appendix B

Full List of GED-to-College Bridge Programs

This appendix provides a description of GED-to-college bridge programs across the country. Specific components of each program are summarized in Appendix Table B.1.

High-Intensity Programs

YouthBuild Postsecondary Education Initiative: Nationwide

YouthBuild programs provide secondary credential preparation, vocational training, and life-skills development opportunities geared toward older adolescents, recent high school dropouts, and at-risk youth ages 16 to 24.[1] The initiative was founded in 1990 after the initial success of the first YouthBuild program in New York City and now encompasses 273 programs across the country, most of which are sponsored by local community-based organizations. YouthBuild students enroll in academic courses aimed at preparing them for taking the GED exam or earning a traditional high school diploma. In 2008, YouthBuild launched the Postsecondary Education Initiative (PSEI), which provides an even more specific focus on postsecondary education transitions. Programs participating in PSEI have worked to revise their curricula to further align student learning outcomes with the expectations of postsecondary institutions in their areas. For example, at YouthBuild Brockton, a PSEI site, the college preparatory curriculum emphasizes vocabulary development, current events, and critical thinking skills. In addition, PSEI students receive extensive supports for the transition to college, including college and career counseling, tours of local college campuses, and assistance with financial aid applications. These programs, like other YouthBuild programs, also provide intensive career and job skills training through work on affordable-housing construction projects in their communities.

MDRC is currently conducting a random assignment study of approximately 80 YouthBuild sites across the country, including most of the YouthBuild Postsecondary Education Initiative sites. The impact analysis will examine the program's effects on participants' educational attainment, including postsecondary outcomes; employment and earnings; involvement with the criminal justice system; and other outcomes.

City University of New York (CUNY) Prep Day School: Bronx, New York

Based in the Bronx, CUNY Prep's Day School provides college preparation for older adolescents (ages 16-18) who have left traditional high schools.[2] CUNY Prep students

[1]The information in this paragraph comes from the following sources: MDRC (2013); Jensen and Yohalem (2010); https://youthbuild.org.

[2]The information in this and the following paragraph comes from the following sources: Westat/Metis (2008); CUNY Prep (2011); Jenny Ristenbatt, Director/Principal, CUNY Prep Day School, personal communication (April 8, 2013).

Appendix Table B.1

GED-to-College Bridge Programs and Components

Program	Brief Description	Components				
		College-Preparatory Curricula	College Transition Supports	Direct Connections to Postsecondary Institutions	Career Prep: Contextualization or Training	Managed Enrollment
Intensive (full-time) programs						
YouthBuild Postsecondary Education Initiative	Nationwide program that offers youths ages 16 to 24 GED certificate/HS diploma preparation, vocational training, and transition support.	X	X		X	X
CUNY Prep Day School	Prepares older adolescents (ages 16-18) who are out of school for the GED exam and college-level work.	X	X	X		X
Youth Empowerment Services Philadelphia (YESPhilly)	Provides students ages 17-21 with GED exam preparation and college enrollment support.	X	X			X
Urban League of Greater Hartford College Achievement Program	Offers students college transition classes in reading, writing, and math alongside GED classes.	X	X			X

(continued)

Appendix Table B.1 (continued)

Program	Brief Description	Components				
		College-Preparatory Curricula	College Transition Supports	Direct Connections to Postsecondary Institutions	Career Prep: Contextualization or Training	Managed Enrollment
Less intensive (part-time) programs						
Oregon Pathways for Adult Basic Skills Initiative	Offers contextualized basic skills classes to develop college-level academic skills and prepare students for a high school credential.	X	X	X	X	X
Lake Land College Manufacturing Bridge Program	Offers a single course aimed at moving incumbent workers directly into credit-bearing courses while preparing for the GED exam.	X	X	X	X	X
Black Hawk College Warehouse and Distribution Specialist Bridge Program	16-week bridge program prepares GED and ESL students for the college's Warehousing and Distribution Specialist program through contextualized instruction and support services.	X	X	X	X	X
Davidson County Community College Contextualized Basic Skills Program	Basic skills and GED curriculum is contextualized in specific occupational fields, and instruction is customized to each student.	X		X	X	X

NOTE: ESL = English as a Second Language.

receive academic instruction through a competency-based, standards-aligned program that covers a mix of humanities (history, social studies, and language arts), science, and math. In addition, they take an elective class once a week that is focused on literacy. This college preparatory academic program is based on the national Diploma Plus model.[3] Students enroll in courses for at least five hours a day for five days a week, with the goal of becoming prepared to earn a GED certificate and enroll in college. Class sizes are capped at 15 to 20 students, and high expectations for attendance are strictly enforced. With enrollment opening four times per year, instruction takes place in three-month marking periods. This structure allows students to progress to taking the GED exam on an individualized, self-paced timetable that is based on prior performance and periodic self-assessments.

While in the program, students also receive comprehensive social supports, including counseling, career advising, and case management and referrals to housing, legal, employment, and health care services. CUNY Prep's advisement offices also help students address barriers to attendance, in particular financial challenges, by providing assistance with accessing public benefits or part-time employment opportunities. After earning the GED certificate, students are strongly encouraged to enroll in CUNY Prep's College Transition Academy (CTA). CTA transition supports include introduction to and preparation for the college placement exams in writing and math. These supports are aimed at helping students bypass developmental education courses. Students enrolled in the CTA can also enroll in college courses through CUNY Prep's College Now program.

After students complete the CTA, CUNY Prep coaches continue to track their progress and provide less intensive support for at least a year. In addition, as part of the CUNY Prep College Success Network (CSN), college success coaches are housed in a dedicated space at Hostos Community College to help students make a successful transition into and through their degree studies. CSN provides individual and group advisement and space for tutoring sessions; it also assists students and alumni with a broad range of college navigation issues, including financial aid and communicating with college faculty.

YESPhilly: Philadelphia, Pennsylvania

Aimed toward older adolescents ages 17 to 21, the Youth Empowerment Services GED to College program in Philadelphia (YESPhilly) provides a 30-hour-a-week literacy-, math-, and technology-focused program, with instruction taking place in two-month cycles that focus on a particular topic or theme. YESPhilly makes small classes a priority, with students progressing through their academic program in small cohorts. Much of the instruction takes place through hands-on or group-based learning. The program assists students in making the transi-

[3]For more information on the Diploma Plus model, see Diploma Plus (2013).

tion to college by helping them with college admissions and financial aid as well as providing an introduction to college environments through college tours. YESPhilly students also receive individualized, group, and family support from counselors, who work with them to develop personalized "student development plans" that allow them to take ownership of their goals and track their progress toward achieving them. Finally, though these offerings are not a part of its official GED program, YESPhilly has also developed a partnership with the Community College of Philadelphia through which students may enroll in for-credit college courses in subjects such as media arts, early childhood education, and psychology, as well as a noncredit student success course.[4]

Urban League of Greater Hartford College Achievement Program: Hartford, Connecticut

The Urban League of Greater Hartford's College Achievement Program offers students college transition classes in reading, writing, and math alongside GED courses.[5] In addition to 24 hours of regular GED instruction per week, students receive 4 to 6 additional hours of instruction and programming each week. The curriculum emphasizes critical thinking, algebra, and study skills. Transition supports provided include college counseling, assistance in completing financial aid and college admissions applications, and advising. Students are also offered opportunities to prepare for the Accuplacer placement test (used by Connecticut community colleges), attend college fairs, and tour postsecondary and training institutions. Classes take place in 12-week cycles, with three cycles occurring per year, and the program holds students to high standards for attendance: they are not allowed to have more than three absences, and if they do they are suspended until the beginning of the next half-cycle (either the beginning of the next lesson cycle or midpoint of the current one). Once students graduate from the program and move on to college, the program makes an effort to stay in contact with them and allows them to come back for help with their classes. This program differs from the other, less intensive college bridge programs highlighted in this section in that it is located at a community-based organization, rather than a community college.

[4]Interview with Taylor Frome, Executive Director; Mike Sack, Education Director; and Gary Paprocki, Program Director, YESPhilly (July 25, 2012); YESPhilly (2013).

[5]The information in this paragraph comes from the following sources: Zafft, Kallenbach, and Spohn (2006); Urban League of Greater Hartford (2013); telephone interview with Kathy Reilly, Director of Education and Youth, Urban League of Greater Hartford (April 19, 2013).

Lower-Intensity Programs

Oregon Pathways to Adult Basic Skills: Statewide, Oregon

The Oregon Pathways to Adult Basic Skills (OPABS) initiative enrolls participating students in accelerated adult basic skills courses at Oregon community colleges. The courses focus on developing college-level reading, writing, and math skills.[6] Courses are offered at two different levels: "pre-bridge," for students at sixth- to eighth-grade reading levels, and "bridge," for students at ninth- to twelfth-grade reading levels. Students in "bridge" courses are focused on attaining a secondary credential and matriculating into college. Students receive 120 or 180 hours of instruction in the pre-bridge and bridge courses, respectively, over the course of two terms, with a focus on developing college-level reading, writing, and math skills. Students in pre-bridge courses are preparing for entry into the bridge program. Course content is contextualized in state and regional high-demand career areas, such as health services and hospitality, with the aim of familiarizing learners with workplace terminology and tasks they might perform on the job. This is done using an occupational "survey" approach: while certain high-demand fields are the focus, a range of occupational information is integrated into the courses. Though the curriculum is standardized across the statewide initiative, local programs are expected to adapt it to best meet the needs of their students.

Students receive transition support through participation in a one-term college- and career-readiness course that provides information about local labor market opportunities and educational requirements, helps students to assess their interests and skills, and culminates in the preparation of an individual "Career Pathway Plan" that is updated as they progress. In addition, students participate in advising modules on college admission, placement tests, and financial aid. At many colleges, the program utilizes a learning community or cohort model in which students take classes together for one term or more, with the goal of helping them build relationships with and support one another.

LaGuardia Community College GED Bridge to Business and Health Careers: Queens, New York

LaGuardia Community College's GED Bridge to Business and Health Careers program provides contextualized GED instruction in a community college setting.[7] Students receive health- or business-focused GED instruction that is designed to develop college-level skills in

[6]The information in this section comes from Debbie Moller, Education Specialist, Oregon Department of Community Colleges and Workforce Development, personal communication (May 13, 2013). For more information on the OPABS program model, see Alamprese (2012); Bagwell (2010, 2011).

[7]The information in this paragraph comes from the following sources: LaGuardia Community College (2013); Martin and Broadus (2013).

reading, writing, and math and help students achieve a GED certificate within one semester. Though a part-time program, instruction is more intensive than in LaGuardia's traditional GED classes (60 hours per semester), with students receiving 9 hours of instruction per week for a total of 108 instructional hours. The curriculum uses sector-specific themes and concepts to help students develop academic skills. For example, in a contextualized Bridge to Health class, students might work on their reading comprehension skills by examining patient case studies. To build college readiness, students are expected to conduct research, write college-style essays, and complete a course portfolio. The program's instructional approach allows for collaborative and participatory learning opportunities, and emphasizes student-directed, individualized instruction. The program also includes college transition supports, including assistance with the admissions and financial aid processes, educational case management, academic advising, and tutoring.

Lake Land College Manufacturing Bridge Program: Mattoon, Illinois

Through a partnership between local manufacturers and the community college, incumbent workers are enrolled in a single course designed to move them directly into credit-bearing coursework while preparing to take and pass the GED exam.[8] The class meets for a total of 40 instructional hours, divided into 2.5 hours per day, 2 days per week, over 8 weeks. Through hands-on activities and coteaching by a basic skills and a technical skills instructor, the curriculum contextualizes fundamental applied technology and manufacturing skills with reading and math, and includes workplace knowledge relative to the content area, such as information about minimum wage policies. All students are incumbent workers who lack a high school diploma or the equivalent. They must have reading skills at the sixth-grade level or above. Students' employers pay them for the time they are in the bridge course. To support their transition to college, students receive support services, including academic advising, assistance with financial aid, transportation assistance, and personal counseling or referrals to appropriate providers.

Black Hawk College Warehouse and Distribution Specialist Bridge Program: Moline, Illinois

As part of the Shifting Gears initiative (see Box 4.1 in Chapter 4 for more information), Black Hawk College developed a 16-week bridge program that aimed to prepare GED and ESL students to make the transition to the college's Warehouse and Distribution Specialist (WDS) programs, offering courses for a GED cohort and an English as a Second Language (ESL)

[8]The information in this paragraph comes from the following sources: Illinois Office of Community College Research and Leadership (2012); Brian Haskins, Adult Education and Transition Coordinator, Lake Land College, personal communication (May 9, 2013).

cohort.[9] To achieve this goal, the program contextualized GED and ESL course content in the transportation, distribution, and logistics field, and provided comprehensive supports, including tutoring, targeted use of instructional software, career counseling, and advising, to facilitate students' transition. The program targeted students age 18 and over who tested at the ninth-grade level or above on the Test of Adult Basic Education. This eligibility requirement was strictly enforced for students in the GED cohort, as the college predicted that students with this level of skill were more likely to pass the GED exam and transfer to the WDS program without also needing to enroll in remedial courses.

Davidson County Community College Contextualized Basic Skills Program: Thomasville, North Carolina

In an effort to help basic skills and GED students move into credit-level programs after obtaining the GED certificate, Davidson County Community College offers a Basic Skills program that incorporates contextualized learning in a number of occupational areas, including certified nursing assistant, other allied health professions, truck driver, HVAC (heating, ventilation, and air conditioning), welding, and early-childhood education.[10] The college developed curricular materials for each of the occupational areas of focus, and instructors use these materials to customize instruction for groups of students with varying interests, even within one classroom. In addition, students are offered hands-on learning opportunities through a tactile kit from the Microcomputer Evaluation of Career and Academics program to complete tasks specific to their career areas; nursing students, for example, can learn how to take blood pressure. To further support their transition to college-level courses, students visit for-credit classes while in the program.

[9]The information in this paragraph comes from Bragg, Harmon, Kirby, and Kim (2010).
[10]The information in this paragraph comes from Jobs for the Future (2010).

Appendix C

Full List of Concurrent Enrollment Programs

This appendix provides summaries of concurrent enrollment programs. Specific components of the programs that are described below are summarized in Appendix Table C.1, and a list of states that have developed career pathways programs is presented in Appendix Table C.2.

Noncredit Concurrent Enrollment Programs

Virginia Middle College: Statewide, Virginia

The Virginia Middle College program allows students to work toward their GED certificate or adult high school diploma while enrolled at a Virginia community college.[1] In operation at nine colleges throughout the state, the program offers students the opportunity to take a student success course while preparing to obtain their secondary credential using college-customized curricula that emphasize critical thinking and problem solving. Students also receive comprehensive support services, including academic coaching and career exploration, and work toward a state-recognized Career Readiness Certificate. While students may earn one credit for the success course, the credit does not count toward their credential completion requirements and it is not transferable to a four-year institution. Though all nine individual programs have similar key components, their emphasis varies based on the unique features of their settings. For example, while programs focus on general academic preparation, the program at Thomas Nelson College is located in the same building as a One-Stop center and across the street from a Career and Technical center, and thus focuses on workforce training. At most colleges, the program lasts for one to two semesters, with the average program lasting a year. All colleges partner with local adult education agencies.

Participating students are typically between the ages of 18 and 24. To be eligible to participate, students must have math and reading skills levels at the ninth-grade level or above. Additionally, students generally apply to participate through a competitive process: one college, for example, receives about 500 to 600 applications for 70 spots each year.

Portland Community College YES: Portland, Oregon

Portland Community College's (PCC's) Youth Empowered to Succeed (YES) program provides GED preparation while allowing students to enroll in a nontransferable college, career,

[1]The information in this section comes from the following sources: Virginia Community College System (2013); telephone interviews with Caroline Thurston, Director, Middle College and Adult Career Services, Virginia Community College System (November 16, 2012; May 7, 2013).

Appendix Table C.1

Concurrent Enrollment Programs and Components

Program	Brief Description	Components				
		College-Preparatory Curricula	College Transition Supports	Direct Connections to Postsecondary Institutions	Career Prep: Contextualization or Training	Managed Enrollment
Noncredit concurrent enrollment programs						
Virginia Middle College	College-based program that enrolls students in a student success course while preparing for a secondary credential.	X	X	X		X
Portland Community College (PCC) Youth Empowered to Succeed	College-based program that enrolls students in a student success course at PCC while they work toward their GED certificate.	X	X	X		X
New Haven Adult & Continuing Education's Transition: Post-Secondary Education and Training program	CBO-based program that offers GED students on-site developmental education taught by faculty from a local college.	X	X	X		X
Prairie State College Manufacturing Bridge Program	Bridge course helping students work toward their GED certificate while preparing for college-level training in the manufacturing field.	X	X	X	X	X

(continued)

Appendix Table C.1 (continued)

Program	Brief Description	Components				
		College-Preparatory Curricula	College Transition Supports	Direct Connections to Postsecondary Institutions	Career Prep: Contextualization or Training	Managed Enrollment
For-credit concurrent enrollment programs						
Pathways to Employment at Central Piedmont Community College	Accelerated program that allows students to enroll in college-level courses applicable to short-term occupational certificates while working toward their GED certificate.	X	X	X	X	X
PluggedInVA	Programs prepare students for the GED exam while enrolled in postsecondary courses in a regionally high-demand industry.	X	X	X	X	X
Illinois Central College Manufacturing Bridge Program	Allows students to enroll in college credit courses while they take a bridge course that provides contextualized GED instruction and aims to prepare them for further education.	X	X	X	X	X
Skill Up Kentucky	Statewide program that helps students prepare for the GED exam while developing soft skills and earning career and computer certifications and college credit in an occupational field.	X		X	X	X
WorkINdiana	Statewide initiative offering students the opportunity to earn certification in six industry sectors along with the GED certificate.	X		X	X	X

(continued)

Appendix Table C.1 (continued)

Program	Brief Description	Components				
		College-Preparatory Curricula	College Transition Supports	Direct Connections to Postsecondary Institutions	Career Prep: Contextualization or Training	Managed Enrollment
Career pathways concurrent enrollment programs						
I-BEST	Statewide model that pairs workforce training and ABE through team teaching. All programs include college-level technical credits and are part of a certificate or associate's degree program.	X	X	X	X	X
Minnesota FastTRAC	Statewide initiative integrating ABE and training in high-demand fields through team teaching. Instruction is sequenced to allow students to earn "stackable" credentials.	X	X	X	X	X
Arkansas Career Pathways Initiative	Statewide, community college-based initiative that offers educational pathways within high-demand career fields.	X	X	X	X	X
North Carolina Basic Skills Plus	Offers employability skills preparation, job-specific training, and developmental and occupational education to students who are concurrently enrolled in secondary credential preparation.	X	X	X	X	X
Carreras en Salud	Prepares students for careers in health care. Seven levels of training build on one another, culminating in LPN certification.	X	X	X	X	X

NOTE: CBO = community-based organization. ABE = adult basic education. LPN = licensed practical nurse.

Beyond the GED

Appendix Table C.2

State Participation in Career Pathways Initiatives

State	Accelerating Opportunity	Shifting Gears	Career Pathways Technical Assistance Initiative	Alliance for Quality Career Pathways	Other
Alabama					
Alaska					
Arizona					Arizona I-BEST
Arkansas				X	Arkansas Career Pathways Initiative
California				X	
Colorado					
Connecticut					
Delaware					
Florida					
Georgia	X				
Hawaii					
Illinois	X	X		X	
Indiana		X			
Iowa					
Kansas	X		X		
Kentucky	X		X	X	
Louisiana	X				
Maine					
Maryland			X		
Massachusetts				X	
Michigan		X			
Minnesota		X		X	MN FastTRAC
Mississippi	X				

(continued)

Appendix Table C.2 (continued)

State	Accelerating Opportunity	Shifting Gears	Career Pathways Technical Assistance Initiative	Alliance for Quality Career Pathways	Other
Missouri					
Montana			X		
Nebraska					
Nevada					
New Hampshire					
New Jersey					
New Mexico			X		
New York					
North Carolina	X				
North Dakota					
Ohio		X	X		Ohio Stackable Certificates
Oklahoma					
Oregon				X	Career Pathways Statewide Initiative
Pennsylvania			X		
Rhode Island					
South Carolina					
South Dakota					
Tennessee					
Texas					Texas Career Pathways Initiative
Utah					
Vermont					
Virginia			X	X	PluggedInVA
Washington				X	I-BEST
West Virginia					
Wisconsin		X		X	Wisconsin RISE

(continued)

Appendix Table C.2 (continued)

State	Accelerating Opportunity	Shifting Gears	Career Pathways Technical Assistance Initiative	Alliance for Quality Career Pathways	Other
Wyoming					

SOURCES: Accelerating Opportunity (2013); Roberts and Price (2012); Kozumplik et al. (2011); Center on Law and Social Policy (2012).

NOTE: For descriptions of the Accelerating Opportunity, Shifting Gears, Career Pathways Technical Assistance, and Alliance for Quality Career Pathways initiatives, see Box 4.1 in Chapter 4.

and guidance course at the college each semester.[2] The program is operated by the community college, in close partnership with local kindergarten through grade 12 (K-12) districts. In Oregon, Oregon Department of Education State School Funds follow the student. K-12 districts receive funds through an attendance-based funding formula, then contract with PCC, and financially support students as they take adult basic education classes at PCC. At some sites, the program uses curricula developed by the Oregon Pathways to Adult Basic Skills initiative (discussed in Chapter 3 and Appendix B). In addition, students receive intensive counseling and support from "Resource Specialists" and have access to additional resources like tutoring and scholarships. The program serves students between the ages of 16 and 21, although students must be 20 or younger at enrollment. To be eligible to participate, students must test at the adult secondary education (ASE) level based on their Comprehensive Adult Student Assessment System (CASAS) score. (They must be at level 4, 5, or 6.) Students receive instruction and programming for 10 to 13 hours per week; the amount of time they spend in the program depends on their skill level.

New Haven Adult and Continuing Education's "Transition: Post-Secondary Education and Training Program": New Haven, Connecticut

New Haven Adult and Continuing Education's Transition: Post-Secondary Education and Training program allows GED students to enroll in developmental education classes at a

[2]The information in this paragraph comes from the following sources: Portland Community College (2013) and telephone interview with Jeff Laff, Manager, Portland Community College YES (December 6, 2012).

local postsecondary institution, Gateway Community College.[3] Students take the College Placement Test and, based on academic need, can concurrently take developmental education courses and earn institutional credit. Developmental education courses are held at the adult education program but taught by college faculty. Students may also enroll in a study skills class at the college. The program's GED classes emphasize critical thinking and problem-solving skills, and work-readiness content is integrated into the GED curriculum in the form of applied problems.

Prairie State College Manufacturing Bridge Program: Chicago Heights, Illinois

This program offers a GED-preparation bridge course that helps students work toward their GED while preparing for entry-level employment and/or postsecondary training in the manufacturing field.[4] Students may enroll in college-level courses while attending the bridge course, though the courses do not count for college-level credit until students complete their GED studies and earn the certificate. To enroll, students must have reading skills at the eighth-grade-equivalent level or above, and math skills at the seventh-grade-equivalent level or above. The curriculum emphasizes reading, writing, math, and technology skills, contextualizing instruction of the five GED content areas in the manufacturing field. The class meets 4 days per week, 3 hours per day over 14 weeks, for a total of 168 hours of instruction. Instruction includes hands-on activities in math and science, presentations, online research, and small-group activities. Students receive a variety of transition support services: a transition specialist is dedicated to assisting bridge students in setting goals as well as acclimating them to the wide variety of services within the college, while caseworkers provide referrals and transportation assistance and student service specialists coordinate industry-related field trips and assist with application for the GED exam.

[3]The information in this paragraph comes from the following sources: Zafft, Kallenbach, and Spohn (2006); Nicholas Montano, Assistant Principal, New Haven Adult and Continuing Education, personal communication (May 14, 2013).

[4]The information in this paragraph comes from the following sources: Illinois Office of Community College Research and Leadership (2012); John Schleuter, Assistant Professor/Coordinator of Adult Basic and Secondary Education, Prairie State College.

College-Credit Concurrent Enrollment Programs

Pathways to Employment at Central Piedmont Community College: Charlotte, North Carolina

The Pathways to Employment at Central Piedmont Community College program allows students to enroll in college-level courses that apply to short-term occupational certificates in six possible fields, while they work toward their GED certificate.[5] Integrating academic skill development, career advising, work-readiness training, and occupation-specific training, the program offers up to 32 weeks of course work in an accelerated time frame of 12 to 14 weeks, offering full-time instruction during this period. All occupationally oriented courses are team taught, and students also take a basic skills course contextualized to their chosen field. In addition, students have access to a Learning Resource Center, where an instructor is available to provide individualized support. Though the program is open to students at any skill level, those with lower skill levels (usually between sixth- and ninth-grade-equivalent, making up approximately half of participants) are typically required to take a set of prerequisite classes focused on reading and math. The program aims to get students through prerequisites within one semester, but this may take more or less time depending on their skill levels. Students take both occupational and basic skills classes as a cohort, based on the occupational pathway in which they are enrolled. However, new students may enroll on a weekly basis, taking prerequisite courses and receiving services from the Learning Resource Center immediately following participation in an information session, then beginning the full program at the beginning of the next semester.

PluggedInVA: Statewide, Virginia

PluggedInVA allows students to prepare for the GED while also being enrolled in postsecondary courses along a specific occupational pathway in a regionally high-demand field.[6] All programs must include a minimum of 12 credits at a partnering postsecondary institution. The program lasts for six months, and the time commitment varies by site, with students receiving instruction for between 12 and 24 hours per week. Students also receive ACT WorkKeys test preparation for the Virginia Career Readiness Certificate, as well as receiving instruction in

[5]The information in this paragraph comes from the following sources: Central Piedmont Community College (2013); telephone interview with Nadya Maisak, Program Coordinator, Pathways to Careers, Central Piedmont Community College (April 26, 2013). A list of the areas of occupational focus students may select is available at www.cpcc.edu/ccr/pathways/employment/programs.

[6]The information in this paragraph comes from the following sources: PluggedInVA (2013); telephone interview with James Andre, Specialist for Federal Programs, Virginia Department of Education, Office of Adult Education and Literacy; Kate Daley, Instructional Specialist, Virginia Commonwealth University; and Randall Stamper, Assistant Vice Chancellor for Career Pathways and Workforce Programs, Virginia Community College System (November 15, 2012); James Andre, personal communication (April 19, 2013).

digital literacy skills and professional soft skills.[7] The program targets students over the age of 18, with at least ninth-grade math and reading levels as tested by the Test of Adult Basic Education (TABE) or General Assessment of Instructional Needs (GAIN). Not all students enter the program without a GED certificate, and those who need to earn it are encouraged to do so as early in the six-month program as possible. The curriculum was developed with input from industry partners. PluggedInVA is provided by local education agencies, community colleges, and community-based literacy organizations who belong to regional adult education programs funded under AEFLA.

Illinois Central College Manufacturing Bridge Program: East Peoria, Illinois

Through this program, students receive GED preparation while taking a bridge course designed to prepare them for entry-level work in manufacturing; they may also take credit instruction toward further certification (for example, computer numerical control, or CNC, machining). In addition, students may simultaneously enroll in other credit-bearing college courses of their choice.[8] The class meets 3 days per week for 3 hours per day over 9 weeks, for a total of 81 hours of instruction. The bridge course uses a manufacturing curriculum designed by the Illinois Community College Board, and teaching is shared by two adult education instructors and a staff person from the college's career center. One instructor teaches reading, writing, and math, and another teaches technical skills. Students receive instruction in computer literacy, GED preparation, and manufacturing. In addition, students tour the college and local manufacturing facilities while also receiving support in career exploration and job search skills. The program targets students with reading levels at the sixth-grade-equivalent or above. In addition to serving students without high school diplomas, the program serves students with low math levels who have diplomas.

Skill Up Kentucky: Statewide, Kentucky

Offering 13 programs in six counties, Skill Up Kentucky is a six-month program that helps students work toward their GED certificate while developing professional soft skills and earning general career-readiness certificates, Microsoft digital literacy certifications, and college credits in an occupational field.[9] The occupational fields on which the program focuses vary by site, and include allied health, energy/power plant operator, and technology/computers. The

[7]ACT WorkKeys is a job skills assessment system.

[8]The information in this paragraph comes from the following sources: Illinois Office of Community College Research and Leadership (2012); telephone interview with Kay Sutton, Dean of Public Services and Community Outreach, Illinois Central College (May 3, 2013).

[9]The information in this paragraph comes from Kentucky P20 Innovation Lab (2011).

GED curriculum is contextualized in the occupational field, and adult education and community college instructors teach in teams to deliver the curriculum. The curriculum emphasizes problem-based instruction and individual and small-group work aimed at completing a series of integrated learning activities that culminate in a capstone project. The program was originally modeled after the PluggedInVA Virginia initiative.

WorkINdiana: Statewide, Indiana

The WorkINdiana initiative allows adult learners to prepare for the GED exam while working toward a career certification in one of six industry sectors (health care, information technology, business administration and support, advanced manufacturing, transportation and logistics, and hospitality).[10] WorkINdiana programs are offered by adult education programs throughout the state, often in partnership with community colleges. Participants may receive vouchers specific to WorkINdiana that cover the cost of the certification exam in addition to education expenses. WorkINdiana programs are open to students with skill levels as low as fourth-grade-equivalent as tested by the TABE, and must include a minimum of 40 instructional hours delivered within a period of less than 14 weeks.

Career Pathways Concurrent Enrollment Programs

I-BEST: Statewide, Washington

Numbering approximately 150 across Washington's 34 community and technical colleges, I-BEST programs pair workforce training in high-demand fields with adult basic education (ABE) or English as a Second Language (ESL) through team teaching. All programs include college-level professional-technical credits, and the programs are required to be part of a certificate or associate's degree program designed to lead to further education and employment in high-demand occupations.[11] I-BEST targets students whose skill levels qualify them for federally supported levels of basic skills education based on the CASAS basic skills test. I-BEST is administered by the Washington State Board of Technical and Community colleges.

[10]The information in this paragraph comes from the following sources: Jaclyn Dowd, Deputy Commissioner of Policy, Education, and training, Indiana Department of Workforce Development, personal communication (August 21, 2012); Indiana Department of Workforce Development (2013a, 2013b).

[11]The information in this paragraph comes from Wachen, Jenkins, Belfield, and Van Noy (2012); Wachen, Jenkins, and Van Noy (2010).

Minnesota FastTRAC: Statewide, Minnesota

Operating 34 programs on 20 college campuses across the state, the Minnesota FastTRAC initiative integrates basic skills and career-specific training by pairing ABE and postsecondary career and technical instructors in the classroom.[12] Programs aim to help students earn "stackable" credentials in high-demand fields. Stackable credentials allow students to earn shorter-term credentials or certificates that have clear labor market value on their own, and can be built upon with further education and credentialing to allow access to more advanced labor market opportunities.[13] FastTRAC offers sequenced instruction broken into two main components: bridge instruction at two levels, which provides contextualized basic skills instruction and general career preparation; and integrated instruction, which offers college-level credit and is team-taught by career and technical education and ABE instructors. Instruction is complemented by supports such as career advising and help accessing services like child care and transportation. Though students must have skills at the ninth-grade-equivalent level or above to participate in the concurrent enrollment component of the program, the program offers entry points to the bridge component to students with skill levels as low as second-grade-equivalent through a "pre-bridge" program. FastTRAC is affiliated with Shifting Gears, which supported its planning phase and continues to provide some funding. It is operated by a partnership between the Minnesota Department of Education, the Minnesota Department of Employment and Economic Development, and Minnesota State Colleges and Universities.

Arkansas Career Pathways Initiative: Statewide, Arkansas

The Arkansas Career Pathways Initiative (CPI) includes 25 sites at the state's 22 two-year colleges and three technical centers affiliated with four-year institutions. The initiative offers educational pathways that include a series of degrees and credentials within high-demand career fields, ranging from GED certificates and vocational credentials to associate's degrees, targeting low-income parents who are often eligible for Temporary Assistance for Needy Families.[14] To tailor instruction to lower-skilled students, curricular enhancements have included contextualization as well as the use of self-paced instruction to address key areas of deficiency.

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[12]The information in this paragraph comes from the following sources: Minnesota Department of Economic Development (2011); telephone interview with Judy Mortrude, State Program Administrator for FastTRAC, Minnesota Department of Economic Development; Nola Speiser, State Program Administrator for FastTRAC, Minnesota Department of Economic Development; and Melanie Burns, Management Analyst, Minnesota State Colleges and Universities (May 3, 2013).

[13]See Austin, Mellow, Rosin, and Seltzer (2012) for a discussion of "stackable" credentials.

[14]The information in this section comes from the following sources: Leach (2008); Arkansas Department of Education (2013).

The CPI grew out of the experience of the Southeast College in Pine Bluff, Arkansas, which offers students an intensive, contextualized curriculum that is team-taught by developmental education and allied health faculty. The program aims to help students with skill levels at the ninth-grade level or below attain college readiness in just one semester, as well as preparing them to enter credit-bearing programs in allied health, including registered nurse and licensed practical nurse programs.

North Carolina Basic Skills Plus: Statewide, North Carolina

The North Carolina Basic Skills Plus initiative, now being implemented at 43 community colleges across the state, offers employability skills preparation, job-specific training, and developmental education and occupational instruction to students who are concurrently enrolled in a secondary credential preparation course at a community college.[15] Within this framework, each participating college develops and customizes its own career pathway program and curricula, including components such as contextualized instruction and cohort enrollment/learning communities. The initiative serves students with skills at the ASE level or above.

Carreras en Salud: Chicago, Illinois

The Carreras en Salud program seeks to prepare students for careers in the health care field. The program is operated by the Instituto del Progreso Latino, a local community-based organization, and a local community college (Wright College's Humboldt Park Vocational Education Center).[16] Students may enter the program at six different levels, with the lowest entry point targeting students with fifth- to sixth-grade literacy levels. Each level can be completed in 16 weeks and is meant to prepare students for the next level of training. The segments include a bilingual Certified Nursing Assistant program, a Licensed Practical Nurse (LPN) bridge program, and an LPN program. While in the LPN bridge segment, participants may take a customized GED course if they need the credential.

[15]The information in this paragraph comes from the following sources: Clark Dimond, Director, Foundational Skills and Workforce Readiness, North Carolina Community College System, personal communication (April 9, 2013); North Carolina State Board of Community Colleges (2012a, 2012b).

[16]The information in this paragraph comes from the following sources: Jenkins and Kossy (2007); Mirabal (2008).

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About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for ex-offenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.