

TRAISALIGATS

Issue 4 — April 2011

ILLINOIS ADULT EDUCATION BRIDGES: PROMISING PRACTICES

Debra Bragg, Kathleen Marie Oertle, Sujung Kim, Catherine Kirby, Jason Taylor, Tim Harmon, & Loralea Liss

The Challenge

At a time when postsecondary education plays an increasingly important role in preparing the workforce, it is disconcerting that such a sizeable proportion of the U.S. population is not prepared to enter college. Obtaining a high school diploma or a General Education Development (GED) certificate is the first step. A 2008 study conducted by the American Council on Education (ACE) (2009) reports that almost 40 million U.S. adults aged 16 and older are without any high school level credentials. Much attention is paid to the academic preparedness and transition rates of students who enter college directly from high school, but less is known about GED credential recipients' participation in education beyond the GED (Zhang, 2010). The 2009 ACE report mentions that more than 17 million adults have passed the GED test since 1942, but existing research consistently shows very low participation by GED holders in postsecondary education. Carnevale, Smith and Strohl (2010) contend that some form of postsecondary credential will be required for 64% of the new jobs created from 2008 to 2018. At a time when "90% of the fastest-growing jobs will require postsecondary education or training" (Connell, 2008, p. 5), it is becoming increasingly evident that many Americans are unprepared to fill these positions. Further, with a national unemployment rate of just under 9% (Bureau of Labor Statistics, US Department of Labor, 2011), strategies that assist adults to transition into college are important to the nation's economic recovery (Carnevale, et. al, 2010).

In light of these economic circumstances and the dramatic impact on individuals and families, it is critical that adults receive access to educational opportunities that assist them in finishing their secondary education and preparing them for and connecting them to postsecondary education. Policy, practice, and planning efforts should be directed at transitioning students through the educational system and helping them to secure gainful employment, build productive careers, and improve their overall quality of life (Lekes et al, 2007; Oertle & Trach, 2007; Will, 1983; Wittenburg, Golden, & Fishman, 2002).

The Bridge Framework

To enhance state-level adult education and employment policy, in 2007 the Joyce Foundation began the Shifting Gears (SG) initiative (see http://www.shifting-gears.org) to assist six states (Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin) to integrate adult education, workforce development and postsecondary education policies and improve job opportunities for low-skilled workers. SG seeks to make systemic policy changes that, in turn, enhance the educational and economic circumstances of adults with limited



education and occupational skills (Price & Roberts, 2009). Policy change is dedicated to strengthening the educational pipeline, including Adult Basic Education (ABE), Adult Secondary Education (ASE), and English as a Second Language (ESL); and postsecondary education and workforce education and training associated with Title I of the Workforce Investment Act (WIA). With funding from Joyce and with leadership from the Illinois Community College Board (ICCB) and the Department of Commerce and Economic Opportunity (DCEO), Illinois' SG initiative connects multiple state training and retraining programs, P-20 education, and workforce development.

Bridge programs are a centerpiece of Illinois' SG effort, and build upon the definition (see http://occrl.illinois.edu/files/Projects/shifting_gears/Bridge%20Definition.pdf) of bridge programs that focuses on enhancing transition to college for adults with limited skills, including three core elements of contextualized instruction, career development, and transition services (ICCB, 2009). Adult bridges in Illinois attempt to prepare adults "to enter and succeed in credit-bearing postsecondary programs, thus leading to career-path employment in high-demand, middle- and high-skilled jobs" (Price & Roberts, 2009, p. 11). Findings from the evaluation of Illinois' SG pilot sites, conducted by the Office of Community College Research and Leadership, show that adult bridge programs offer preparatory courses intended to help students transition to postsecondary education, job-related specific training, and employment (Bragg, Harmon, Kirby, & Kim, 2009). Initial results of this evaluation of bridge programs funded by Shifting Gears showed higher completion of the bridge program by students in the developmental education bridge than the adult education bridge programs. However, students in developmental bridges had graduated from high school and possessed stronger academic preparation than their adult bridge counterparts. (The lack of access to student unit record level data precluded us from conducting an analysis that was controlled by demographic and other individual differences.)

BRIDGE DEFINITION AND CORE ELEMENTS

Bridge programs prepare adults with limited academic or limited English skills to enter and succeed in credit-bearing postsecondary education and training leading to career-path employment in high-demand, middle- and high-skilled occupations. The goal of bridge programs is to sequentially bridge the gap between the initial skills of individuals and what they need to enter and succeed in postsecondary education and career-path employment.

CORE ELEMENTS

Bridge programs assist students in obtaining the necessary academic, employability, and technical skills through three required components—contextualized instruction, career development, and support services. Required elements include:

- Contextualized instruction that integrates basic reading, math, and language skills and industry/occupation knowledge.
- Career development that includes career exploration, career planning within a career area, and understanding the world of work (specific elements depend upon the level of the bridge program and on whether participants are already incumbent workers in the specific field).
- Transition services that provide students with the information and assistance they need to successfully navigate the process of moving from adult education or remedial coursework to credit or occupational programs. Services may include (as needed and available) academic advising, tutoring, study skills, coaching, and referrals to individual support services, e.g., transportation and child care.

Note: Career development and transition services should take into account the needs of those low-income adults who will need to find related work as they progress in their education and career paths.

http://occrl.illinois.edu/files/Projects/shifting_gears/Bridge%20Definition.pdf

Illinois' Bridge Definition

A formative evaluation¹ of adult education bridge programs funded by the ICCB subsequent to the original Shifting Gears pilot projects has shown that sites involved in implementing bridge programs in Illinois attempt to use the bridge definition. A summary of the strategies the sites were using in three core areas follows.

Contextualized Instruction

The first core element of the Illinois' bridge definition is contextualized instruction, which is defined as curriculum that "integrates basic reading, math, and language skills and industry/occupational knowledge" (ICCB, 2009). All of the adult education bridge programs attempted to integrate academic content and contextualized curriculum, and some were doing so with business partner input. Most program staff discussed curriculum in detail, including involving local employers to provide input on curriculum and create lesson plans, offer career development, and share resource materials. We observed adult students learning industry specific vocabulary and practicing reading comprehension using an employee handbook and hazardous materials statements. Mathematics skills were incorporated into word problems contextualized with inventory control practices and medicine dosage problems. We observed instruction using industry specific tools, such as handheld scanners and blood pressure and heart monitors to teach students how to use technology in work applications. Whereas all of these strategies have the potential to benefit students, relatively few of the instructors had formal education or experience in the associated occupations. In only a few instances did we see bridge instructors co-teaching with someone with occupational knowledge and experience. Several bridge instructors reported having some access to professional development on contextualized instruction, but many wanted more training.

Career Development

The second core element of Illinois' bridge definition is career development, a component that, "includes career exploration, career planning within a career area, and understanding of the world of work (specific elements depend upon

the level of the bridge program and whether participants are already incumbent workers in the specific field) (ICCB, 2009). Career exploration and development activities were found at all 10 bridge sites, with the following variations emerging: (1) career development activities were integrated into the curriculum as a course or within a course; (2) career development activities were supplemental to bridge coursework; and (3) career development activities were available as a combination of in-class and supplemental experiences. The major categories for these activities were: (1) assisting bridge students to explore the related occupational sector: healthcare, manufacturing, or transportation, distribution and logistics (TDL); (2) goal setting and planning for the future, including crafting individualized career plans (ICPs); (3) accessing further education including the admissions process, financial aid, and enrollment; and (4) preparing for work, including workforce preparation, networking, job search skills, resume and cover letter writing, and interviewing.

Whereas both formal and informal career counseling was available to students once they were enrolled in bridge coursework, career counseling that began at the initial stage of student recruitment appeared most useful to students. Administrators and faculty from several sites pointed out that students dropped out because they found that they were not interested in the specific career area. Often,



¹The evaluation methods employed to gather these findings is detailed at the conclusion of this paper. Readers are also encouraged to reference the following reports available on the OCCRL website at http://occrl.illinois.edu.

Oertle, K. M., Kim, S., Taylor, J., Bragg, D. D., & Harmon, T. (2010). *Illinois adult education bridge evaluation: Technical report*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois.

Bragg, D. D., Harmon, T., Kirby, C., & Kim. S. (2010, August). *Bridge programs in Illinois: Summaries, outcomes and cross-site findings*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois.

4 TRANSITION Highlights

staff did not have sufficient time to screen students because of the short recruitment period, and they later learned that students who enrolled were not interested in pursuing the occupations. Even with time, administrators and faculty had difficulty assessing whether students' career interests were aligned with the career cluster associated with the bridge.

Transition Services

The third core element in the bridge definition is transition services, which refers to services "that provide students with the information and assistance they need to successfully navigate the process of moving from adult education or remedial coursework to credit or occupational programs" (ICCB, 2009). A number of examples of services are listed as part of the definition, but it does not mandate or require that any specific type of service be provided.

One transition strategy introduced by some sites was the use of a transition coordinator or case manager as a primary contact person for students before, during, and after their enrollment in the bridge. Four predominant forms of the transition coordinator were: (1) an advisor designated to support the program who was apart from other bridge staff at District 214; Kaskaskia College; Pui Tak Center; and Rock Valley College; (2) an instructor who served in a dual role as transition coordinator at Shawnee Community College; (3) a program coordinator who served a triple role as transition coordinator and instructor at College of Lake County; and (4) transition supports but no dedicated transition coordinator at four sites. Rather than having a transition coordinator, Jewish Vocational Services, Elgin and Lewis and Clark used counselors funded by adult education and/or the community college to provide support for their bridge students. Alternatively, Triton College provided mentors to support students individually.

In addition to transition coordinators, other support services present in the programs were:

- a Website (see: http://www.clcillinois.edu/healthlibrary/) specifically for the bridge program that was targeted toward ABE/ASE/ESL populations built by several Health Science faculty at College of Lake County. The website provided a wealth of healthcare related information, including a series called, "A Day in the Life of a..." This series covers 16 allied health fields and gives students a glimpse into a professional's day in each field.
- a GED scholarship was being developed by Kaskaskia College for students who completed the GED and enrolled in a one-credit hour transition course.
- a bridge medical math course at Lewis and Clark Community College gave students who successfully complete the
 bridge the opportunity to take the math college placement exam and earn college credit for medical math required
 in the healthcare coursework.
- targeted COMPASS workshops provided by Pui Tak Center exposed students to the COMPASS test and prepared
 them for the exam at the end of the program. The Student Transition Services Coordinator at the Pui Tak Center
 worked with Malcolm X Community College personnel to create sample reading passages.

Emerging and Promising Practices

The evaluation results reported by Oertle et al., (2010) also revealed a number of promising practices:

Bridge Collaborative Partnership(s)

Bridge partnerships were based on reciprocal opportunities and maximized resources and returns. The partners were adult education, continuing education, postsecondary career and technical education (CTE), community-based organizations (CBOs), and business and industry.

Bridge Champion(s)

Program administrators or coordinators were champions (i.e., agents of change) for the adult bridge programs, with many demonstrating enough clout in the parent organization to influence decisions and affect change. These bridge champions spread the word about the programs, and they helped to build partnerships in positive ways. They also served as the basis of support to connect the bridge staff and partners. Furthermore, they had a progressive vision for how students would access adult education that transcends the GED or improves English language skills.

Bridge Transition Coordinator

The transition coordinator was the "go to" person who acted as a broker of knowledge for students, bridge staff, and bridge partners. The coordinator was key to student movement into, through, and beyond the bridge. The coordinator became the hub for recruitment, including giving presentations to potential students, sponsoring open houses, sharing enrollment information, creating bridge flyers and pamphlets, and using mass media for marketing. Their role in retention included arranging for study skills support, tutoring, childcare, and transportation, and transition services included providing and sharing resources through interagency collaboration, goal setting and planning, and making referrals.

Bridge Technology

Many of the bridge administrators and instructors were intentional about the integration of technology into the curriculum. At some sites, classrooms with computers for each student were the primary point of instruction. Communication in some sites was facilitated via electronic mail, Blackboard, and Facebook where student learning was facilitated through social networking. These technologies were also key to communicating information about employment and computer security. Instructors routinely integrated technology and dedicated time for computer research and webbased instruction so that the students could improve their technical skills, and some students routinely used handheld electronic dictionaries and language translators. Furthermore, industry specific tools such as handheld scanners and blood pressure and heart monitors were used to teach students how to use technology in work applications. Many students seemed comfortable using technology, which was an unanticipated finding since the evaluation of Illinois' original Shifting Gears sites revealed many bridge students struggled to use technology (Bragg et al., 2009).

Two bridge programs are profiled in the remainder of this brief. These two programs were funded by the state's Shifting Gears initiative, and additional information is presented about these programs in Bragg et al. (2010) and on the OCCRL website at: http://occrl.illinois.edu/publications/projects/shifting_gears.

Black Hawk College Adult Education ESL to TDL Bridge Course

Practice Context

Black Hawk College (BHC) is a comprehensive community college serving all or part of nine counties and a population of over 230,000 residents in a mostly rural area of northwest Illinois. This practice was fully developed and implemented for the Shifting Gears (SG) initiative during the 2007–08 academic year. Heeding BHC's strategic plans to expand the student base to include their relatively large population of adult education students, the timing of development of the bridge for adult learners was fortuitous. Coinciding with SG, college administrators were looking for a program offering that would provide adults with a credential to secure employment or improve their career opportunities in a relatively short amount of time. Based on several carefully considered factors, the college chose the Transportation, Distribution and Logistics (TDL) industry sector to develop the bridge, as the college's geographic location is a hub of transportation on the Mississippi River and on a major east-west interstate (I-80). Also, the college had existing courses and programs in the logistics area.

Practice Description

To help address the educational and employment needs of a relatively large English language learner population (800-900 students annually) the College developed an occupationally contextualized bridge course for English as Second Language (ESL) adult education students interested in careers in TDL. The 16-week, ESL bridge course was developed to address two goals: 1) contextualize a standard adult education ESL course to prepare students to transition into the Warehouse Distribution Specialist (WDS) certificate program, and 2) provide comprehensive support services including tutoring, learning communities, targeted use of instructional software, and career counseling to enhance students' success.





The ESL curriculum was co-developed by an experienced, full-time ESL teacher and another contractor (external to BHC) who was familiar with Georgia's "Quickstart" curriculum. Quickstart was used as a model to create a customized outline of concepts and terminology to contextualize with the ESL curricula.

The instructor contextualized the ESL curriculum with reading, writing, and math content she aligned with the WDS program and with competencies needed in the larger TDL industry. To do this, she read WDS program texts to determine the academic level required and the common vocabulary needed by her ESL bridge students. In addition to the requisite foundation in English grammar, she infused over 500 vocabulary words, including terms that reference math, the industry, and the workplace. Classroom strategies and instruction were diverse and included warehouse tours and outside speakers, mentors and tutors who were involved in the TDL industry. Students strengthened their computer literacy by learning some content via

computer-based modules; they watched American films to learn about American culture and to hear nuances in English pronunciation and contemporary American jargon. The curriculum also included employability and teamwork skills, career development and job acquisition skills, college success skills, and lessons on health and wellness. To be sure all students were prepared to enter the fall semester WDS courses, BHC also created a 6-week ESL refresher course to help students retain their new knowledge during the summer break between the end of the spring bridge course and the start of the fall semester.

Supporting Strategies

1. Hiring a Part-Time Math Instructor

Black Hawk College hired a part-time math instructor to teach bridge students in the classroom and on an individual basis to ensure they understood math vocabulary well enough to succeed in their subsequent WDS courses. The ESL instructor also included math-related vocabulary because, as she explained, "many ESL students have knowledge of math principles but cannot read the mathematical words on the exams and thus, score lower than their actual competency level."

2. Curricular Alignment and Career Pathway Development

From the beginning of the SG initiative, BHC adult education administrators designed their approach to bridge course development to be consistent with the larger career pathway framework because they understood its utility for transitioning students as their needs and aspirations evolved. Bridge course content was carefully aligned with entry level competencies for the WDS program, a certificate program comprised of five courses that earn vocational skills credit. The WDS certificate is aligned to the Inventory Specialist Certificate program, which is aligned to the college's Associate of Science degree in Supply Chain Management, which is articulated with a baccalaureate program in Supply Chain Management at Western Illinois University.

3. Intensive Transition Support Services

Black Hawk College hired an Advisor to support the diverse needs of the bridge students through coaching, registration assistance, academic and financial aid advisement, coordination of local resources for child care, assistance to help students secure transportation resources, and creation of events to help the students feel a part of a learning community. In addition, the Advisor wrote brief profiles about each student to provide to the WDS program instructors to familiarize them with the population as a whole and the individuals' specific needs or issues.

4. Utilizing Data for Program Improvement

Due to student demand, the College offered two sections of the WDS certificate program in two formats; one met five days per week over thirteen weeks, and the other met two days per week over twenty-five weeks. The additional section was offered to accommodate bridge students' work schedules, to accelerate the WDS curriculum into two different models, and to measure student outcomes to help determine the most optimal delivery model. Overall, the BHC bridge team embraced a continuous improvement culture that called for ongoing re-evaluation of student outcomes in response to the program's evolving nature.

Resources

Leadership of this practice was situated in the Adult Education division of the college. Bridge course development was spearheaded by the Associate Dean of Extended Educational Programs, the Coordinator of Literacy Programs, and a part-time program Advisor. Also highly supportive of the bridge were the college president, vice presidents, and faculty from academic ESL, adult education, and the specific career area. Externally, the bridge was supported by an active partnership with Eastern Iowa Community College, a partner in a federal Department of Labor (DOL) grant focusing on logistics entitled, "Joined by a River." Further, BHC is a partner in the Quad-Cities Logistics Roundtable, a large employer advisory group to the DOL grant which provides BHC with coordinated business and industry support for the College's several logistics courses and programs. The program also benefitted from collaboration with the college's Carl D. Perkins Administrator who was involved in the implementation of the "Joined by a River" grant, and also provided funding to pay instructors for the additional cohort. In addition, she assisted in recruiting, interviewing, and hiring additional instructors for the bridge.

Evidence of Success

All 19 of the ESL students enrolled in the bridge course completed all five courses in the WDS certificate program. Given the success of the SG bridge course in the manufacturing/TDL industry sector, the bridge curriculum process has also been applied to developing a bridge in the health science sector. With the initial SG bridge as inspiration, the College expects this second bridge program to be even more robust and further its mission for student success.

Oakton Community College Developmental Education CNA to LPN Bridge Course

Practice Context

As a pilot site selected to participate in Illinois' Shifting Gears (SG) initiative in 2007, Oakton Community College (OCC) partnered with Presbyterian Homes to develop a bridge course to prepare a cadre of their employed Certified Nursing Assistants (CNAs) to enter college-credit prerequisite courses to a Practical Nursing program. Oakton Community College, located in Skokie, IL, is a comprehensive community college serving 450,000 residents in suburban Chicago. Presbyterian Homes is a large, continuing care retirement community with over 1,600 residents among five campuses in Chicago and nearby suburban areas. The intended outcome of the contextualized bridge curriculum was to provide a short-term, engaging, accessible, developmental education experience to a select group of CNAs to prepare them for credit-level instruction.

Practice Description

The College's Chair of Nursing and the Nursing Program Coordinator, both Professors of Nursing, along with the Dean of Science and Health Careers, worked closely with Presbyterian Homes administrators in designing the bridge course, considering the needs of the full-time working students and the unique needs of a diverse group of employees, many of whom were not native English speakers and not familiar with postsecondary-level education. All students had a high school diploma, a GED, or the equivalent.

The course was built upon an existing 8-week course designed to increase the skills of applicants to the College's Associate Degree Nursing (ADN) program but whose assessment scores fall short of the admissions standard. For the bridge course, college faculty determined that by doubling the length of the 8-week course they could accommodate students' full-time work schedules. Further, by adding "College 101" content (reading comprehension, vocabulary building and basic computer literacy skills) the bridge course could offer students the skills they needed to be successful in the eight





science, math and psychology prerequisite Practical Nursing program classes. Seventeen Presbyterian Homes' employees self-selected to attend OCC's CNA to LPN bridge course. Although students were not pre-tested upon admission, they were given English and reading placement tests and the math portion of the COMPASS near the completion of the bridge course.

The bridge course curriculum was co-designed by OCC's ADN coordinator and the bridge instructor, an experienced instructor of developmental English. Class was held one day per week for three hours. The lecture/discussion and lab components were provided at OCC's Skokie campus and at a cottage at Presbyterian Homes, donated for classroom use. The bridge instructor contextualized medical vocabulary with reading, speaking and writing assignments. She used a variety of sources including the National League of Nursing (NLN) exam, which all students would eventually take as an admission requirement for the

Practical Nursing program, as well as the texts "504 Absolutely Essential Words" and "Reading Smart." Students completed individual, group, and project-based assignments infused with work place skills, such as presentations and projects with firm deadlines. Basic computer skills were introduced in the course once students' low levels of computer literacy were determined. The instructor created an encouraging and challenging class-room environment, designing activities that built upon the learners' prior knowledge and experiences and reinforcing study and time management skills.

Support Strategies

1. Extending Course Length

Oakton Community College Nursing faculty determined that the 8-week course used as a model needed alterations to enable student success and thus extended the timeframe, from eight to sixteen weeks. While the students admitted into the bridge course were described as a "highly motivated group," they proved to have academic needs far greater than anticipated and the extended timeframe was needed.

2. Intensive Transition Support Services

The provision of support services was a shared effort between the Director of Nursing Education at Presbyterian Homes and two coordinators at OCC: one with an extensive nursing background and the other an experienced admissions counselor. Transition support took many forms and required frequent, responsive communication to advise bridge students about college-related information and provide individual registration assistance and academic advising to create individual plans of study. To accommodate students' busy work schedules and personalize the college-going experience, the co-coordinators conducted weekly visits to OCC's Skokie campus where the bridge course was held and to the Presbyterian Homes cottage to get to know the students.

3. Instructor Selection

Administrators at OCC realized the selection of the "right" instructor was imperative to the bridge course's success. The College specifically recruited an instructor with whom they had worked in the past. The instructor had previously been in the Peace Corps and had a great deal of experience in developmental education. Given her nurturing nature and creative, "out of the box" thinking, there was immediate agreement among OCC administrators that she possessed the qualities best suited to meet the bridge students' needs.

Evidence of Success

With respect to the first cohort involved in the SG initiative, of the 17 students who began the bridge course, 15 persisted to completion of the course. Fourteen students enrolled in the next course in the prerequisite sequence, and as of this writing they were all on target to graduate in August, 2011. They will then be eligible to sit for their licensure exam to become Licensed Practical Nurses. Further, all 14 have indicated their intention to continue their education by enrolling in OCC's ADN program.

Given the SG bridge course's success, the college has used this course as a template for developing a part-time Nursing program in an effort to better accommodate working adults who are interested in becoming Registered Nurses.

Conclusion

Illinois is experiencing a growth of bridge programs as state education and workforce agencies continue to devote existing and pursue new resources to establish planning and demonstration sites. Five adult education provider sites have received planning grants and five others have demonstration grants in FY2010. Five community colleges are implementing developmental education bridge courses and three other colleges received funds to develop models that establish how a comprehensive array of student support services can be coordinated and offered to adult student needing assistance to reach their academic goals. Workforce agencies in the Chicago metro area continue to offer bridge programs, and plans are being made to replicate them on a regional basis in other parts of the state. In Fall 2011, the state will release the results of the second bridge survey which is tracking bridge growth and some implementation characteristics, aiding the state and providers in establishing a repository of bridge-related information. In addition, state and local leaders continue to critically examine policies that impede bridge instruction and improve policies that advance its adoption. The state remains committed to supporting adult students' completion of the credentials they need to improve their personal and professional lives and in doing so, contribute to the economic well-being of the state.

THE EVALUATION

During the 2009-10 academic year, 10 Illinois adult education bridge sites were evaluated by OCCRL, with funding from the ICCB. The 10 sites were:

- College of Lake County
- Elgin Community College
- Township High School District 214 Community Education (District 214)
- Jewish Vocational Services
- Kaskaskia College
- Lewis and Clark Community College
- · Pui Tak Center
- Rock Valley College
- Shawnee Community College
- Triton College

The primary goal of this evaluation was to generate knowledge that could be used to further develop adult bridge programs in the state of Illinois. The evaluation design was formative, and mixed methods were used. Data collection methods included:
(a) development and review of logic models with the adult bridge program administrators; (b) document review and analysis of program proposals and supporting materials; (c) one-day site visits that included collection of program documents (e.g., program marketing materials, syllabi, student goal and progress forms), semi-structured interviews, classroom observations, and student focus groups; (d) follow-up conference calls with bridge program administrators, faculty, and staff; and (e) analysis of data from the Illinois Bridge Status Survey. All data collection activities were conducted between November 2009 and May 2010 using site visits, surveys, telephone interviews and document analysis. The design did not offer rigorous evidence of program effectiveness; rather, its goal was to lay the groundwork for future impact studies.

References

- American Council on Education (ACE). (2009). 2008 GED testing program statistical report. Washington, DC: Author. Retrieved at http://www.acenet.edu/Content/NavigationMenu/ged/pubs/2009ASR.pdf.
- Bragg, D. D., Harmon, T., Kirby, C. L., & Kim, S. J. (2009). *Initial results of Illinois' Shifting gears pilot demonstration evaluation*. Retrieved from Office of Community College Research and Leadership website: http://occrl.illinois.edu/node/433.
- Bragg, D. D., Harmon, T., Kirby, C., & Kim. S. (2010, August). *Bridge programs in Illinois: Summaries, outcomes and cross-site find-ings*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois.
- Bureau of Labor Statistics, U.S. Department of Labor. (2011, April). *The employment situation—March 2011*. Retrieved from The Department of Labor website: http://www.bls.gov/news.release/pdf/empsit.pdf.
- Carnevale, A. P., Smith, N., & Strohl, J. (2010, June). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University, Center on Education and the Workforce.
- Connell, C. (2008, October). *The vital role of community colleges in the education and integration of immigrants*. Retrieved from Grantmakers Concerned with Immigrants and Refugees website http://www.gcir.org/publications/gcirpubs/college.
- Illinois Community College Board. (2009). Request for Proposal FY2010 Adult Education Bridge Program Development Project, Appendix B. Retrieved from The Illinois Community College Board website: http://www.iccb.state.il.us/bridge.documents.html.
- Lacey, T. A., & Wright, B. (2009). Occupational employment projections to 2018. Monthly Labor Review, 132 (11), 82-123. Retrieved from http://www.bls.gov/opub/mlr/2009/11/art5full.pdf.
- Lekes, N., Bragg, D. D., Loeb, J. W., Oleksiw, C. A., Marszalek, J., Brooks-LaRaviere, M., & et al. (2007). *Career and Technical Education Pathway Programs, Academic Performance, and the Transition to College and Career.* St. Paul, MN: National Research Center for Career and Technical Education. Retrieved from http://136.165.122.102/UserFiles/File/pubs/CTE_Pathway_Programs.pdf.
- Oertle, K. M., & Trach, J. S. (2007). Interagency collaboration: The importance of rehabilitation professionals' involvement in transition. *Journal of Rehabilitation*, 73, 26-44.
- Oertle, K. M., Kim, S., Taylor, J., Bragg, D. D., & Harmon, T. (2010). *Illinois adult education bridge evaluation: Technical report*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois.
- Price, D., & Roberts, B. (2009, December). *The shifting gears approach to systems change* Retrieved from the Joyce Foundation's Shifting Gears website: www.shifting-gears.org.
- Will, M. (1983). OSERS programming for the transition of youth with disabilities: Bridges from school to working life. (ED256132). Washington DC: The Office of Special Education and Rehabilitation Services, Office of Information and Resources for the Handicapped. Retrieved from the Education Resources Information Center (ERIC) website: http://www.eric.ed.gov/PDFS/ED256132.pdf.
- Wittenburg, D. C., Golden, T., & Fishman, M. (2002). Transition options for youth with disabilities: An overview of the programs and policies that affect transition from school. *Journal of Vocational Rehabilitation*, 17, 195-206.
- Zhang, J. (2010, May). From GED credential to college: Patterns of participation in postsecondary education programs. Paper presented at the meeting of the American Education Research Association, Denver, CO.

About the Authors

Debra D. Bragg is Professor of Higher Education and Director of OCCRL. She can be reached at dbragg@illinois.edu

Kathleen Oertle is a visiting research scientist at the University of Illinois Graduate College and can be reached at oertle@illinois.edu

Sujung Kim is a Ph.D. student in Education Policy, Organization and Leadership at the University of Illinois at Urbana-Champaign. She currently works as a Graduate Research Assistant for OCCRL. She can be reached at kim480@illinois.edu

Catherine Kirby is the Assistant Director of OCCRL and Project Manager for Illinois' Shifting Gears Initiatives and can be reached at ckirby@illinois.edu

Jason L. Taylor is a Ph.D. student in Higher Education at the University of Illinois at Urbana-Champaign. He currently works as a Graduate Research Assistant for OCCRL. He can be reached at taylor26@illinois.edu

Timothy Harmon is a Project Coordinator for OCCRL. He can be reached at tharmon@illinois.edu

Loralea Liss is a Project Coordinator for OCCRL and can be reached at Itliss@illinois.edu

Transition Highlights

Please visit the OCCRL website at http://occrl.illinois.edu for these additional issues of Transition Highlights:

- Kalchik, S., & Oertle, K. (2010, May). The integral role of career development in supporting programs of study and career pathways. *Transition Highlights*, Issue 1, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_05_2010.pdf.
- Kalchik, S., & Oertle, K. M. (2010, September). The theory and application of contextualized teaching and learning in relation to programs of study and career pathways. *Transition Highlights*, Issue 2, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_09_2010.pdf.
- Kalchik, S., & Oertle, K. M. (2011, January). The relationship of individual career plans to programs of study and career pathways. *Transition Highlights*, Issue 3, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_01_2011.pdf.

University of Illinois at Urbana-Champaign
This publication was prepared pursuant to a grant from the Illinois Community College Board and printed by the Authority of the State of Illinois, May 2011 (ICCB Grant Agreement Number CTEL 11002).
The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the University of Illinois at Urbana-Champaign. Our primary mission is to use research and evaluation methods to improve policies and programs to enhance community college education and transition to college for diverse learners in Illinois and the United States. Projects of this office are supported by the Illinois Community College Board (ICCB), the Illinois State Board of Education (ISBE), along with other state, federal, and private and not-for-profit organizations. The contents of our publications do not necessarily represent the positions or policies of our sponsors or the University of Illinois. Comments or inquiries about our publications are welcome and should be directed to OCCRL@illinois.edu. This document can be found on the web at: http://occrl.illinois.edu .