Community College
Virtual Symposium

Promoting College and Career Readiness: Bridge Programs for Low-Skill Adults

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U.S. Department of Education

Office of Vocational and Adult Education

January 2012

U.S. Department of Education

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January 2012

Acknowledgements

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Preface

America's competitive advantage in the global economy depends on a qualified, skilled workforce.

A troubling gap, however, currently exists between the skills and knowledge of the country's current and projected workforce and the demands of jobs expected to grow most rapidly during the next decade. Community colleges are ideally positioned to help close that gap. President Obama has acknowledged this reality by calling for increased college graduation rates and a commitment among students to complete at least one year of postsecondary education (Obama 2009).

Community colleges have a long history as leaders in workforce education, collaborating with business and industry to meet local employment needs. They offer affordable tuition, open admissions, flexible course schedules, and convenient locations. They provide opportunities not only for students leaving high school, but also for older students, low-income and minority students, and working adults. Several problems, however, must be addressed if community colleges are to succeed as engines of workforce development and economic prosperity. These challenges include low rates of student persistence and completion and insufficient alignment between education standards and workforce expectations.

This brief is one of a series of four prepared for the April 27, 2011, *Community College Virtual Symposium*, a project of the U.S. Department of Education, Office of Vocational and Adult Education, held at Montgomery College, Silver Spring, Md.[1] This series is intended to spur dialogue among state and institutional leaders and identify and disseminate policies and practices demonstrated effective in meeting the challenges mentioned above.

Many low-skill adults[2] with a secondary credential or less are not fully prepared for further education or employment. Career pathway bridge programs, which provide a combination of academic and occupational instruction, career guidance, and support services, are a common intervention intended to improve college and career readiness for such adults.

This brief describes recent approaches to bridge programs and explores promising practices that contextualize and/or integrate instruction and strengthen student support and transition services to improve students' rates of postsecondary transition and completion. It focuses exclusively on programs bridging adult education and community college occupational programs. Although some students may not have a secondary credential when entering bridge programs, a major goal of these programs is to enable students who lack a secondary credential to earn one during the program.

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[1] The other three briefs include Aligning Secondary and Postsecondary Education: Experiences From Career and Technical Education; Connecting Curriculum, Assessment, and Treatment in Developmental Education; and Integrating Industry-Driven Competencies in Education and Training Through Employer Engagement.

[2] Low-skill adults are individuals who lack the necessary skills and knowledge to succeed in postsecondary education and training, or meet the demands of the current labor market.

Education Challenges of Low-Skill Adults

Research on adults' literacy skills, education attainment, and experiences in secondary and adult education programs demonstrates a need to improve adults' literacy skills and highlights places along the path to postsecondary education where adults face difficulties in achieving their goals. Little is known, however, about how well low-skill adults, especially those enrolled in adult education programs, fare once they transition into postsecondary education or employment. General Educational Development (GED) test-takers, nontraditional college students, and low-income adults are often members of this population and can provide detail on the challenges facing low-skill adults.

Roughly 24 million U.S. adults aged 18–64 lack a high school credential (U.S. Census Bureau 2009). The National Assessment of Adult Literacy (NAAL) reported that 50 percent of adults with less than a high school credential have *below basic* literacy skills— those needed for such basic tasks as searching everyday texts and filling out common forms. An additional 33 percent are limited to "simple and everyday literacy activities" requiring *basic* literacy skills; adults with a GED or high school diploma fare slightly better, with 53 percent at *below basic* or *basic* prose literacy levels (Kutner, Greenberg, and Baer 2005, 15). Many of these adults will need to improve their skills to participate in the job training and middle-skill employment opportunities (those that require some form of specialized training or education beyond high school but less than a bachelor's degree) predicted for the future.

Postsecondary education, nonetheless, remains a common goal of many adult education students and GED test-takers (Patterson et al. 2010; U.S.

Department of Education 2007). Research findings on GED test-takers from 2004, 2005, and 2006 indicate that a goal of entering postsecondary education was key not only in their taking the test initially, but also in retesting when they failed the first time (Zhang and Patterson 2010).

Even for those who improve their skills or ultimately receive their GED, educational advancement and postsecondary degree completion is difficult (Patterson et al. 2010; Patterson 2010; Zhang 2010; Reder 2007). In a study of 2003 GED recipients, the researchers found that while 43 percent enrolled in postsecondary education within six years of obtaining their GED, only 12 percent eventually earned a postsecondary degree or credential within that period (Patterson et al. 2010; Patterson 2010). Likewise, according to a 2005 study that tracked adult basic education (ABE), English as a second language (ESL), and GED students over a five-year period in the Washington state community and technical college system, less than 30 percent of ABE and GED students and only 13 percent of ESL students took postsecondary courses. Ultimately, only 4 to 6 percent of these students received a certificate or earned 45 or more credits within five years of enrolling in postsecondary courses (Prince and Jenkins 2005).

Researchers also have examined several other factors that may influence the success of low-skill adults. These factors include first-generation status (students whose parents did not attend college); lack of transition support (e.g., peer and family support, assistance in balancing life responsibilities, and access to financial aid) (Reder 2007; Matus-Grossman and Gooden 2002); and nontraditional student characteristics (e.g., enrolling later in life and attending part-time) (Choy 2002; Horn and Carroll 1996).

Taken together, these studies reveal the disparity between adults' desire to enter postsecondary education and the preparation and support they may need to succeed in making that transition.

Bridge Programs

Many adult education programs and community colleges have responded to the need to improve low-skill adults' transition into postsecondary education and training by developing career pathway programs and, within these programs, bridge programs. Generally, career pathway programs are a "series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment within that sector" (Jenkins 2006, 6). Career pathways often include "stackable" credentials and accelerated courses offered at flexible times that support student entry and exit along the pathway.

Bridge programs, one of the first steps in a career pathway for low-skill adults, support the transition from adult education to the next step in an occupational pathway. By connecting adult education programs (including ABE, ESL, and adult secondary education [ASE]) to community college occupational programs, bridge programs seek to increase the rates at which low-skill adults move into college-level occupational programs, persist in these programs, and obtain postsecondary credentials in industries offering family-sustaining wages and career advancement.

Bridge programs target adults who meet the definitions for ABE, ASE, and ESL learners in the *Workforce Investment Act of 1998* (*WIA*). These are adults with assessed reading, writing, math, and English language skills below 12th-grade level, regardless of whether they have a high school credential.

In practice, bridge programs help adult students identify career and education goals and develop the skills, content knowledge, and learning strategies they need to enter and succeed in postsecondary education and employment. They combine basic skill instruction in reading, math, writing, and English language, including preparation for the GED test, with occupational content, employment skills, and college success strategies. Some bridge programs also offer college credit and certificates, which may be the first step toward a college degree. State and local labor market information is used to develop bridge programs focused on occupations or industry sectors with a high demand for employees (Jenkins 2006; Center for Law and Social Policy 2010).

Over the past decade, bridge programs have developed mainly in two ways: as part of local institutional efforts or state-led initiatives. Funds and direction for these efforts have come from a variety of state, foundation, and federally funded programs that seek to develop or identify promising, replicable practices. In many cases, community colleges and adult education programs partner to implement and test elements of bridge programs believed to help low-skill adults enter and persist in postsecondary education. In some initiatives, bridge programs have been funded with the intent of testing key services in

a state or local model; in other initiatives, grantees have been asked to develop bridge services without using a prescribed model.

Bridge programs are designed to address the needs of students with various occupational interests and skill levels. Some focus on specific occupational fields (e.g., Washington's Integrated Basic Education and Skills Training [I-BEST]) and are intended for students with specific postsecondary or occupational goals. Other bridge models (e.g., Oregon's Pathways

for Adult Basic Skills Transition to Education and Work Initiative [OPABS]) focus on broad introductory occupational content for students who are setting occupational goals. Each model includes some form of contextualized or integrated instruction (NIFL 2010; Perin 2011); support for career planning; and postsecondary success strategies (e.g., study skills, assistance with the college application and financial aid processes) that help students enter and succeed in college-level academic and occupational courses.

State Bridge Initiatives

The momentum behind career pathway bridge programs is evident in the variety of locally developed models, initiatives designed for statewide implementation, and existing models adapted by states in addition to Oregon. This section describes three states' bridge initiatives designed to accelerate basic skill development and postsecondary transition and to support degree attainment. Some components of bridge models are common across programs, although the level of specificity and implementation of these components may vary. The Appendix provides a description of key bridge program components, including supporting policy or guidance (table A-1), a definition of state-required core program elements (table A-2), and documentation on the variation in local implementation of the three models (table A-3).

All three examples have descriptive data and some outcome data available that document their effectiveness. Despite widespread interest in bridge programs and many descriptive reports available to the public, little empirical information is available on their effectiveness (Park, Ernst, and Kim 2007; Bragg et al. 2007; Valentine et al. 2009).

Integrated Basic Education and Skills Training Program (I-BEST)

I-BEST was developed by Washington state in response to multiple events. These included a new state plan for adult education; local experiments with integrated curriculum practices; and research by the Washington State Board for Community and Technical Colleges (SBCTC) and the Community College Research Center (CCRC) revealing an economic advantage, or "tipping point," for adult students with a secondary credential or less who earned at least one year of postsecondary-level credit and a certificate (Prince and Jenkins 2005). The findings of the SBCTC-CCRC study also revealed that few Washington ABE students advanced to postsecondary education.

Local programs' pilot tests of various instructional strategies aimed at increasing the rates at which adult education students transition into postsecondary courses led to the creation of I-BEST, which integrates basic skills instruction with a career and technical education (CTE) course for ABE students

taught by ABE and CTE faculty. The two-year pilot project led to a full-scale implementation of I-BEST in academic year 2007–08 across all 34 community and technical colleges in Washington.

Resources and Funding

Various resources have supported I-BEST since its inception. The Ford Foundation Bridges to Opportunity initiative provided funds for the research study that informed I-BEST development. SBCTC grants, using federal CTE funds and state adult education funds, supported the pilot-testing and fine-tuning of I-BEST components. Statewide implementation resources included professional development, small planning grants, and state general funds in the form of full-time equivalency (FTE) reimbursement at 1.75 times the normal rate. Local colleges leveraged various funding streams, such as WorkFirst and funding from local workforce development councils (Washington State's Workforce Investment Boards). Lastly, I-BEST is sustained with support from the enhanced FTE reimbursement rate (Cooper and Chadwick 2011).

State Policy

Research has shown that resource and policy alignment play an important role in career pathway development and long-term sustainability (Foster, Strawn, and Duke-Benfield 2011; Mazzeo et al. 2006; Center for Law and Social Policy 2010). As a result of the "tipping point" study (see above under I-BEST), there was a critical shift in Washington state policy. The study results reinforced the need for research and data-driven policy to be aligned with the state goal of creating a more robust, accessible community college system—one that moves all students, including adult education students, to the tipping point (Cooper and Chadwick 2011).

State staff also reported that state and local program administrators' views on student success shifted to a belief that the primary predictor of student success is what programs do, not what the student is missing, once getting through the college door (i.e., "Are we student-ready?" vs. "Are students college-ready?"). This includes understanding how adults learn, making instruction meaningful, and finding practices that move students further faster (Cooper and Chadwick 2011).

Policy and resource alignment have been important to the evolution and acceptance of I-BEST statewide. Alignment strategies included gaining buy-in for I-BEST from key legislators and local leaders early on. In turn, these individuals provided leadership and support when the legislature and Washington State Board for Community and Technical Colleges considered I-BEST-related policy decisions.

Further, new policies were developed and existing ones were enhanced to support co-teaching and student access. These policies include alignment with ABE and occupational content standards, enhanced FTE reimbursement for I-BEST students, and the Opportunity and WorkFirst Grants that provide financial assistance to low-skill, low-income, and part-time students. Finally, the Student Achievement Initiative (SAI)—a community college systemwide initiative using performance funding for student progress (at key places along the postsecondary path where students often lose momentum) to motivate changes in local practice (Shulock and Jenkins 2011)—complements the I-BEST model and supports the state's goals of increasing student access and achievement.

Instructional Approach

The primary instructional approach of I-BEST is an integrated ABE and CTE instructional planning process and co-teaching, at least 50 percent of the time, by ABE and CTE faculty. I-BEST courses integrate CTE content knowledge and standards with the basic academic skills and learning outcomes of adult education (i.e., reading, math, writing, speaking and listening in English). Programs also provide coordinated transition and support services that help students plan for and make a transition into work or further education along a defined pathway (Washington State Board for Community and Technical Colleges 2008).

Program Effectiveness

A recent analysis that examined both correlational and causal effects of I-BEST found that basic skills students enrolled in I-BEST courses were significantly more likely than their counterparts who did not take I-BEST courses to earn college credits, receive a certificate or degree, and make gains on basic skills tests (Zeidenberg, Cho, and Jenkins 2010). These results were similar to those of an earlier study (Jenkins, Zeidenberg, and Kienzl 2009), but the newer study included more comprehensive data—two years of cohort data over a three-year period—and explored the effects of the presence of I-BEST on student outcomes. Findings suggested that being enrolled in a college that offered I-BEST increased the likelihood that basic skills students would earn college credit and receive an occupational certificate within three years.

Oregon Pathways for Adult Basic Skills Transition to Education and Work (OPABS)

Oregon is using a systems approach to career pathways that grew out of the state's participation in the 2003–04

National Governors Association (NGA) Pathways to Advancement initiative. An interagency state team with members from education, labor, health and human services, and the governor's office developed a career pathways statewide initiative to increase the number of Oregonians with certificates, credentials, and degrees in high-demand fields. Using grants awarded by the Department of Community Colleges and Workforce Development (CCWD) in 2004, colleges have developed new practices, policy, staff training, and partnerships (WorkSource Oregon 2011).

In 2005, the CCWD's Oregon Pathways for Adult Basic Skills Transition to Education and Work Initiative (OPABS) provided the impetus for the state's Adult Basic Skills (ABS) system to incorporate career pathways. The intent was to provide the basic skills system with high-quality services and processes that facilitate ABS learners' transition into further education and employment and include formal connections to postsecondary education and One-Stop Career Centers. The initiative proposed three types of activities: curriculum development, pilot testing, implementation, and dissemination; program enhancement; and development of coordination among ABS, postsecondary education, and One-Stop Centers.

Resources and Funding

Funds for developing and testing the OPABS model included state general funds through the CCWD Commissioner's Strategic Fund and federal *WIA* Incentive Funds and Title II State Leadership Funds. The funds for statewide dissemination include CCWD Strategic Funds and federal *WIA* Title II State Leadership Funds. Oregon also has received a planning grant from the ABE to Credentials initiative, administered by Jobs for the Future, with funds from the Bill & Melinda Gates Foundation, which will help advance OPABS (Moore 2011).

Other Bridge Efforts

Many states and local programs are engaged in various bridge efforts that include foundation-funded activities, such as the Jobs for the Future (JFF) Breaking Through and ABE to Credentials initiatives (http://www.jff.org/projects/current/education/abe-credentials/1172); the Joyce Foundation Shifting Gears initiative (http://www.shifting-gears.org); and the Nellie Mae Education Foundation New England ABE-to-College Transition project—in collaboration with the New England Literacy Resource Center at World Education, Inc. (http://www.collegetransition.org). Federally funded initiatives include ABE Career Connections and Policy to Performance (www.ed.gov/about/offices/list/ovae/pi/AdultEd/resources.html).

State Policy

State policies have supported the development and implementation of OPABS. CCWD's career pathways grants now require that both postsecondary and ABS faculty be involved in developing career pathways and bridge programs. Other policies and guidance include required professional development for all faculty teaching OPABS courses to ensure consistent implementation; the use of CASAS criterion levels used to place learners in OPABS courses; and required collection of data on learner pre-and post-tests, attendance, learner OPABS course evaluations, and faculty course implementation logs.

To inform the ongoing improvement and statewide implementation of OPABS, Oregon plans to form an OPABS advisory group composed of OPABS teachers and administrators, representatives from the state career pathways initiative and the workforce system, state ABS staff, and the OPABS evaluator. Currently, 11 of the state's 17 ABS programs are implementing OPABS (Bagwell 2011).

Instructional Approach

To support the instruction provided in OPABS, ABS program services are enhanced to facilitate learners' orientation, assessment, and placement into classes;

access to advising and support services; connection to One-Stop Centers; and enrollment in postsecondary courses. The OPABS instructional model involves a set of standardized basic skills courses contextualized with CTE content, and includes lesson plans, scope and sequence, and learner and teacher materials. Complementary standardized modules providing college and career awareness and student-advising and transition services are also offered (Alamprese 2010).

Program Effectiveness

State staff report that a student cohort model, a clear understanding of the commitment involved in a bridge program, and the College and Career Awareness course are all critical to students' persistence in the program. They also indicate that some programs have independently developed strategies (e.g., weekly cohort meetings) to continue supporting students once they have started postsecondary courses (Bagwell 2011).

Preliminary evidence indicates that adults participating in OPABS academically enhanced basic skills courses identify a career path, develop their basic skills, and transition to postsecondary transfer-credit courses at the same or faster rates as adults in non-OPABS courses (Alamprese 2011).

Illinois Adult Education Bridge Initiative

Participation in the 2007 Shifting Gears initiative, which supported state policy changes to reduce education and employment barriers for low-skill adults, led Illinois to use a multiphase approach for advancing bridge programs. In the initial development phase, Shifting Gears 1.0 (SG 1.0), 10 programs participated in developing and testing bridge programs to help students move successfully into credit-bearing postsecondary education and training. State participation in the initiative led to developing a formal state definition for bridge programs that includes contextualized curriculum with occupation-specific content, career development, and transition services. An SG 1.0 evaluation report describes bridge program implementation across programs using these core components and design considerations for scaling up (Bragg et al. 2009). Phase 2.0 focused on further implementing and refining these core components, along with others (e.g., collaborative partnerships, bridge champion, transition coordinator, and bridge technology) key to student success. Illinois is now increasing its efforts and encouraging statewide implementation of the bridge model.

Resources and Funding

Original funds for Illinois' bridge initiative, or SG 1.0, came from the Joyce Foundation Shifting Gears initiative. Additional support and matching funds came from the Department of Commerce and Economic Opportunity (DCEO), and the Illinois Community College Board (ICCB) provided leadership. Funding for statewide implementation includes federal *WIA* Incentive and Title II funds (Bragg et al. 2009). Illinois also has received a planning grant from the ABE to Credentials initiative, administered by Jobs for the Future, with funding from the Bill & Melinda Gates Foundation, which will assist in advancing the state's bridge initiative (Foster 2011).

State Policy

Policy change in Illinois is connected strategically to two other state priorities—the Critical Skills Shortage Initiative (CSSI), focusing on the same industry sectors, and the programs of study required by the *Carl D. Perkins Career and Technical Education Act of 2006* (*Perkins*), incorporating academic and career and technical education content. Initial policy steps included developing a state bridge definition and implementing a state bridge model. During early implementation, the intent of Illinois bridge programs was to "combine resources, shape policy, and carry out practices to assist adult learners to move beyond ABE, ASE, and ESL programs" (Oertle et al. 2010, 2). These practices include issuing local policy guidance on how federal and state adult education funds can be used to support bridge programs; redefining Illinois' *WIA* training to include bridge programs; incorporating new performance measures into state data systems to track bridge program effectiveness; and a new "Adult Basic Education Strategic Vision" emphasizing creation of career pathways for adult education students that connect to postsecondary education and CTE (Strawn 2010). Currently, Illinois is engaged in further aligning bridge-related policy, especially between state and local programs, institutionalizing bridge practices, and strengthening state and local data systems to track student outcomes (Foster 2011).

Instructional Approach

Illinois' bridge model requires programs to incorporate CTE content into basic skills courses and provide contextualized instruction in traditional ABE classrooms, through blended online instruction or in co-teaching settings. Programs also provide career

development and transition services that help students navigate the path to credit-bearing course work (Illinois Community College Board 2009).

Program Effectiveness

Building on an earlier evaluation of pilot efforts, a 2010 evaluation of Illinois adult education bridge programs examined program implementation characteristics and collaborations, alignment with Illinois' bridge definition, policy and program challenges, outcome measures and data collection, and emerging promising practices (Oertle et al. 2010). Recommendations include the need to further delineate bridge levels (i.e., the current definition, encompassing 6th through 12th grade-level equivalency, is too broad); the need to acknowledge other core elements (e.g., student cohorts, learning communities, accelerated instruction) evident in state sites; the critical need for faculty professional development to ensure quality instruction; consistent and informative ways to measure student progress; and clear expectations of funding and long-term sustainability.

The two primary outcomes explored in a 2011 analysis of nine adult bridge programs are bridge completion and National Reporting System (NRS) educational functional-level gains based on change in pre- to post-test scores (Taylor and Bragg forthcoming 2011). Preliminary analysis show that about 68 percent of students in the nine programs completed the bridge course and roughly 62 percent of students (who had taken a pre- and post-test and had the potential for one or more level gains) achieved such gains. Students scoring at the ABE Beginning and Intermediate levels on the pre-test were more likely to have made one or more level gain than students scoring higher at the next level, which is ASE Low.

Discussion

Early data suggest that career pathway bridge programs may be a promising, practical strategy for helping low-skill adults reach their postsecondary education and employment goals. These programs also may enable federal and state education systems to meet their goals and address the nation's economic and labor market challenges.

The three states highlighted in this brief envision their bridge initiatives as vehicles for transforming their adult education systems. Each state initiative has clearly defined program components; targeted professional development; and a multiyear period for development, implementation, and refinement. All three have recognized the importance of measuring short- and long-term student and program outcomes, as well as the need for a data system that can monitor student progress and follow-up.

Consensus is emerging that the key elements of a bridge program should include coordination among ABE, postsecondary education, and workforce development staff; a contextualized and/or integrated academic component; a career- and college-awareness component; and advising and transition services. A key consideration in implementing these elements is the need for flexibility in customizing services to meet local needs. State and local experiences in designing and implementing bridge programs offer lessons for others seeking to create or expand these services.

Planning

- Short- and long-term success requires time, collaboration, and significant planning with the use of data. Institutions can build a strong foundation for new services by convening an advisory or planning group that includes appropriate staff (i.e., senior leadership, adult education staff, community college CTE staff, employers, student services providers, and employment services staff) to support the program coordinator and participate in all stages of design, implementation, and modification.

- Institutions can develop bridge programs as part of specific career pathways demonstrating connections among skill levels, education programs and outcomes, employment opportunities, and a long-term education and career path.

- States can address the potentially higher costs of bridge courses by rethinking how courses could be classified or reimbursed for FTE purposes.

Policy

- Institutions can clearly define the target population and program expectations required for student success. The target population, defined by both students' skill levels and career goals and experience, may affect the design of the service components. Programs need flexibility to configure program components to meet the needs of the target population.

- States and institutions can use internal and external professional development resources (e.g., online modules, inter- and intra-institution mentors and learning communities, state workshops) to improve instructors' abilities to integrate academic and occupational curriculum and deliver contextualized instruction.

- States can review their policies and guidance governing services to identify ways to support the development and scaling-up of bridge programs and strategies for removing policy barriers. These strategies may include adult education, *Perkins, WIA,* dual enrollment, financial aid, federal ability-to-benefit criteria, professional development, and data accountability systems.

Instruction

- Institutions can increase student access to postsecondary programs and articulation among programs in different locations by creating flexible, integrated instructional programs. Contextualized curricula that accelerate learning and award college credit also provide students with incentives to enroll and persist.

Ongoing continuous improvement

- States and institutions can use local and state-level data to define the problem they wish to address through a bridge model and identify implementation data elements that will inform both the design and effectiveness of the bridge strategy.

- States and institutions can use data to analyze student progress and success as well as to continuously improve programs. States also should consider ensuring that bridge program data are included in state efforts to build comprehensive data systems linking secondary, adult, and postsecondary education data.

The long-term success of bridge programs may depend on the ability of the adult education system to transform the way that services are designed, funded, and delivered (so that bridge programs are not viewed as an add-on for only a subpopulation of students). Similarly, their success may depend on community colleges recognizing adult education students as credible postsecondary candidates and adult education programs as viable partners in the postsecondary education system. In the meantime, the availability of evaluation data to help guide states and institutions in designing and delivering bridge programs would be invaluable to implementing them.

References

Alamprese, Judith A. 2007. *Summary of Approach to Developing OPABS Courses and Definitions of Lesson Plan Elements*. Bethesda, MD: Abt Associates Inc.

Alamprese, Judith A. 2010. *Oregon Pathways for Adult Basic Skills Transition to Education and Work: Initiative Description*. Bethesda, MD: Abt Associates Inc.

Alamprese, Judith A. Principal Associate, Abt Associates Inc. Correspondence with Kristen Kulongoski. 2011, Feb.7.

Bagwell, Mary Jane, State Director, Oregon Adult Basic Skills. Interview by Kristen Kulongoski. 2011, March 25.

Bragg, Debra D., Christine D. Bremer, Marisa Castellano, Catherine Kirby, Ann Mavis, Donna Schaad, and Judith Sunderman. 2007. *A Cross-Case Analysis of Career Pathway Programs That Link Low-Skilled Adults to Family-Sustaining Wage Careers*. St. Paul, MN: National Research Center for Career and Technical Education, University of Minnesota.

Bragg, Debra D., Timothy Harmon, Catherine Kirby, and Sujung Kim. 2009. *Initial Results of Illinois' Shifting Gears Pilot Demonstration Evaluation*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

CASAS. 2011. *Comprehensive Adult Student Assessment Systems*. Accessed March 21, 2011. https://www.casas.org/home/.

Center for Law and Social Policy. 2010. *Funding Career Pathways and Career Pathway Bridges: A Federal Policy Toolkit for States*. Washington, DC: Author.

Choy, Susan. 2002. *Nontraditional Undergraduates*. NCES 2002-012. Washington, DC: National Center for Education Statistics, U.S. Department of Education.

Cooper, Kathy, Policy Associate, and John Chadwick, I-BEST Coordinator, Washington Adult Basic Skills. Interview by Kristen Kulongoski. 2011, March 22.

Foster, Jennifer, Senior Director for Illinois Adult Education and Family Literacy. Interview by Kristen Kulongoski. 2011, April 19.

Foster, Marcie, Julie Strawn, and Amy Ellen Duke-Benfield. 2011. *Beyond Basic Skills: State Strategies to Connect Low-Skilled Students to an Employer-Valued Postsecondary Education*. Washington, DC: Center for Law and Social Policy.

Horn, Laura and C. Dennis Carroll. 1996. *Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence and Attainment Among 1989-90 Beginning Postsecondary Students*. NCES 97-578. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Illinois Community College Board. 2009. *Request for Proposal - FY 2010 Adult Education Bridge Program Development Project*. Accessed March 25, 2011. http://www.iccb.state.il.us/bridge.documents.html.

Illinois Community College Board. 2011. *ABE to Credentials Illinois Application*. Accessed June 23, 2011. http://www.iccb.state.il.us/abe.to.credentials.html

Jenkins, Davis. 2006. *Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy*. Brooklyn, NY: Workforce Strategy Center.

Jenkins, Davis, Matthew Zeidenberg, and Gregory Kienzl. 2009. *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*. New York: Community College Research Center, Teachers College, Columbia University.

Kutner, Mark, Elizabeth Greenberg, and Justin Baer. 2005. *National Assessment of Adult Literacy (NAAL): A First Look at the Literacy of America's Adults in the 21st Century.* NCES 2006-470. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Matus-Grossman, Lisa, and Susan Gooden. 2002. *Opening Doors: Students' Perspectives on Juggling Work, Family, and College.* New York: MDRC.

Mazzeo, Christopher, Brandon Roberts, Christopher Spence, and Julie Strawn. 2006. *Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity.* Brooklyn, NY: Workforce Strategy Center.

Moore, David P., Education Division Director, Oregon Department of Community Colleges and Workforce Development. Email correspondence with Kristen Kulongoski. 2011, Feb. 22.

National Institute for Literacy (NIFL). 2010. *Integrating Curriculum: Lessons for Adult Education from Career and Technical Education.* Washington, DC: Author.

Obama, Barack. 2009. *Remarks of President Barack Obama—As Prepared for Delivery Address to Joint Session of Congress Tuesday, February 24, 2009.* Accessed April 4, 2011. http://www.whitehouse.gov/the_press_office/ Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress/.

Oertle, Kathleen M., Sujung Kim, Jason L. Taylor, Debra D. Bragg, and Timothy Harmon. 2010. *Illinois Adult Education Bridge Evaluation: Technical Report.* Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

Park, Rosemarie J., Stacey Ernst, and Eunyoung Kim. 2007. *Moving Beyond the GED: Low-Skilled Adult Transition to Occupational Pathways at Community Colleges Leading to Family-Supporting Careers.* St. Paul, MN: National Research Center for Career and Technical Education, University of Minnesota.

Patterson, Margaret B. 2010. *GED® Tests Passers in Postsecondary Institutions of Up to Two Years: Enrollment and Graduation Patterns.* Washington, DC: GED Testing Service.

Patterson, Margaret B., Jizhi Zhang, Wei Song, and Anne Guison-Dowdy. 2010. *Crossing the Bridge: GED Credentials and Postsecondary Education Outcomes.* Washington, DC: GED Testing Service.

Perin, Dolores. 2011. *Facilitating Student Learning Through Contextualization.* (CCRC Working Paper No. 29). New York: Community College Research Center, Teachers College, Columbia Univeristy.

Prince, David, and Davis Jenkins. 2005. *Building Pathways to Success for Low-Skill Adult Students: Lessons for Community College Policy and Practice from a Statewide Longitudinal Tracking Study.* New York: Community College Research Center, Teachers College, Columbia University.

Reder, Stephen. 2007. *Adult Education and Postsecondary Success.* New York: Council for Advancement of Adult Literacy.

Shulock, Nancy, and Davis Jenkins. 2011. *Performance Incentives to Improve Community College Completion: Learning from Washington State's Student Achievement Initiative.* Sacramento, CA: Institute for Higher Education Leadership and Policy, California State University, Sacramento.

Strawn, Julie. 2010. *Shifting Gears: State Innovations to Advance Workers and the Economy in the Midwest.* Chicago, IL: The Joyce Foundation.

Taylor, Jason L., and Debra D. Bragg. Forthcoming 2011. I*mmediate Student Outcomes of Adult Education Bridge Programs in Illinois.* Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

U.S. Census Bureau, Current Population Survey. 2009. *Annual Social and Economic Supplement.* Washington, DC: Author.

U.S. Department of Education, Office of Vocational and Adult Education. 2007. *Adult Education Annual Report to Congress Year 2004–05.* Washington, DC: Author.

Valentine, Jeffrey C., Amy S. Hirschy, Christine D. Bremer, Walter Novillo, Marisa Castellano, and Aaron Banister. 2009. *Systematic Reviews of Research: Postsecondary Transitions - Identifying Effective Models and Practices.* Louisville, KY: National Research Center for Career and Technical Education, University of Louisville.

Wachen, John, Davis Jenkins, and Michelle Van Noy. 2010. *How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program.* New York: Community College Research Center, Teachers College, Columbia University.

Washington State Board for Community and Technical Colleges. 2008. *Application and Guidelines Combined: 2008 Integrated Basic Education and Skills Training (I-BEST).* Accessed Feb. 25, 2011. http://www.sbctc.ctc.edu/college/ e_integratedbasiceducationandskillstraining.aspx.

Washington State Board for Community and Technical Colleges. n.d. *Create Your Own I-BEST Program.* Accessed June 21, 2011. http://www.sbctc.ctc.edu/college/_e-ibestcreateyourownprogram.aspx.

WorkSource Oregon. 2011. *Career Pathways.* Accessed March 25, 2011 http://www.worksourceoregon.org/ index.php/career-pathways.

Zeidenberg, Matthew, Sung-Woo Cho, and Davis Jenkins. 2010. *Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness.* New York: Community College Research Center, Teachers College, Columbia University.

Zhang, Jizhi. 2010. *From GED Credential to College: Patterns of Participation in Postsecondary Education Programs.* Washington, DC: GED Testing Service.

Zhang, Jizhi, and Margaret B. Patterson. 2010. *Repeat GED Tests Examinees: Who Persists and Who Passes?* Washington, DC: GED Testing Service.

Appendix

Table A-1. Supporting policy or guidance of state bridge initiatives, by selected component and featured state

Supporting policy or guidance	Washington I-BEST	Oregon OPABS	Illinois AEBI
Criteria for target population	Students qualifying for federally funded adult education services. • These are adults with assessed reading, writing, math, and English language skills below the 12th-grade level.	Students qualifying for federally funded adult education services. • NRS ABE High Intermediate level (6th- to 8th-grade reading or math levels). • Or NRS ASE levels (9th- to 12th-grade reading or math levels).	Students qualifying for federally funded adult education services. • NRS ABE High Intermediate level (6th- to 8th-grade reading or math levels). • Or NRS ASE levels (9th- to 12th-grade reading or math levels). • Or ESL Intermediate level and above.
Data collection/ program evaluation	Students are pre- and post-tested with state-approved assessment instruments. • CASAS assessment in reading, math, or listening for ESL learners (CASAS 2011). Student progress is evaluated using system-wide data, such as student characteristics, program enrollment and completion data, postsecondary-level data, and state-level data. Sample measures include: • NRS measures, including GED attainment, placement in postsecondary education, and placement and retention in employment. • Students who earned workforce certificates (credentials) or attained (non-credential) skill levels recognized by the institution as a completion point. • Postsecondary-level credits attempted and earned, and college- level certificates or credentials earned. • I-BEST student grade point averages.	Students are pre- and post-tested with state-approved assessment instruments. • CASAS assessment in reading and/or math. Student progress is evaluated using system-wide data, such as student characteristics, program enrollment and completion data, postsecondary-level data, and state-level data. Instructor implementation data are collected to monitor the fidelity and use of the OPABS courses. Data also provide feedback on the use of standardized lesson plans and the occupational contextualization of the courses. Annual instructor surveys are administered to track instructors' changes in instructional content and methods. Post-course standardized evaluations are collected from learners to assess their perceptions of the utility of the courses.	Students are pre- and post-tested with state-approved assessment instruments. • TABE, CELSA, or BEST Plus assessments. Student progress is evaluated using system-wide data, such as student characteristics, program enrollment and completion data, postsecondary-level data, and state-level data. *Short-term measures* • Higher numbers of low-income working adults enroll in postsecondary education. • Bridge program graduates who enroll in credit programs will succeed in their courses. *Long-term measures* • Higher proportion of low-income working adults attain degrees and/or certificates. • Higher proportion of ABE, GED, ASE, ESL, and developmental education students transition into and complete an associate's degree and/or certificate program. • Increased earnings and job quality for low-income adults engaged in career pathways work.

See notes at end of table.

Table A-1. Supporting policy or guidance of state bridge initiatives, by selected component and featured state—cont.

Supporting policy or guidance	Washington I-BEST	Oregon OPABS	Illinois AEBI
Professional development	Optional state-sponsored as well as inter/intra-institutional professional development is provided, including state workshops and conferences, online modules and other resources, mentoring, and learning communities.	Required professional development workshops prepare ABS faculty to teach OPABS courses and advising modules and integrate additional occupational information into courses.	Optional state-sponsored professional development is provided, including a recently developed Bridge Training Workshop (three-day training with intensive technical assistance).

NOTE: The following abbreviations were used in this table: National Reporting System (NRS); Adult Basic Education (ABE); Adult Secondary Education (ASE); English as a Second Language (ESL); General Educational Development (GED); Comprehensive Adult Student Assessment System (CASAS); Test for Adult Basic Education (TABE); Combined English Language Skills Assessment (CELSA); Basic English Skills Test (BEST Plus); Integrated Basic Education and Skills Training Program (I-BEST); Oregon Pathways for Adult Basic Skills Transition to Education and Work (OPABS); Adult Education Bridge Initiative (AEBI).
SOURCE: Washington State Board for Community and Technical Colleges 2008, n.d.; Wachen, Jenkins, and Van Noy 2010; Alamprese 2007, 2010, 2011; Illinois Community College Board 2009, 2011.

Table A-2. Definitions of core program elements of state bridge programs, by featured state

Core program elements	Washington I-BEST	Oregon OPABS	Illinois AEBI
Planning process	A required collaborative planning process includes adult education programs, community colleges, local and regional businesses, labor, community-based organizations (CBOs), and employment services. Programs must focus on occupations and sectors in demand locally that provide high wages, as supported by local data on the number of job openings and wages. The most common I-BEST programs (88 percent) focus on health-care, manufacturing, education, and business. Courses must build toward certificates and/or degrees and prepare students for employment. Courses must form a clearly articulated career pathway.	A required collaborative planning process includes ABS faculty, CTE faculty, student services staff, and One-Stop Center staff. Standardized OPABS programs focus on Oregon's high-demand occupations: health services, industrial and engineering systems, and business and management.	A required collaborative planning process includes the adult education program, the community college, and/or employers and specifies the role of each partner and the services that each will provide. Programs may focus on one of the following state-identified industry/ occupational sectors: healthcare, manufacturing, or transportation, distribution, and logistics. The bridge program must prepare students to enter credit-bearing courses and programs within one of the 16 nationally recognized career clusters.
Curriculum development	Locally developed contextualized and integrated curriculum. ABE and CTE faculty partner to develop a joint program of instruction including integrated learning outcomes encompassing all Washington ABE Learning Standards and relevant CTE skills standards.	Standardized set of contextualized courses. Six academically accelerated basic skills courses in reading, math, and writing are aligned to the skill requirements of postsecondary, entry-level CTE courses and state ABS Learning Standards. Three of the two-term courses are at the bridge level (ASE levels), and three are at the pre-bridge (High Intermediate) level.	Locally developed contextualized curriculum. Course content must contain the knowledge and skills needed for entry-level occupations within a broad cluster, as well as career information and planning. Alignment with recently revised state ABE/ASE and ESL content standards will be required in the near future.
Instruction	Faculty from ABE and CTE are involved in the delivery of instruction, with a minimum of 50 percent co-teaching required in the integrated CTE courses. Integrated CTE courses are supported by an additional ABE course focused on both content reinforcement and basic skills improvement.	ABE faculty instruction is based on standardized lesson plans that follow a scope and sequence and include instructor and learner materials.	Contextualized instructional delivery by ABE faculty may include traditional classroom activities, a blended online approach, and co-teaching. Instruction is structured in short-term, intensive modules offered at times convenient to adult students' schedules.

See notes at end of table.

Table A-2. Definitions of core program elements of state bridge programs, by featured state—cont.

Core program elements	Washington I-BEST	Oregon OPABS	Illinois AEBI
Career and college awareness	Coordination among college departments is required to identify student success strategies (e.g., acquiring financial aid, participating in career/education planning, mitigating barriers, navigating college systems, etc.).	A required Career and College Awareness course—a two-term reading course spanning the pre-bridge and bridge levels—provides information about local labor markets and the educational requirements of jobs in these markets. The course leads learners through an exploration of their skills, interests, and educational and work background to help them prepare a career pathway plan for further education and work.	A required career development component includes career exploration, planning within a career area, and learning about the world of work.
Advising and transition services	Required transition strategies help students move to the next program level, whether that includes work or the next academic program (e.g., career pathway planning, financial aid assistance, and academic support).	Three required two-hour pre-college advising modules—College Application Process, Placement Testing, and Financial Aid—prepare learners to begin the college admissions process.	Required transition services provide college and career information and assistance to allow students to navigate the transition process successfully. Strategies target student recruitment, retention, support services, and transition.

NOTE: The following abbreviations were used in this table: Integrated Basic Education and Skills Training Program (I-BEST); Oregon Pathways for Adult Basic Skills Transition to Education and Work (OPABS); Adult Education Bridge Initiative (AEBI); Adult Basic Skills (ABS); Career and Technical Education (CTE); Adult Basic Education (ABE); Adult Secondary Education (ASE); English as a Second Language (ESL).
SOURCE: Washington State Board for Community and Technical Colleges 2008; Wachen, Jenkins, and Van Noy 2010; Alamprese 2007, 2010; Ilinois Community College Board 2009, 2011.

Table A-3. Variations of local implementation of state bridge initiatives, by featured state

Local implementation variations	Washington I-BEST	Oregon OPABS	Illinois AEBI
Program design	Program length typically spans one to four quarters, with a very small number of programs requiring more than four quarters. Seventy-nine percent of I-BEST programs are three quarters or less in length. The length of programs also varies by field of study and college.	While ABS programs have flexibility in the number and types of OPABS courses taught during an academic year, programs implementing OPABS are expected to offer, at minimum, the Career and College Awareness course concurrently with a bridge or pre-bridge course. This combination of courses guides learners in preparing an initial career pathway plan, while developing their basic skills for transition to further education or work. Programs also are expected to offer both terms of the two-term courses.	Program design options include a single course (for higher-level students) that transitions students into credit-bearing courses or a series of courses in which students complete a lower-level bridge course that prepares them to enter a noncredit or credit occupational course, or program leading to an entry-level job. This second approach allows students to stop out for work and return to a higher-level bridge course without having to repeat content.
Curriculum development/ instruction	Levels of integrated instruction (four models listed below), incorporating both basic skills and professional technical content, vary across programs and institutions. Four instructional models were documented in a recent qualitative study (Wachen, Jenkins, and Van Noy 2010) evaluating the effectiveness of the I-BEST program: (1) non-integrated instruction; (2) non-integrated instruction with separate, contextualized basic skills instruction; (3) partially integrated instruction; and (4) fully integrated instruction. Student population varies by course among colleges. Twenty-seven colleges reported filling I-BEST courses with both I-BEST and non-I-BEST students, a result of limited I-BEST enrollment and as a learning strategy in which higher-skill students support lower-skill students. Some colleges also fill I-BEST courses only with I-BEST students.	While OPABS courses are standardized in terms of lesson plans that follow a scope and sequence and include instructor and learner materials, ABS faculty have flexibility in the use of additional materials and resources to supplement the OPABS courses (e.g., inviting guest speakers to discuss high-demand careers and courses required for these careers). These activities link the courses directly to individual college career pathways. Some ABS programs have formed cohorts of ABS learners, in which the same learners are enrolled in the multiple OPABS courses (i.e., basic skills courses, College and Career Awareness course, advising module) over two terms. The use of cohorts creates a natural learning community of ABS learners who support each other in developing a career pathway plan and making the transition from ABS to postsecondary courses.	Levels of curriculum and instructional integration vary among programs. Integration of technology varies among programs, including the use of computers and software, Web-based instruction, Internet research, and industry-specific tools.

See notes at end of table.

Table A-3. Variations of local implementation of state bridge initiatives, by featured state—cont.

Local implementation variations	Washington I-BEST	Oregon OPABS	Illinois AEBI
Career and college awareness/ advising and transition services	The breadth and intensity of student support services vary among I-BEST programs and colleges. Types of services include traditional student support services (i.e., counseling, financial aid planning, academic advising), pre- and post-assessment, program screening, career planning and employment assistance, and pre-I-BEST programs for adults with fewer skills. Staff providing support services also varied among colleges, from a dedicated I-BEST coordinator or case manager to instructors and traditional support services personnel.	See above under Curriculum development/instruction.	Career exploration and development strategies are diverse and extensive among programs, as are the format and implementation of formal Individual Career Plans (ICP). Practices include integrated career exploration as part of the curriculum. Transition services vary by staff providing them (e.g., program coordinator, instructor, or a separate transition coordinator or case manager), types of transition services (e.g., guest speakers, child care, tutoring, flyers, mentors, workshops), format (e.g., individual or group advising), and strategy focus (e.g., recruitment, retention, support services, or transition to postsecondary).
College credit and/or credentialing	Programs vary in the amount of college credit and type of certificate and/or credential offered upon successful completion of the program.	College credit is not yet provided, but the state will be piloting college credit/credentialing this fall.	Programs vary in the amount of college credit and type of certificate and/or credential they offer. Programs may offer dual enrollment in credit and noncredit programs.
Other elements with variation	**Student Recruitment** To promote greater student success in I-BEST, programs have defined additional academic (e.g., minimum CASAS scores, minimum number of GED tests completed) and personal (e.g., preparedness, background checks) eligibility requirements beyond the state requirement of a CASAS score of 256 or below. Student recruitment and program entry points vary among programs and include referrals from adult education programs, programs within the college (e.g., CTE programs, workforce grant programs, TRIO), and partnerships outside the college (e.g., CBOs, workforce partners, businesses).		**Planning Process** Approaches to building partnerships vary among programs and depend on the location of the adult education program (i.e., community college, community-based organization, local education agency) and involvement of local businesses.

NOTE: The following abbreviations were used in this table: Integrated Basic Education and Skills Training Program (I-BEST); Oregon Pathways for Adult Basic Skills Transition to Education and Work (OPABS); Adult Education Bridge Initiative (AEBI); Adult Basic Skills (ABS); Career and Technical Education (CTE); General Educational Development (GED); Comprehensive Adult Student Assessment System (CASAS); community-based organizations (CBOs).
SOURCE: Wachen, Jenkins, and Van Noy 2010; Alamprese 2007, 2010, 2011; Bagwell 2011; Illinois Community College Board 2009; Oertle et al. 2010.

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