Promising Practices for Transitioning Students from Adult Education to Postsecondary Education

A Review of Literature with Implications
for California Community College Practitioners

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Acknowledgements

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Additional Contribution

Other people who read drafts of this report include Kate Frankel and Cyndie Snyder, project assistants from University of California Berkeley's research center, Policy Analysis for California Education, who are working on a study of transition issues from high school to post-secondary education.

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The Research and Planning Group/Center for Student Success

The Research and Planning Group for California Community Colleges (RP Group) strengthens the ability of California community colleges to undertake high quality research, planning, and assessments that improve evidence-based decision making, institutional effectiveness, and success for all students. It does so through three primary strategies. First, RP's Center for Student Success (CSS) conducts research and evaluation projects that utilize the skills and unique perspectives of California community college institutional researchers, faculty, and administrators. Second, the RP Group builds the skills of administrators, faculty, and staff through a broad range of professional development offerings and by disseminating effective practices. Finally, the RP Group develops strategic partnerships and provides leadership on statewide initiatives to help keep evidenced-based decision making, accountability, and student success at the forefront of California community college efforts.

Since 2000, CSS has led 15 system-level research and evaluation projects that have resulted in significant changes to the California community college system, including the laying of the groundwork for the statewide accountability system (ARCC), the modification of admission requirements for the registered nursing programs, and the publication Basic Skills as the Foundation for Success in the California Community Colleges, which was instrumental in the development of the Basic Skills Initiative and provided the framework for evaluating college-level basic skills programs throughout the state. The success of CSS projects is rooted in their design. Each project is led by a unique team of community college staff, faculty, and administrators who have proven research skills and a direct understanding of the subject at hand. Projects culminate in audience-specific products that stimulate discussion, improve outcomes, and strengthen student success. You can find out more about CSS research and the RP Group at www.rpgroup.org

Executive Summary

This report examines the literature on practices and programs seeking to improve students' transition from adult education to postsecondary education. Ultimately, the report seeks to provide practitioners with models for effective strategies in transitioning students to postsecondary education that can be implemented at community colleges throughout California.

From a review of more than 40 references, a total of 17 effective practices emerged. Because this report has been created as a follow-up to Basic Skills as a Foundation for Student Success in California Community College, it uses the same four major categories to organize the effective practices uncovered in the literature. The practices are summarized below.

Area A: Organizational and Administrative Practices

- A.1 Improving transition of students from adult education to postsecondary education is an institutional priority for community college and adult education programs.

- A.2 Faculty and staff of transition programs are resourceful, experienced, and committed to serving adult students.

- A.3 Strong collaborative partnerships exist among college programs, adult education programs, business/industry, and community-based organizations.

- A.4 Institutions have innovative and flexible admissions and enrollment policies that facilitate transitions.

- A.5 To evaluate the effectiveness of courses and programs, student data systems track transitions and outcomes across programs.

Area B: Program Component Practices

- B.1 Programs inform adult education students about the opportunities in and benefits of higher education.

- B.2 Programs provide adult education students with assistance in meeting the financial demands of college.

- B.3 Personalized support, such as peer mentoring, tutoring, or case management, is provided before, during, and after transitioning.

- B.4 Programs provide effective matriculation services, including assessment that is aligned between adult education and postsecondary programs.

Area C: Staff Development Practices

‣ C.1 Institutions provide staff development opportunities to adult education faculty.

Area D: Instructional Practices

‣ D.1 Adult education and postsecondary curriculum are aligned, sequential, and progressive to provide a seamless pathway for transition students.

‣ D.2 Instruction is contextualized so that transition students see the connection between basic skills education and academic or vocational content.

‣ D.3 Programs include career planning as a part of the curriculum.

‣ D.4 Curriculum and scheduling are designed to be flexible, chunked, and modularized with multiple entry and exit points.

‣ D.5 Sufficient language instruction is provided for English-as-a-second-language learners.

‣ D.6 Instruction and curriculum are designed and delivered in a way that integrates a variety of instructional methodologies.

‣ D.7 Institutions provide accelerated courses/programs that give transition students the opportunity to quickly meet their goals.

The report examines practices in each of these areas and provides examples from adult education programs nationwide. However, it is important to note that there is little evidence-based research completed to date on students transitioning from adult to postsecondary education. Hence, the practices in this report fall mostly into the "promising" rather than the "effective" category. Nonetheless, the report identifies these practices and makes recommendations for further research.

Definitions

Definitions of Programs and Students

Adult Education. Adult education addressing foundational skills includes the following components: Adult Basic Education instruction for raising adults' basic reading, writing and mathematics skills to the 8th grade level; Adult Secondary Education for preparing students to graduate or to pass the GED; and English as a Second Language instruction.

Traditionally, adult education courses or programs carry no academic credits and often are free of charge. The majority of adult education programs are typically provided by the K-12 education system; however, some community colleges administer noncredit adult education classes in their districts. Adult education programs can also be offered by community-based organizations, library literacy programs, and public or private nonprofit agencies.

Adult Basic Education (ABE). Students in Adult Basic Education can be native or nonnative English speakers. ABE programs provide education in basic reading, writing, and mathematics skills or assist students in achieving other goals related to employment or further education.

ABE programs can offer separate courses for native and nonnative English speakers or serve both types of students in the same classroom. However, ABE nonnative English speakers are a distinct population from those in ESL programs (see below). ABE students typically have strong speaking and listening skills; understand one or more varieties of spoken English, including non-standard, elliptical forms; and feel comfortable with books, Web sites, and class materials in English (Hadley, 1993).

Adult Secondary Education (ASE). An ASE program provides adults with the classes they need to complete all of the school district's high school curricula as well as pass the California High School Exit Exams. ASE programs often include GED preparation classes and onsite GED testing.

Basic Skills or Developmental Education. Basic Skills as a Foundation for Student Success in California Community College describes basic skills as "those foundation skills in reading, writing, mathematics, and English as a Second Language as well as learning skills and study skills which are necessary for students to succeed in college-level work. Courses designed to develop these skills are generally classified as pre-collegiate, basic skills, or both, and may be either credit or non-credit" (Center for Student Success, 2007, p.13).

English as a Second Language (ESL). Students who do not speak English as their first language attend ESL courses to improve their language skills and achieve goals similar to students in ABE. These students often need to concentrate on speaking and listening skills, especially in beginning level classes. Students' level of education varies widely from no formal education to graduate or professional degrees (Hadley, 1993).

Transition Students. In this report, transition students are defined as students who move from adult education to postsecondary education programs.

Definitions of Practices

Effective Practice. Organizational, administrative, instructional, or support activities engaged in by highly successful programs, as validated by research and literature sources. This definition of effective practice has been slightly adapted from the definition that was used in Basic Skills as a Foundation for Student Success in California Community Colleges (Center for Student Success, 2007, p. 13).

Promising Practice. Organizational, administrative, instructional, or support activities engaged in by programs that have not been validated by research and literature sources, but are judged by experienced and knowledgeable practitioners in the field as having the potential to be highly successful. The guiding questions used to identify promising practices include the following: What information did you draw on in selecting this practice as promising? What formal or informal evidence do you have of impact and outcomes of this practice? What research needs to be done to establish it as an effective practice?

Evidence-Based Research. This research identifies reliable and valid solutions to problems of educational practice. A quality research study is one that does one or more of the following:

- ‣ Employs systematic, empirical methods that draw on observation or experiment.
- ‣ Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn.
- ‣ Relies on measurements or observational methods that provide valid data across evaluators and observers, and across multiple measurements and observations.
- ‣ Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparatively rigorous, objective, and scientific review.

Evidence-Based Program: Using a balance of sound theory and relevant empirical evidence combined with the judgment of knowledgeable and experienced practitioners to make informed decisions about how a program or practice is implemented or delivered.

Effective or Promising?

This report makes clear that there is little evidence-based research completed to date on transitioning students from adult to postsecondary education. Hence, the practices in this report fall mostly into the "promising" rather than the "effective" category. However, a considerable number of reports have been written by national commissions, researchers, and experts in the field that draw on the experience and knowledge of practitioners and researchers and the findings of case studies. Many of these reports provide descriptions of individual transition programs deemed to be models or to be successful. Due to the lack of quantitative evidence for the effectiveness of particular practices, and because much of the literature reports a combination of successful practices or strategies, it is difficult to ascertain the effects of any individual practice/strategy. The author of this report includes documentation of success where available.

Introduction

The National Center for Higher Education Management Systems reports that the United States seriously risks losing its edge in global economic competitiveness because new American workers do not have the same level of educational preparation as their counterparts in many other countries. It concludes that the U.S. cannot remain internationally competitive without providing better education to older adults who have either dropped out of high school or completed high school but did not go to college (Jones & Kelley 2007). A report from the Council for Adult and Experimental Learning (CAEL) confirms, "Demographic patterns demonstrate that relying on the traditional K-16 pipeline to meet the educational and workforce needs of our states and the nation will not be enough" (CAEL, 2008, p. 7).

Current Educational Levels in the U.S. and California

In 2002, the U.S. Department of Labor announced that most of the fastest growing jobs in the country will require workers to have postsecondary educational preparation (Alamprese, 2005). However, data from the 2005 U.S. Census notes that large numbers of working-age adults (ages 18-64) continue to have attained only low levels of education. The census describes:

- More than 25 million adults in the United States, or 14% of working-age adults, have not completed high school or the equivalent. In California, that percentage grows to 19%, or over four million individuals.
- Among those with less than a high school diploma, approximately 35% have dropped out before 9th grade. In California, 48% of those without a diploma have left school before the 9th grade.
- Nationwide, 8.3 million individuals with a high school diploma or less speak English poorly or not at all. California residents comprise over one-quarter of this pool of individuals.

Enrollment in Adult Education, GED, and Postsecondary Education Programs

The 2008 CAEL report highlighted "the importance of adult education in helping to close the growing gap between this nation's postsecondary attainment and that of other leading countries" (p. 10). Indeed, for many individuals who have either not completed high school or who delay enrollment in postsecondary education, adult education programs are an effective starting point. These programs provide a path for making the transition to postsecondary education where students can earn college credits and work to achieve a certificate or degree. Yet, enrollments are low in adult education programs: only one in four adults with less than a high school diploma participates in any kind of further education or training (Strawn, 2007).

Even those who do enroll in and complete adult education programs are unlikely to pursue credit-bearing postsecondary education. Only about 20% of Adult Basic Education learners in 2002-03 who indicated that postsecondary enrollment was their goal actually enrolled in postsecondary education or training (U.S. Department of Education as cited by Jones & Kelley, 2007). Similarly, over 65% of 1999 GED examinees expressed a desire to pursue further education; however, only 30-35% of GED recipients received any postsecondary education. Moreover, only 5-10% of GED recipients attended a postsecondary educational institution for more than one year (Alamprese, 2005).

The Benefits of Additional Educational Achievement

Advanced education brings a number of benefits, including increases in income levels. A report prepared for the National Commission on Adult Literacy states that "adults with more schooling generate substantially more favorable fiscal impacts for federal, state, and local governments." The report further cites higher employment rates, additional earnings, and higher rates of home ownership as some of the outcomes of additional educational achievement (Khatiwadi, McLaughlin, Sum & Palma, 2007, p.vii).

The relationship between income and educational levels is further supported by U.S. Department of Labor (Alamprese, 2005). In California, working-age residents with college degrees are 27% more likely to participate in the workforce than those with less than a high school diploma. Their earnings over a lifetime are more than twice as much as their counterparts without a high school diploma (CAEL, 2008). According to U.S. Census data, 28.8 million individuals (including 3.7 million in California) with a high school diploma or less are not earning living wages (Jones, 2007).

A study for the Community College Research Center Teacher's College, Columbia University, provides additional evidence that increased education is linked to increased income, even for those who start at the lower rungs of the educational ladder (Prince & Jenkins, 2005). Individuals who started their educational journey in ESL, had one year of college-level credits, and earned a credential had an average earnings advantage of $7,000 more a year in the job market than those who completed fewer than 10 credits.

Higher educational levels bring personal benefits to individuals as well financial advantages. These benefits include opportunities to have better working conditions, enjoy a greater social status, and change jobs or move to a different location. Higher levels of education are also associated with increased participation in civic life and a better quality of life, including better health and an increased participation in leisure activities (CAEL, 2008).

The Role of Community Colleges in Serving Adult Education Students

U.S. Department of Education data show that considerable numbers of U.S. residents do not enroll in college directly after high school (MPR Associates, 2007). When those who delay enrollment do decide to pursue postsecondary education, nearly half enroll in a two-year institution.

However, adults who begin their education in adult education programs do not show great success in community college. A longitudinal study of students in 34 community and technical colleges in Washington showed the following:

- Only 13% of ESL students went on to earn at least some college credits.
- Fewer than 1% of ESL students who started with less than a high school diploma earned a GED or high school diploma in five years.
- Fewer than one third of ABE/GED students enrolled in college credit courses.
- Only 4-6% of ABE/GED students earned 45 or more college credits or earned a certificate or degree in five years.
- Only 35% of those who started with a high school diploma earned at least 45 credits or a credential in five years (Prince & Jenkins, 2005).

Taken together, these data show that those adult education students who come to community colleges often do not make significant progress. Given these statistics, community colleges have an opportunity to be more responsive to this population both in attracting students and in assisting them to further their education. Community colleges, with their affordable education, developmental education programs, and open door policies are the most attractive postsecondary institutions for adult transition students.

The Need for Collaboration Among Community Colleges and Adult Education Institutions

Community colleges cannot respond to this opportunity to better serve adult education students in isolation. The literature reviewed for this report demonstrates a clear need for greater collaboration between colleges and adult education institutions if the transition rate and success of adult education students to postsecondary education is to be increased. Duke and Strawn note, "The college is part of a constellation of institutions and agencies that have responsibility for helping low skilled workers advance" (Duke & Strawn, 2008, p. ii).

Collaboration between institutions has been initiated in various ways across the nation. The National College Transition Network (NCTN), a project of World Education's New England Literacy Resource Center, supports ABE staff, programs, and state agencies in establishing and strengthening ABE-to-college transition services. This organization provides technical assistance, professional development, collegial sharing, advocacy, and increased visibility for transition efforts. In the NCTN New England ABE-to-College Transition Project, 25 adult education programs partner with 30 colleges in six states. Furthermore, some states, such as Kentucky, have developed policies to create a seamless transition between adult education and postsecondary education. In many cases, colleges, local governmental agencies, community-based organizations, and others have initiated collaborations in their area.

In California, some community colleges offer adult education programs, including ABE, GED, and/or ESL in their district. However, most California community colleges do not offer these noncredit adult education services and may have little or no relationship with adult education programs in

their area. California community college administrators and program coordinators/chairs in these districts may need to take the lead in creating relationships with adult education programs to develop transition strategies. This report can be of use to both community college and adult education leaders as they strive to increase transitions of adult students.

The Need for More Research

There is a critical need for data on an institutional level and across institutions on adult student success and the practices that contribute to it. One of the three critical recommendations in a report for the National Commission on Adult Literacy, Policies to Promote Adult Education and Postsecondary Alignment, is to "increase state capacity to track individual outcomes across adult and postsecondary education and training services, over time, and into the labor market; and use this data to set goals for improvement" (Strawn, 2007, p. ii).

Instructors, counselors, tutors, administrators, service providers, and students can contribute to the knowledge base by conducting systematic, intentional, and field-based inquiry in their daily practices. While many adult education faculty are part-time and may not have the time or resources to conduct field-based inquiry, through analytical and reflective practice, practitioners can:

- ‣ Reflect critically on their own practices;
- ‣ Review related research in their area of interest;
- ‣ Pose questions for inquiry arising from their own settings, prior experience, and goals for teaching and learning; and
- ‣ Develop analytical approaches for resolving issues (Sherman & Taylor, 1997, p. 1).

A beginning list of research topics related to transitioning adult education students to postsecondary education is included in this report.

Literature Review

The main body of this report focuses on a review of the current literature. The review is divided into four areas of practice; within each area of practice, relevant data and models are described to illuminate the key areas of each practice and key elements of effective practices are described.

As described previously, the four areas of practice examined in this report are:

Area A: Organizational and Administrative Practices

Area B: Program Component Practices

Area C: Staff Development Practices

Area D: Instructional Practices

Area A: Organizational and Administrative Practices

A.1 Improving transition of students from adult education to postsecondary education is an institutional priority for community college and adult education programs.

Most adult education programs are administered by the K-12 education system. In order to facilitate advancement from these noncredit adult education programs to credit-bearing community college coursework, both adult education providers and community colleges must make supporting this transition an institutional priority. A study of numerous adult education programs by Zafft, Kallenback, and Spohn (2006) highlights this need, recommending that a system-wide goal of postsecondary readiness be established. Even when adult education programs are provided as noncredit in community college districts, supporting the transition of students needs to be an institutional priority.

Support of the College Leadership

Institutional commitment to transition from adult education to postsecondary education can be implemented in a number of ways. Often, the strong support of the administrative leaders at community colleges is an important factor. The Center for Adult English Language Acquisition notes that administrators play a key role in promoting transitions from adult education programs to community colleges (Matthews-Aydinli, 2006).This commitment can be seen in both the Nashua Adult Learning Center in New Hampshire as well as Cape Cod Community College's Success program.

An evaluation report looking at these two programs cites the commitment of the community college president as a key contributor to the programs' success in transitioning adult education students to community colleges (Gittleman, 2005).

The commitment of college leadership can also be seen in the Dorcas Place Adult and Community College in Rhode Island, where staff report that the college president's support for collaboration between ABE and postsecondary programs strengthens their ability to transition students to college (National College Transition Network, 2004).

Strong support by top leadership is also identified as a success factor for the Pasadena City College Math Jam Project. This adult education program is in fact a part of Pasadena City College, offering a two-week noncredit pre-algebra course to underprepared first-time students enrolled at the college. With 72 students in the first cohort, 89% were retained and 56% increased their mathematics placement by one level at the conclusion of the program (The Campaign for College Opportunity, 2007).

Finally, further evidence of the importance of the support of college leadership in effectively transitioning adult education students to community college can be found in Kentucky (Chisman, 2004). Two adult education/community college programs in Kentucky were studied: a collaboration between Jefferson Community College and Jefferson County Schools, and Owensboro Community Technical College. The success of both of these programs was attributed in large part to strong leadership support.

Coordination of Adult and Basic Skills Education at Community Colleges

When community colleges themselves offer adult education programs, an additional indication of institutional commitment is putting a single administrator in charge of adult education (noncredit) and basic skills (credit) programs (Boylan, 2004). This effective practice can be found at Albuquerque Technical Vocational Institute, Davidson County Community College in North Carolina, Santa Fe Community College in Florida, and Western Wyoming Community College. Additional types of organizational integration are further cited as a promising practice in the ABE to Community College Transitions Project study (U.S. Department of Education, Office of Vocational and Adult Education, 2007).

Support for Adult Education Faculty at Community Colleges

A Council for the Advancement of Adult Literacy (CAAL) report notes that adult and basic skills education linkages are strengthened when adult education faculty are given the same pay, benefits, professional development opportunities, and roles in college governance as developmental education faculty. The report also stated that adult education managers should have the same place in the college management system as other managers (CAAL, 2005). The ABE to Community College Transitions Project further notes that hiring and supporting a number of full-time instructors is a key promising practice (U.S. Department of Education, 2007).

Funding Transitions from Adult Education to Community College

Lastly, providing sufficient funding for programs that support the transition from adult education to community colleges is a further indication of institutional support. One promising practice in this arena is combining public and private funding (Liebowitz & Taylor, 2004; Boylan, 2004). The National College Transition Network recommends that the cost and benefits of funding transition programs be assessed and funding be made available (Zafft et al, 2006). The Council for Advancement of Adult Literacy further concludes that transition initiatives need special funding (2005), and ABE to Community College Transitions Project highlights the procurement of additional funding as well as in-kind support as a promising practice (MPR Associates, 2007).

A.2 Faculty and staff of transition programs are resourceful, experienced, and committed to serving adult students.

Faculty Qualifications

The literature does not provide quantitative evidence of how faculty and staff influence the success of transition students. However, a study of five exemplary community college adult ESL program describes,

> One of the most important things that colleges and other ESL providers can do to improve program quality and increase student learning is to hire highly qualified faculty. ... [T]he best way to accomplish this is to hire faculty with extensive professional training in teaching ESL—ideally MA degrees in TESOL or related fields. (Chisman & Crandall, 2007, p.85)

Supporting this claim, an evaluation study of the 21 programs in the New England ABE-to-College Transition Project found that model programs had knowledgeable, experienced, resourceful, and committed staff and leadership (Gittleman, 2005).

Not only do highly qualified faculty enhance program quality, but transitions to community college programs can also be improved by hiring well-qualified adult education faculty. A survey of college presidents indicates that when faculty in adult and developmental education programs have comparable qualifications, they can teach in both programs and discover content overlaps (Boylan, 2004). In addition, leaders who have a deep knowledge of resources can facilitate program development (Bragg et al., 2007).

Commitment to and Understanding of Adult Students

The commitment of faculty to serving adult students, in addition to their understanding of the particular needs of this student population, also plays a key role in program quality and success. The Emerging Pathways project emphasizes that faculty members must understand the students they serve and recognize adult learners as a diverse and complex population (Pusser, 2007).

Faculty who are committed to adult education students often provide personal attention to their students. At Rio Salado College in Arizona, a personal approach fostering high levels of

communication between students and faculty was cited as a key success factor. By implementing this personal approach, Rio Salado College created a decline in drops/withdrawals from 30% in 1999-2000 to 5% in 2002-2003. Furthermore, transitions to college-level coursework increased from 73% to 95-100% (Lombardo, 2004).

Commitment to adult students is also demonstrated by modeling learner-centered values; Boylan has concluded that these kinds of values are necessary conditions for effective collaboration between adult education and postsecondary programs. Boylan notes that a student-oriented philosophy, whether explicit or implicit, guides instruction and student/faculty relationships in successful adult education programs (2004).

A.3 Strong collaborative partnerships exist among college programs, adult education programs, business/industry, and community-based organizations.

Collaborations Between Adult Education and Community College Programs

As noted earlier, most adult education programs are not housed within community colleges. Nationwide only a third of adult education students are served by community colleges (CAAL, 2005).When adult education programs are separate from the community college, transitions are greatly enhanced by close partnerships between the education providers.

An evaluation of the 21 model programs in the New England ABE-to-College Transition project found that a strong partnership between the adult and college programs was crucial. Characteristics of strong partnerships include deep relationships with appropriate people in the college who can advocate for and deliver services to students; partnerships formed over time and characterized by a high degree of coordination; and a knowledgeable and resourceful program staff. The report recommended strengthened college partnerships focusing on maximizing the shared responsibility (Gittleman, 2005).

The Council for Advancement of Adult Literacy concurs, stating in a 2005 report that colleges that do not offer adult education must form collaborative arrangements with external adult education providers. These collaborations can include sharing faculty, staff, and support services; creating jointly administered programs; and establishing mutual expectations about the requirements for college entry (CAAL, 2005).

Collaborations are most effective when there is a systematic and structured transition program. Some programs, for example, establish a schedule for college admissions staff to meet with adult education classes and provide follow-up information on the admissions process. Some states, such as Idaho, are developing routine transition activities where adult education staff work with admissions and counseling staff at community colleges (Alamprese, 2005). Surveyed community college presidents believed that collaboration was more likely to happen if specific policies promoting collaboration existed (Boylan, 2004).

Model programs in Kentucky provide specific examples of the value of collaboration between adult and postsecondary educational institutions. Kentucky's statewide policy is to create a seamless system of education between Kentucky Adult Education (which addresses education at the lower end of the development spectrum) and the Kentucky Community and Technical College System. The state's emphasis on transitioning adult education students to college has created a substantial increase in transition rates: in 1998-1999, 12% of ABE students transitioned to college, and by 2005-2006, 21% of students transitioned (Duke & Strawn, 2008).

A Kentucky study by the Council for Advancement of Adult Literacy profiles several of these types of collaborative programs. The Mayo Campus of the Big Sandy Community and Technical College District collaborates with the adult education program in Johnson County, emphasizing the precise determination of the skills students must master to get a GED or undertake college-level work. In 2002-2003, 98% of students who had a goal of entering postsecondary education did so; furthermore, data from 2000-2001 showed that 90% of adult education students who had undertaken credit coursework graduated from college.

Partnerships between adult education and community college programs can also allow programs to share facilities, further enhancing opportunities for transition. The Sumner Adult Education Program in Maine cited the co-location of its program with the college program as a success factor (Gittleman, 2005). Another report noted that model adult education programs found community colleges helpful in providing staff and space for transition classes as well as college orientation services (Alamprese, 2005). Bragg's interviews with administrators at 27 career pathways programs further found that all of the programs drew on the resources of the local community college for some aspect of administration and delivery (2007). Boylan (2004) also concluded that the sharing of appropriate program facilities made for effective links and collaboration between adult and developmental education.

To increase collaboration between adult and postsecondary education programs, shifts in state policy are required; in particular, state adult education offices can play an important role in facilitating relationships between adult education and community college programs (Alamprese, 2005). The Council for Advancement of Adult Literacy also calls on states to encourage better integration of adult education and colleges, remove state regulatory barriers, and reimburse noncredit adult education service at the same rates as it does for credit (CAAL, 2005).

Interdepartmental Partnerships at Community Colleges

Establishing formal collaborations between departments at colleges that offers both adult and developmental education is cited as an emerging model approach. This type of inter-college partnership can be seen at the Tacoma Community College between the Division of Continuing Education and the Division of Workforce/Basic Skills. Through this partnership, students with very low-level basic skills were prepared to get an industry-recognized Child Development Associate Credential. Students were also prepared to enter a one-year para-education certificate program or a two-year Associate's degree program (Women Employed, 2005).

The Rio Salado College in Arizona also found that developing relationships between noncredit and credit staff was key to success. At Rio Salado, the adult education program's Transitions Coordinator

established relationships with Financial Aid, Admissions, Advisement, and credit ESL faculty and staff at the other community colleges in the district. As a result, the program's drop/withdrawal rate decreased, and the student transition from noncredit to credit increased (Lombardo, 2004). Strong collaboration across programs within the college was also found to be an element of success at Pasadena City College's Math Jam program, which focuses on noncredit pre-algebra instruction (The Campaign for College Opportunity, 2007).

An additional characteristic of collaborative adult and developmental education programs is the use of the same assessment instrument for both programs and some way of correlating scores of different instruments. Boylan also cites efforts to ensure consistency between exit standards for adult education and entry for developmental education as a characteristic of collaborative adult and developmental education programs (Boylan, 2004).

Partnerships with External Agencies

Developing partnerships with organizations outside of the college, including employers, the workforce investment system, community-based organizations, and others, can provide important supports to adult education programs in helping students transition to college and employment. For example, partnerships with industry and the workforce investment community can be critical in certificate or vocational programs that prepare adult students for employment. Employers can provide skills assessment, curriculum review, work-based learning, project-based assessment, job placement, and other supports to programs and students.

Bridges to Careers for Low-Skilled Adults: A Program Development Guide describes several examples of partnerships between education and industry. The Essential Skills Program in Denver prepares students for jobs in high-demand occupations and articulates with the next educational level. This program cites the importance of employer involvement in identifying labor market needs, supporting ongoing curriculum design, and providing internship and job opportunities to students. Within this Denver program, 35% of their 1,000 students have continued their education beyond the certificate level (Women Employed, 2005).

At Shoreline Community College in Seattle, a well-established partnership with the regional automotive industry helped the college create a certificate program for ABE and ESL students. The role of the automotive industry in developing and supporting the program included participating in an advisory board, offering paid internships to students, and employing certificate completers. In turn, the college recruited students and offered the education/training services along with counseling. In this pilot program, six out of 10 completers have entered factory-sponsored Associate's degree programs (Bragg, 2007).

Partnerships with community-based organizations (CBOs) can also aid transition students. These partner organizations can provide services that the educational institution cannot offer alone. For example, CBOs may provide case management and curriculum for teaching ESL, while the college provides vocational curriculum, computer labs, and articulates the basic skills courses with the technical certificate and occupational degree programs. In addition, collaboration with human service agencies or workforce training programs can assist ABE students in overcoming academic,

financial, and personal barriers and boost the educational institution's ability to help students move up to the postsecondary level (U.S. Department of Education as cited by Jones & Kelley, 2007).

The College Gateway Program in San Mateo County, California, offers a prime example of partnering with CBOs and the workforce investment system to support the success of their students. This public/private partnership among colleges, the workforce system, CBOs, and private foundations is a key component in the success of this program that prepares low-skilled individuals for college-level work in biosciences and allied health. In August 2005, 45 students enrolled in the Gateway Program and 82% successfully completed it. Out of these students, seven continued on to a bio-manufacturing program, 13 enrolled in an Associate's degree program at Skyline college, and 13 continued in general education at Cañada College (Women Employed, 2005).

In Chicago, Daley College has benefited from a partnership with the National Council of La Raza, the Metropolitan Chicago Health Care Council, and other CBOs in developing a health care program for adult Latino students, many of whom are limited English speakers. As of June 2007, 423 students had participated in this program. The completion, licensure, and employment rate of the pilot and first cohort group was 73% (Bragg, 2007).

Lastly, several of the model programs described in Bridges to Careers for Low-Skilled Adults: A Program Guide (Women Employed, 2005) benefited from critical partnerships between educational, workforce, and other organizations. One example is Portland Community College's Access College Education in Oregon, which partnered with the college's Steps to Success Welfare-to-Work Program, Workforce Investment Act (WIA) Dislocated Worker program, and One-Stop Career Centers. Nearly half of the first cohort completed the program in one or two terms and entered college courses either during their second term or later.

A.4 Institutions have innovative and flexible admissions and enrollment policies that facilitate transitions.

Dual or Concurrent Enrollment

Several studies of model programs cited dual/concurrent enrollment as a factor that increases transitions from adult education to college programs. In some programs, students enroll simultaneously in adult education and developmental education courses; in others, adult and developmental education students are taught in the same classroom. In the Big Sandy Community College and Technical College District in Kentucky, most classes are mixed ability, serving both adult education and developmental students. Instruction is individualized and competency-based (Chisman, 2004).

Washington's Integrated Basic Education and Training (I-BEST) uses the dual enrollment approach by providing students with both ABE/ESL instruction and vocational training in the same class. ABE/ESL and vocational instructors teach together in the classroom, and students earn credits towards certificates or degrees. This program has had some significant successes in comparison to their other approaches to adult education; 53% of I-BEST went on to earn 15 units of college credit, while only 11% of other adult education students did the same (Duke & Strawn, 2008).

The ability to enroll simultaneously in noncredit and credit coursework can have a particularly positive effect on ESL students. Enabling ESL students to follow a non-linear path of enrolling in credit and noncredit classes at the same time gives them the opportunity to achieve near-term goals, which evidence indicates may motivate them to persist and transition. At Bunker Hill Community College in Boston, 25% of students in the academic noncredit Basic ESL program take both credit and noncredit classes at the same time. This has proved to be a successful strategy for program participants who go on to college-level coursework at higher rates than those in the college's other ESL program (Chisman & Crandall, 2007).

In addition, a Bridge to Heating, Ventilation, Air Conditioning and Refrigeration program at William Rainey Harper College in Illinois developed positive outcomes by having ESL students enroll simultaneously in a credit vocational course and a noncredit vocational ESL support class. In the first cohort, nine of 15 students completed the vocational course with a 3.9 GPA, and six continued coursework in the certificate program (Bell, Kimura & Knuth, 2008).

One longitudinal study also found that allowing students to simultaneously take noncredit courses in ESL and other subjects resulted in higher transition rates. Noncredit ESL students at City College of San Francisco who enroll in noncredit classes in other subjects are six times more likely to transition to credit than those who take ESL classes only (Spurling, 2008).

Opportunities to Earn College Credit in Noncredit Courses

Some colleges have developed creative approaches to helping noncredit students move into the college credit system. San Jacinto North Community College in Texas provides linked courses in which noncredit adult education and credit students take the same course with the same curriculum. Noncredit students then have the opportunity to petition the college for credit for their work in these linked courses. Northern Virginia Community College has also developed a process to offer credit for noncredit work at its Medical Education (Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008). This flexibility within the college facilitates transitions from adult education to college-level programs.

Offering Admissions or Enrollment Incentives

Another flexible and innovative approach to supporting transition to college is offering students admissions/enrollment incentives. Pasadena City College's adult education program, Math Jam, allows students to retake the placement test, guarantees enrollment in a mathematics class, and provides a free textbook as long as students continued to pass mathematics classes. Of the 72 students who enrolled in the first Math Jam cohort, 92% qualified for additional incentives, which included counseling, tutoring, and a free textbook (The Campaign for College Opportunity, 2007).

A.5 To evaluate the effectiveness of courses and programs, student data systems track transitions and outcomes across programs.

Using Data to Understand Successes and Challenges

The literature provides evidence of the value of data systems to document rates of transition and discover practices that promote that transition. Unfortunately, data on transition student progress and success, particularly longitudinal data, do not appear to be commonly collected in any uniform

manner. Boylan found little consistency in the evaluation of outcomes, although community college presidents he interviewed attributed some of their programs' successes to having extensive information about students (2004).

Those colleges who do use data collection extensively and effectively have found that it reveals important information about successful strategies for transitioning from adult education to credit college-level programs. City College of San Francisco's Research Office conducted a longitudinal study of its noncredit ESL program. The study found that over a seven-year period, only 8% of noncredit ESL students (approximately 3,000 students) transitioned to credit. However, students who received matriculation services, such as placement testing, orientation, and counseling, were approximately 50% more likely to transition to credit than those who received no services.

Furthermore, the study found that ESL students who took advantage of program "enhancements" were more likely to transition to credit coursework. These "enhancements" included: 1) enrolling simultaneously in other noncredit courses at the college; 2) enrolling in ESL "focus" classes, which concentrate on one skill, in addition to taking general ESL classes focused on all language skills; and 3) taking accelerated ESL courses designed to move the student through two levels of ESL in one semester. While only 3% of students who did not participate in enhancements transitioned to credit courses, 14% of those who chose at least one enhancement completed this transition. In addition, 45% of those who participated in all three enhancements successfully transitioned (Spurling et. al, 2008).

Data collection and analysis has also been used at the Rio Salado Transition program in Arizona to better understand successes and challenges in transitioning students from adult education to college-level work. The program has documented a dramatic and consistent decline in drops and withdrawals over four years in the noncredit transition program. Furthermore, pass rates in college-level ESL classes have risen from 73% to 100% (Lombardo, 2004).

The Need for Additional Data Collection

The call for increased data collection is a common theme in the literature. One of three recommendations in a report prepared for the National Commission on Adult Literacy is to "increase state capacity to track individual outcomes across adult and postsecondary education and training services, over time, and into the labor market" and to "use this data to set goals for improvement" (Strawn, 2007, p. ii). The U.S. Department of Education further notes that data can be used to demonstrate to policymakers the relationship between human capital development and economic development is a promising approach to increasing transitions (MPR Associates, 2007).

The Council for Adult and Exception Learning (CAEL) also recommends that adult education programs track basic participation and demographic data (CAEL, 2006). The ABE-to-College Transition report further supports this recommendation, suggesting the implementation of a five-year longitudinal study to gather data on assessment testing, college-level course enrollment, and college persistence (Gittleman, 2005).The Council for Advancement of Adult Literacy also advocates for the development of student data systems to conduct both formative and summative research on linkages between adult education and college programs.

Moreover, the Breaking Through Initiative recognized that data collection and retrieval are major challenges in helping low-skilled adults succeed. The Initiative published a document with data tools that can be used by community colleges and adult education programs. The document includes a campus data tool kit that describes a variety of data collection methods and recommends a common data core that colleges should collect (Ewell, 2008).

Finally, transition programs could be easier to implement if state-level discussion and action led to the replacement of labor-intensive student tracking systems with cross-systems or integrated automated student record systems (Zafft et al., 2006).

Area B: Program Component Practices

B.1 Programs inform adult education students about the opportunities in and benefits of higher education.

Professionals agree that many adult education students are not well informed about postsecondary education's opportunities and payoffs and the necessary steps for transitioning. Several studies conclude that more aggressive efforts must be made to inform adult education students about college opportunities and the benefits of obtaining a college education (Prince & Jenkins, 2005). Van Noy et al. (2008) found that students needed guidance to become aware of how noncredit courses lead to degree-applicable courses. Furthermore, adult education students must be given detailed information on the impact of credit and noncredit courses on postsecondary attainment and lifetime earnings (Pusser et al., 2007).

Although the literature does not provide evidence that orientation/awareness activities are directly tied to improved or successful transitions, some adult education program staff members have found such activities to be a key to success. Moreover, learning how to move on to postsecondary education can be especially important for ESL students who may be unfamiliar with the American educational system. Lack of information about postsecondary education has been identified as one of the barriers for immigrant students in the United States (Erisman, 2007).

Finally, several studies specifically call for the provision of career pathways information to help students understand the educational steps they must take to reach their career goals. Policymakers and educators must be explicit about the pathways that connect noncredit and credit programs as well as short-term noncredit training and degree and certificate programs (Van Noy et al., 2008). Building incumbent workers' awareness of opportunities for postsecondary education and its payoff in the workplace can also be an effective strategy (MPR Associates, 2007).

Orientation Activities

In order to build understanding of the opportunities available through college education, the Success Program at Cape Cod Community College in Massachusetts offers a two-day, 20-hour orientation that gives students a comprehensive overview of academic and social goals as well as builds motivation. As a result, at least one person emerges as the class "mother" who stays in contact with the other

students and often writes a newsletter that follows up on program graduates (NCTN, 2004). Through the "mother" and newsletter, graduates learn from each other about the postsecondary experience.

At Rio Salado College in Tempe, Arizona, the Transitions Program for ESL students uses transition advisors to orient students to the college experience before enrolling in credit courses. The program has three transition advisors who focus on recruiting students from advanced noncredit ESL classes. They visit classes and give PowerPoint presentations on programs, support services, ways to prepare for college, and more. In addition, students are invited to contact and meet with a transition advisor two or three times to discuss college goals, motivation, and preparedness. Finally, the adult education students visit the college with a transition advisor where they take the placement test, participate in a short tour, and receive admissions assistance (Lombardo, 2004).

LaGuardia Community College in New York also provides several college preparation activities for ESL students in its adult continuing education program, including one-on-one counseling, workshops, and visits to classes. Topics covered include how to apply for financial aid and obtain scholarships, discover career options, complete the college application, select a City University of New York (CUNY) College, understand college requirements, and register (Blaber & Housel, 2008; Erisman, 2007).

In addition, Seminole Community College in Florida, one of the five exemplary colleges studied for a Council for Advancement of Adult Learning (CAAL) report on adult ESL, has a Moving On program designed to help students learn about postsecondary education options. It requires ESL students in the adult education intermediate and advanced ESL levels to attend a two-hour seminar on the American educational system. Students leave the seminar with a general knowledge of their options in higher education. This activity is supplemented by bimonthly follow-up seminars and support from three ESL program specialists and an Educational Planner (Chisman & Crandall, 2007).

Part of orientation activities may include simple exposure to the postsecondary educational environment. Providing this exposure, for example by holding the adult education program near the local community college, was found to give students a chance to adjust to a college environment (MPR Associates, 2007). Furthermore, the Adult Learning Center in Nashua, New Hampshire, also identifies exposure to the real world of college as an important factor for student success. Data from Spring 2000 to Summer 2004 showed that of 129 students, 70% completed the 30-week program, 56% finished one or more college semesters, five earned an AA degree, and one transferred to a four-year college (Gittleman, 2005).

B.2 Programs provide adult education students with assistance in meeting the financial demands of college.

Studies and reports indicate that financial aid or financial assistance of some sort is needed to help transition students succeed. Many transition students face difficulties in pursuing postsecondary education because of financial challenges. They are often working adults with low incomes and may not have the time to attend school full-time to be eligible for financial aid. Sixty-eight percent of the students in the New England ABE-to-College Transition Project are employed, and 47% work more than 35 hours a week. Seventy-nine percent had an income of $25,000 or less, 28% earned less than

$5,000, and 38% received some kind of public assistance (Gittleman, 2005). Working full-time while enrolled is one of the six characteristics for non-persistence on a postsecondary risk index (Reder, 2007).

Providing Financial Aid

A statewide longitudinal study, Building Pathways to Success for Low-Skilled Adult Students, tracked a cohort of almost 35,000 students in adult education and credit programs at 34 Washington community colleges and found that financial aid was associated with a higher chance of success (Prince & Jenkins, 2005). A study by John S. Levin confirms this analysis, citing financial aid as one of the four categories of needs for adult learners in the highest risk categories (Pusser et al., 2007). Unfortunately, students—often the poorest ones—who needed to take a large number of developmental education courses were in danger of running out of financial aid before degree completion (Boylan, 2004).

Many sources discuss the importance of providing information and assistance on how to navigate the bureaucratic maze in applying for financial aid. Most programs examined by Bragg (2007) offered help with financial aid, which is an essential topic to be covered in orientation and counseling activities (Alamprese, 2004 & 2005). Preparing students to meet financial aid challenges is cited as a success factor by staff at the Sumner Adult Education Program in Maine, a New England ABE-to-College Transition Project program (Gittleman, 2005).

Several reports go even further in highlighting the importance of financial aid for transitioning adult education students, advocating for changes in federal and state financial aid policies. One major recommendation in a report for the National Commission on Adult Literacy is "to adapt financial aid policies to the needs of lower-skilled adults and support their success in adult and postsecondary education and training" (Strawn, 2007, p. iii). The participants in a symposium for the U.S. Department of Education, Adult Basic Education to Community College Transitions, also called for changes in federal and state policies and the creation of a more flexible financial aid system to support part-time students (MPR Associates, 2007).

Other Approaches to Reducing the Cost of College

Institutions have found a variety of ways, besides offering financial aid, to help students with the costs of postsecondary education. Some colleges offer free tuition hours or scholarships. In Oregon, students get a tuition waiver for six hours at Chemeketa Community College. At Rogue Community College, those who get a GED or high school diploma get a chance to pay for one credit and get one free for up to six free credits.

At Casper Community College in Wyoming, learners with a GED get four hours of free tuition. At Western Wyoming Community College, those with a GED can apply for a scholarship for a full year of free tuition (Alamprese, 2004). In addition, the Jefferson Community College and adult education program in Jefferson County Public Schools reached an agreement to secure funds for scholarships to GED students (Chisman, 2004).

Moreover, the Dorcas Place Adult and Family Learning Center in Providence, Rhode Island, uses grant money and a private anonymous donation to purchase seats in a credit class for a cohort of at least five students in three different courses (NCTN, 2004). Students in Access College Education, a program at Portland Community College in Oregon, may have tuition paid through welfare-to-work and dislocated worker programs, and students with a GED get one free semester of college.

At least one program, the CUNY Language Immersion Program, is heavily subsidized by the college to keep fees low. This is a successful, intensive, noncredit English and academic preparation program for students who have been accepted into degree programs but whose English is not yet adequate for college level classes (Erisman & Looney, 2007).

Other programs offer paid internships, subsidized work programs, or assistance with other fees/costs to aid adult education students transitioning to postsecondary education. Students in the Essential Skills Program at the Community College of Denver, which prepares students for high-demand occupations, get paid internships. At the Career Pathways program at Madisonville Community College in Kentucky, the Certified Nursing Assistant program pays for tuition, uniforms, books, supplies, and certification fees for 15 students per year with Workforce Investment Act (WIA) funding. It also places graduates in subsidized work programs, with WIA funding paying for the first 500 hours of salary (Women Employed, 2005).

In addition, colleges may allow students to concurrently enroll in developmental and credit-bearing courses, give credit for noncredit courses, and provide free courses and support services in order to bring adult education students to the college level in a cost-effective manner. At Davidson County Community College in North Carolina, the school deliberately elevated the GED exit standards so that GED students would be ready for college level and would not need—and thus, would not need to pay for—developmental education coursework.

Santa Fe Community College and Western Wyoming Community College provide free lab-based noncredit courses serving both adult and developmental education students; students may also use them to meet developmental education requirements after completing the courses. Santa Fe Community College and Albuquerque Technical and Vocational Institute provide free academic support services to help students bypass developmental education. Frequently, students who fall below the cut score are still placed in regular college courses and given strong academic services.

Finally, sometimes an external partner provides financial assistance. Capital IDEA, a work-force intermediary that partners with Austin Community College, pays for tuition, fees, books, and childcare for adult education students. Participants graduate at nearly twice the rate of Austin Community College students who do not receive Capital IDEA supports (Liebowitz & Taylor, 2004).

B. 3 Personalized support, such as peer mentoring, tutoring, or case management, is provided before, during, and after transitioning.

The Need for Support Services

Several reports conclude that offering comprehensive integrated academic and student support services is a promising practice (Alamprese, 2005; Bragg, 2007; CAEL 2006; Liebowitz & Taylor, 2004; Women Employed, 2005; and Zafft et al., 2006). In particular, the ABE-to-College Transitions Project cites three approaches used in model adult education programs:

> 1) referrals to a network of support services in collaborating community colleges;

> 2) referrals to local human services and workforce training agencies; and

> 3) reliance on ABE instructors for support and encouragement (MPR Associates, 2007).

Matthews-Aydinli further found promising results in programs that address non-academic factors in educational achievement, such as lack of transportation or childcare, or limited time to attend classes; provide orientation to students; and address academic challenges. Zafft (2006) and Alamprese (2004 and 2005) echo the importance of providing individualized assistance and counseling in helping students manage work and care for families while studying.

Counseling and Case Management

The partnership between Capital IDEA and Austin Community College in Texas, which was formed to enable underemployed and unemployed adults to attend college full-time, offers one example of support services that aid in the transition process. This partnership provides a large array of services including long-term counseling and educational assistance. Participants meet weekly with peers and a career counselor to focus on case management, mutual support, counseling, study skills, financial management, parenting skills, problem-solving, and critical-thinking skills. Program graduates have tripled their pre-program earnings and graduated at nearly twice the rate of Austin Community College students who did not receive these academic and support services (CAEL, 2006).

The Breaking Through initiative at Central New Mexico Community College also has a comprehensive student support system featuring achievement coaches to help with selecting courses, providing academic advice and personal counseling, purchasing bus passes and textbooks, finding housing/clothing, engaging peer mentors, securing financial aid, and accessing campus resources. Apprenticeship partners offer pairing for course and registration fees, donated funds for goods and supplies, and a kick-off celebration. Of the program participants who took the WorkKeys test, 90% improved their scores (Cross Mwase, 2007).

The Rio Salado College program provides counseling through three full-time transition advisors who recruit students from ESL classes; meet them individually two or three times to discuss goals, motivation, and preparedness; and help them complete initial college paperwork. The advisors also visit the college with the students and assist them with the admissions process (Lombardo, 2004).

Mentoring and Tutoring

The U.S. Department of Education Adult Basic Education to Community College Transitions Symposium identified the provision of mentoring services as a promising approach (MPR Associates, 2007).The ABE-to-College Transitions Project's Community Education Project in Holyoke, Massachusetts, uses mentors to provide both information and support during the transition period; these mentors remain available during the students' first year in college. The mentors are typically Holyoke Community College students who began in adult education classes. These mentors also serve as assistants in a college transition class and provide individualized support to students during the matriculation process (CAEL, 2006).

The Sumner Adult Education program in East Sullivan, Maine, also provides mentors to their students. In this program, ABE graduates are provided mentors during their first semester at college, and the mentors remain available throughout the students' educational process (Alamprese, 2005).

The ABE-To-College program in Pawtucket, Rhode Island, has also used mentors successfully, citing monthly in-house mentoring sessions as a promising practice. The mentoring sessions include guidance in skills and goal-setting, advising on individual and group interaction with classmates and instructors, and introducing students to valuable resources. Of the 17 students mentored in 2005, eight continued on to postsecondary education and five remained in touch with the mentors (NCTN, 2004).

Tutoring is another promising type of support service, according to the ABE to Community College Transitions Project report (MPR Associates, 2007). The Council for Advancement of Adult Literacy concurs, stating that individual tutoring increases transitions from adult education to college programs (CAAL, 2005). For example, Kentucky's Madisonville Community College Career Pathways project found individualized and small-group tutoring to be a key factor in preparing students to transition into a nursing assistance program or higher level of nursing education (Women Employed, 2005).

B.4 Programs provide effective matriculation services, including assessment that is aligned between adult education and postsecondary programs.

Several studies provide evidence that aligning assessment and matriculation between adult education and postsecondary programs helps place students into the appropriate program, strengthens the links between adult and postsecondary programs, and results in increased student success.

Assessment Alignment

Aligning adult education services with college placement decisions is a major policy recommendation in a report on the challenges in assessing for postsecondary readiness, prepared for the National Commission on Adult Literacy. The report describes, "A first step might be to compare the range of content and skills required on commonly used college placement tests and their parallel in adult education program common assessments" (Mellard & Anderson, 2007, p. 1).

Such assessment alignment, however, is apparently not common. Boylan (2004) found that adult and developmental education programs frequently use different assessment instruments. He noted that there was no uniform definition of what skill levels place students into developmental education, and there was a gray area where the skill levels of adult education and developmental educational students were about equal. One academic advisor interviewed said that students who scored in the higher ranges of the adult education Test of Adult Basic English (TABE) were probably equivalent to students who scored in the lowest ranges of ASSET (an instrument commonly used in colleges).

In the Career Pathways initiative at Ouachita Technical College in Arkansas, an exemplary program, the program tries to find appropriate placement for every individual who contacts the college workforce center. Program staff direct students who lack a high school diploma or score below 10.5 on the TABE to adult education classes. Those with a GED or high school diploma who may need only short-term developmental education assistance go directly to Ouachita Technical College where they take a three-month program before entering college classes. This program helps students experience success with a short-term goal, demonstrate responsibility for attendance and participation, and make the transition to college-level classes (Bragg, 2007).

In some cases, there is no operational distinction between adult education and developmental education, so students do not need to be matriculated into one program or the other. Mayo Campus of the Big Sandy Community and Technical College District in Kentucky is responsible for both adult and developmental education in Johnson County. There are no set courses; all instruction is individualized and competency-based. Most classes are mixed-ability and the emphasis is on determining exactly what skills students must master to get a GED or score high enough on the COMPASS test to undertake academic work. Adult education students get the same rights and privileges as credit students, including financial aid and career counseling (Chisman, 2004).

An exemplary ESL program at Lake County Community College in Illinois uses the Combined English Language Skills Assessment for placement into both a noncredit English for Academic Purposes (EAP) program and its credit ESL program. Transition rates to credit are higher for the EAP students than for the non-EAP, noncredit students. Bunker Hill, another exemplary ESL program described in the CAAL report, uses the Arlington Education and Employment Program writing test for both credit and noncredit students. From Spring 2001 to Fall 2005, 17% of noncredit ESL students placed in credit ESL and 7% placed in other credit classes (Chisman & Crandall, 2007).

Matriculation Services

A recent study in one college showed that receipt of matriculation services is positively related to transition from adult education to college-level coursework. A seven-year longitudinal study of noncredit ESL students at City College of San Francisco found that receiving matriculation services increased student transition rates to credit courses. Students who received all three services measured (placement testing, orientation and counseling) before or just after enrolling in noncredit ESL classes were 50% more likely to transition to credit (Spurling, Seymour & Chisman, 2008).

Furthermore, flexibility in applying matriculation services, such as allowing students to retake the placement test after offering short courses designed to help them increase their test scores, is a promising practice found in several programs. Under-prepared first-time students in Pasadena City College's Math Jam take a two-week noncredit course and then retake the placement test. Fifty-six percent of the students in the first cohort increased their placement by one level (The Campaign for College Opportunity, 2007). Similarly, Jefferson County Community College in Kentucky offers a three-week college preparation program to help students with low COMPASS scores. When retested with COMPASS, all students were able to skip at least one developmental education course; 59% were able to skip more than one (Chisman, 2004).

Area C: Staff Development Practices

C.1 Institutions provide staff development opportunities to adult education faculty.

Effective practices for professional development with basic skills faculty in postsecondary education have been described in Basic Skills as a Foundation for Student Success in California Community Colleges, the initial publication in this series from the Center for Student Success (2007). The literature review on adult to postsecondary transition also provides evidence that professional development may lead to greater success for transition students.

Zafft et al. recommend that funding be provided for professional development for both adult education and developmental educators. Adult education instructors must become familiar with syllabi, textbooks, and requirements for courses that students will take when they enroll in college. In addition, they must understand the college placement tests and become familiar with the college environment. Professional development for counselors and administrators is also recommended so that counselors can improve their career planning and advising skills (Zafft et al., 2006).

Alamprese goes even further than simply recommending that institutions support professional development; he concludes that shifts in federal policy are required. Alamprese suggests that the U.S. Department of Education assist states in providing training and technical assistance to adult education staff, with a focus on how to work with personnel from other programs (Alamprese, 2005).

At community colleges, faculty may already have the chance to engage in professional development; a survey of community college presidents by Boylan indicates that 53% of adult and developmental education instructors already have access to the professional development opportunities. Community college faculty members receive support to attend conferences, participate in workshops, or enroll in graduate courses; the college pays for some or all of the costs, although only for full-time faculty in some cases (Boylan, 2004).

Area D: Instructional Practices

D.1 Adult education and postsecondary curriculum are aligned, sequential, and progressive to provide a seamless pathway for transition students.

The Need for Alignment Between Adult Education and Postsecondary Curriculum

Professionals and researchers who have analyzed the factors that may help increase transitions agree that greater curriculum alignment between the adult education and postsecondary education systems is needed. The National Commission on Adult Literacy notes that without such alignment, adult education students' prospects for earning a degree or credential are reduced. A report from this organization states,

> Postsecondary education and training typically does not coordinate, dual enroll, or align services with adult education in the way that it increasingly does with high schools. As a result, even adult education students who earn their GEDs generally must enroll in remediation again at the college level, at which their chances of earning a degree are slim. (Strawn, 2007, pp. i-ii.)

A report on state policies and community college practices for noncredit workforce education agrees that articulation between the noncredit and credit programs was important, suggesting that noncredit and credit programs must have parallel and integrated structures. To create this articulation, collaboration within institutions is key, helping programs avoid duplication and develop a seamless movement of students between noncredit and credit (Van Noy et al., 2008; Boylan, 2004, p. 10).

Several other reports, drawing on research and profiles of colleges and programs, also cite the need for more curricular alignment. The Council for Advancement of Adult Literacy concludes that strengthening curricular linkages and providing articulated sequences through curricula could bolster the linkages between adult education and community colleges (CAAL, 2005).

The ABE to Community College Transitions Project also found aligning adult education curriculum with developmental education courses to be a promising practice. One of the six characteristics of the 16 successful programs studied for this report is the use of curricula and instructional techniques aligned with postsecondary content (MPR Associates, 2007). Unfortunately, Boylan found a curricular disconnect in many places: the exit skills for adult education students did not match college entrance requirements (Boylan, 2004).

To address the need for greater alignment and articulation between adult education and postsecondary education programs, professionals have called for shifts in state policy regarding curriculum. Alamprese suggests that state adult education offices should develop curriculum standards to guide adult education transition and support curriculum development. He also advocates for the U.S. Department of Education facilitating the development of state content standards (Alamprese, 2005). Zafft et al. further conclude that the transition programs they studied would be easier to implement with state-level discussion and action on curriculum alignment (Zafft et al., 2006).

Instructional Alignment and Articulation Strategies

Programs across the country have used a wide range of strategies and techniques to increase both alignment and articulation between adult education and postsecondary programs. For example, the goal of the Nellie Mae Foundation New England ABE-to-College Transition Project is to bridge the gap between the level of academic work required to earn a GED or an External Diploma Program certificate and the skills required for college-level academic work. The 21 sites in this adult education project designed new classes in mathematics, reading, writing, and computers that were aligned with academic content required by community colleges. Some of the courses are being offered on community college campuses (Gittleman, 2005; Alamprese, 2005).

Three community colleges in Wyoming similarly examined whether GED mathematics courses truly prepared students to get the score on the COMPASS test required for admission to college-level coursework. As a result, these schools now offer post-GED mathematics classes to teach students the concepts they need to succeed on the COMPASS test and in their credit classes (Alamprese, 2005). Two other successful programs, Davidson County Community College in North Carolina and Santa Fe Community College in Florida, also try to align GED with college entrance standards (Boylan, 2004).

Furthermore, the Kentucky Educational Cooperative and West Kentucky Community and Technical College have developed GED curriculum that teaches mathematics, reading, and writing at the level required for college entry. All students are dually enrolled in the college and the adult education program (Chisman, 2004).

A curriculum defined in terms of competencies needed to succeed in postsecondary education and jobs can also greatly improve transition success, according to a Bridges to Careers for Low-Skilled Adults Program Development Guide (Women Employed, 2005). The sequence of programs that prepare students to enter Biotechnology certificate program at City College of San Francisco is an example of this kind of curriculum. The Bridge to Biotech is an adult education program that trains low-income adults with a 7th to 12th grade education level for careers and ongoing education in biosciences. The program is closely aligned with the credit biotechnology certificate sequence at the college and specifically helps students develop skills to either enter the workforce or continue on to achieve a certificate. Over 90% of the graduates find jobs in bioscience and/or enroll in further bioscience education (CAEL, 2006).

Central New Mexico Community College, among the institutions chosen to implement a Breaking Through Initiative, has also developed a career/technical education program that articulates into a credit program. This construction trade apprenticeship program is closely related to degree coursework and articulates so students can receive college credit and matriculate into certificate and degree programs. In the first six months of the project, 33 students were retained from the first cohort and 23 were pursuing certificates/degrees (Cross Mwase, 2007).

Providing seamless transitions with a top-down design process is a key feature of several of the exemplary noncredit community college ESL programs studied for the CAAL report (Chisman &

Crandall, 2007). For example, Lake County Community College in Illinois turned the two bottom levels of credit coursework into a two-semester, noncredit English for Academic Purposes program with academic content. In addition, Bunker Hill Community College in Massachusetts has established a three-level Basic ESL program to meet the goals of what had been lower-credit levels. Each level is designed to prepare students for the next one. The school also offers a free Transitions to College program. This program is designed for GED recipients who need to improve their skills to get into college credit courses, and the instruction is equivalent to that offered by the lower two levels of developmental education courses.

Furthermore, all three successful noncredit career pathways programs that Bragg (2007) studied use college developmental education curriculum when students needed it. This is done because of concern over the increased time and financial aid needed for developmental education courses at the college if students did not meet college placement cut-off scores.

Another instructional strategy that has been found to be successful in improving transitions is the use of student portfolios. The Community Learning Center Bridge Program in Cambridge, Massachusetts assigns students portfolios as a strategy for focusing attention on what is important for graduation from the Bridge program. There is a master list of items students must put in their portfolios, including materials related to college preparedness, computers, mathematics, and writing. Thirty-eight percent of 2003 Bridge program graduates were accepted into college, rising to 67% for 2004 graduates (NCTN, 2004).

Some programs have found that not only do adult education students need to develop academic skills, but they also need to learn how to manage the pace of college curriculum and college life. Chisman (2004) found that successful programs in Kentucky taught college readiness skills not usually featured in academic programs, such as study and research skills, development of written and oral presentations, and general orientation to college requirements. A number of Kentucky community colleges also offer short college readiness courses. These can be taught by developmental education programs, adult education programs, or both, with students dually enrolled.

This kind of college readiness instruction has been cited by students in two of the programs studied for the evaluation report on the New England ABE-to-College Transition Project as a valuable program component. Nashua Adult Learning Center students in New Hampshire stressed the importance of receiving both life and study skills instruction in addition to academic instruction. Both staff and students also said that a key success factor was also the staff's and students' awareness that the program was not just for GED preparation, but also for larger goals beyond attaining a GED (Gittleman, 2005).

In addition, students in the Sumner Adult Education Program in Maine reported that learning how to balance and prioritize demands, organize their work, study in increments, take notes, and tape classes were success factors, in addition to the rigorous mathematics, writing, and reading courses (Gittleman, 2005).

D.2 Instruction is contextualized so that transition students see the connection between basic skills education and academic or vocational content.

The Benefits of Contextualized Instruction

Contextualized instruction is a key feature of many successful transition programs. Much of the literature speaks, in particular, of the need to contextualize instruction to prepare students for the workforce.

Linking education to meaningful economic payoffs is one of four major promising strategies cited in Breaking Through for helping low-skilled adults enter and succeed in college and careers (Liebowitz & Taylor 2004). Key components of this strategy include focusing on high-demand occupations, actively engaging employers to help adults develop skills for real jobs, and linking the acquisition of reading, writing, mathematics, and English language skills to their actual use in broad occupation or career paths. The Council for Adult and Experiential Learning (2006) further found that provision of an adult-centered process that makes learning relevant and integrates content is a key component of successful adult-learning and skill-training programs in an inventory of models and innovations.

Examples of Contextualized Instruction

Chisman & Crandall (2007) find that colleges can increase transitions by expanding career programs. For example, students can gain language and practical skills in vocational ESL programs (VESL) that allow a quicker transition to employment and earnings compared with the traditional ESL model. Students can also use these supported career programs as the first step to higher educational programs.

The I-BEST program in Washington is a large program with proven success in contextualizing instruction to career pathways. This program integrates vocational and ESL instruction for students at the high-beginning level and above. Language instruction in the ESL class is tailored to the language needed for employment in the selected industry sector. To successfully contextualize instruction for its adult education students, I-BEST uses extensive instructional collaboration. An ESL/ABE instructor is paired with a technical/vocational instructor to concurrently provide literacy education and employment-related skills development. The success of this program can be seen in the data: I-BEST students earned five times more college credit and were 15 times more likely to complete workforce training than regular ESL students in the same amount of time (Washington State Board for Community and Technical Colleges, 2005).

Other programs that can demonstrate the success of contextualized instruction include that of the Community College of Denver. This school has developed an Essential Skills program that contextualizes ABE, ESOL, and GED preparation to career pathways, including business services, early childhood education, and information technology. Approximately 25% of the graduates of this program continue into postsecondary education (Liebowitz & Taylor, 2004).

Contextualized curriculum is also a key feature of the Breaking Through Initiative program at Central New Mexico Community College. Students first take a three-week course with a mathematics and reading focus applied to the construction trades, as well as GED test preparation, a construction lab

project, and a construction site visit. Students then take a 12-week course in basic skills mathematics and reading in addition to instruction in various construction trades. Following this, students enroll in an apprenticeship program, after which they can then matriculate into the college's certificate/degree programs. The apprenticeship coursework is closely related to degree coursework and articulated so that students can receive college credit for their work in the apprenticeship program (Cross Mwase, 2007).

The Lake County Certified Nursing Assistant (CNA) program for ESL students uses contextualized instruction by integrating vocabulary development for medical and health professions, measurement terminology, conversion formulas, authentic non-adapted medical material, and other practices into a noncredit ESL program to prepare students to enter the CNA program. It also has a noncredit ESL support course, offered concurrently with a content CNA course, that provides instruction in vocabulary building, study/test-taking skills, and listening and speaking skills. Of the 21 students enrolled in the program in Spring 2005, all but two passed the CNA content class and received the college's CNA certification (Chisman & Crandall, 2007).

The experience at William Rainey Harper College further supports the benefits of contextualized adult education instruction. William Rainey Harper College found that having ESL/adult education faculty members trained in basic vocational content was an essential component of its Bridge to Heating, Ventilation, and Air Conditioning & Refrigeration (HVACR) certificate program. Constant communication between the vocational and ESL/adult education faculty during the semester was essential as well. Nine of the 15 students in the first of four courses in the HVACR program completed with a 3.9 GPA, and six continued coursework in the certificate program (Bell, 2008).

Other model programs that use contextualized curriculum have also been identified, although no success data are available for these programs. For example, Tacoma Community College has designed a model pathways program that integrates ABE and ESL with technical career paths. In its early childhood education program, low-paid childcare workers with limited English skills enter a program that integrates the curricula of ESOL into early childhood education in a team-taught course. At the end of the program, graduates get nine credits towards a two-year degree and a certificate that entitles them to higher wages.

In addition, the Southeast Arkansas College Career Pathways Pilot Project, an exemplary program studied for the Bridges to Careers Program Development Guide, provides a curriculum that is contextualized to specific jobs in its WAGE Pathways Bridge Program (Women Employed, 2005). Bragg (2007) further notes that two exemplary programs—the health pathways program for adult Latinos at Carreras en Salud-Instituto del Progresso Latino in Chicago and the General Service Technician program at Shoreline Community College in Seattle—have strong contextualized ESL curriculum.

Providing instruction in basic educational and technical skills contextualized around a specific employment sector is also a key feature of the Career Pathways Model, one of five models developed

by Zafft et al. (2006). Curriculum focusing on the basics of communication, problem-solving, applied mathematics, technology applications, and technical fundamentals, and taught in the context of the workplace and postsecondary classrooms, is a key feature of model bridge training programs (Women Employed, 2005).

Finally, contextualized instruction does not always involve connecting adult education curriculum to industry and employment; some adult education programs situate course content in the context of college-level academic coursework. The CUNY Language Immersion Program (CLIP) and the Math Jam Program at Pasadena City College are two examples of academically contextualized curriculum. The CLIP program, offered at nine CUNY campuses, is a noncredit ESL program that provides 36 weeks of sustained content-based teaching through the arts, humanities, and sciences. Most completers transfer to degree programs at CUNY (Erisman & Looney, 2007). Contextualized and innovative mathematics curriculum is also a key feature of the two-week, noncredit mathematics course offered in the Math Jam program at Pasadena City College. Over half of the students increased their mathematics placement level after taking this course (The Campaign for College Opportunity, 2007).

D.3 Programs include career planning as a part of the curriculum.

In addition to curriculum contextualized to career pathways, programs can use career planning to increase transitions from adult education to postsecondary programs. The Adult Basic Education to Community College Transition Symposium suggests clearly articulating and systematically coordinating the components of career pathways to include career awareness and planning as well as academic training and provision of support services. Encouraging students at intake to set educational and career goals and develop action plans was also deemed a promising practice by the Office of Vocational and Adult Education's ABE to Community College Transitions Project (MPR Associates, 2007).

Programs Using Career Planning to Improve Transition Success

The Breaking Though Initiative Program at Central New Mexico Community College is one of many programs that offers career planning; this program uses a three-week course which includes career exploration as well as contextualized mathematics and English instruction (Cross Mwase, 2007). The Adult Collaborative of Cape Cod for Educational and Support Services (ACCESS) has always had a career-planning component. Students develop a PowerPoint presentation on choosing a career pathway, a project which helps students identify both a career to pursue as well as the education needed to pursue it. To prepare for this project, counselors provide research documents, such as the Careers for your Personality and Career Choice Guide, and students look at college catalogs and schedules. Most follow through by pursuing the pathway they have been researching. From the Fall 2005 cohort, 10 of 13 students became actively involved in college and were on target with career plans (NCTN, 2004).

In another example, the Access College Education (ACE) program in Portland, Oregon, integrates basic skills into career planning, goal setting, and some soft-skills training. About half of the first

cohort in this program completed it in one or two terms and entered college courses either during the second ACE term or afterwards (Women Employed, 2005).

D.4 Curriculum and scheduling are designed to be flexible, chunked, and modularized with multiple entry and exit points.

Many adult students find it difficult to persist in education. A Risk Index for non-persistence, described in the U.S. Department of Education's Descriptive Summary of 1989-90 Beginning Postsecondary Students noted that at-risk students are typically:

- older than the typical postsecondary learner
- part-time rather than full-time
- financially independent
- working full-time while enrolled
- single parents
- supporting dependents other than a spouse (Reder, 2007)

These characteristics of at-risk students often align with the profile of adult education students; because of this, successful transition programs find that flexible, chunked, and modularized curriculum, as well as flexible scheduling, are important to increasing persistence and, ultimately, transitions to postsecondary education. A U.S. Department of Labor Workforce Innovation in Regional Economic Development Initiative agrees that using delivery systems and formats that make learning accessible to the target population is a key feature of program design.

Key Features of Flexible Programs

Having clear, easy-to-navigate transitions from noncredit to credit with multiple entry, exit, and re-entry points is identified as a promising strategy in Breaking Through (Liebowitz & Taylor, 2004). The National Research Center for Career and Technical Education confirms that modularized curriculum with multiple entry/exit points was a key feature of exemplary career pathways programs, (Bragg et al., 2007).

In addition, Boylan (2004) finds that allowing students to move between learning levels helped students transition to postsecondary education. He notes that ABE, Adult Secondary Education (ASE), and ESL were seen as the first steps in progression toward an AA or BA, but concludes that it must not be assumed that students have to go through all phases. Rather, procedures should allow students to change from one learning level to the next.

Chunking, or breaking down larger credit courses or programs into short, discrete noncredit courses, is also recommended as a successful practice in improving transitions. At Lorain Community College in Ohio, for example, chunked courses are bridges to credit courses (Van Noy et al., 2005). Curriculum that is chunked into clear stepping-stones recognized by employers is also a key feature of the Career Pathways Model developed by Zafft et al. (2006).

Furthermore, offering programs at times and places convenient to working adults is a key feature of model bridge training programs that prepare adults who lack adequate basic skills to enter and succeed in postsecondary education and training (Women Employed, 2005).

Programs Using Flexibility to Increase Transitions

Success data are available for one program studied for this initiative: the Career Pathways Program at Portland Community College and Mt. Hood Community College in Oregon. This program provides nine modularized career pathways, from adult education and workforce development programs to credit-level occupational/technical degree programs, with multiple entry/exit and re-entry points. The program serves approximately 250 students annually, and approximately 200 students enter internships each year.

Another program studied, the New Faces program in Philadelphia, has created a healthcare ladder that takes applicants at any employment level and moves them into technical and professional positions. Students can begin with the GED, adult diploma, or high school refresher program, and work all the way through college classes (CAEL, 2006).

The Nashua Adult learning Center Program in New Hampshire, part of the New England ABE-to-College Transition Project, also cites a program design that is flexible and responsive to different types of students as an important factor and provided some modest success data (Gittleman, 2005).

Additional Information

A cautionary note on providing short-term training, which results in chunking and modularizing curriculum, comes from Prince & Jenkins' (2005) major study that tracked 34,956 students enrolled in ABE as well as credit programs students in 34 community and technical colleges in Washington. They found that short-term training focused on getting a job with little attention to educational advancement leads to lower future earnings. Colleges should help students avoid dead-ends by providing short-term options that lead to real attainment in the long term.

D.5 Sufficient language instruction is provided for English-as-a-second-language learners.

The Importance of ESL in Adult Education

The need for ESL instruction has been documented in a variety of sources. According to data from the Office of Vocational and Adult Education, 25% of students served in federally funded adult education programs in 2003-04 were enrolled in ESL (Bragg, 2007). In addition, ESL is the largest and fastest growing adult education program at many community colleges in the country (Crandall & Sheppard, 2004). Indeed, ESL is a starting point for many adult education students; the longitudinal study of almost 35,000 ABE students in community and technical colleges in Washington found that 35% started in ESL. However, only 13% of the ESL students went on to earn at least some college credits in five years (Prince & Jenkins, 2005).

Many ESL students first enroll at the beginning levels and have a long way to go to achieve college-level English proficiency. National Reporting System (NRS) data from 2005-06 for all 50 states show

that 48% of ESL students reported by states to the NRS were at the ESL literacy or beginning levels (Chisman and Crandall, 2007). The actual percentage is likely to be higher since some programs do not test all of their students using NRS-approved tests and, therefore, do not report the levels of all of their students to the NRS.

Although not all adult ESL students want or need a college degree, some need post-ESL studies, as verified by a summary of research on transitions from the Center for Adult English Language Acquisition (CAELA). Linguistic skills (reading, writing, vocabulary) must be provided to help ESL students with academic course work (CAELA, 2008).

Challenges of Transitioning for ESL Students

It is difficult to assess whether transitioning is a realistic expectation for most ESL students who begin at the lowest levels of coursework. In a large longitudinal study of noncredit ESL students at City College of San Francisco, it was found that most of those who transitioned began at fairly low levels and worked their way up to gain the English proficiency they needed to move to credit studies. Almost all students had attained the intermediate level of proficiency or higher before transitioning. Nineteen percent of those who began at the lowest levels ever reached an intermediate level of proficiency or higher, and 8% of noncredit ESL students eventually transitioned to credit studies (Spurling et al., 2008).

Several reports call for more study of the needs of ESL students to better understand the challenges they face and their pathway to transitioning. Spurling et al. (2008) speaks to the need for more longitudinal research to improve the understanding of the components that increase the success and transition rates of noncredit ESL students. In addition, one key recommendation of the evaluation report of the New England ABE-to-College Transition Project is the further assessment of the postsecondary needs of non-native English-speaking adult learners, because these students are more likely project dropouts (Gittleman, 2005).

Practices for Improving ESL Student Transitions

The literature offers a look at a variety of recommendations and practices designed to improve successful transitions for ESL students. A report from Lumina suggests that institutions should integrate ESL education with larger strategies for student success, such as developing student confidence, developing learning communities, and providing support services (Pusser et al., 2007). Additionally, Zafft et al. (2006) note that a focus on advanced language skills required for academic settings, high program intensity, and well-articulated curricula with clear academic benchmarks for admission are all key features of an ESOL model, one of the five transition models developed in a study on adult education program models.

Professional opinion also supports more collaboration between community colleges and adult education programs in offering ESL. Crandall and Sheppard (2004) state that not all ESL can or should be offered by community colleges, but colleges should still play a leadership role in advocating for adult education students. Sheppard and Crandall conclude that in cases where adult education is offered through the community college, the ability to help ESL students to transition to regular college classes partly depends on good relationships within the college, good communication, integration

of curriculum, and community outreach. The CAAL 2005 report further notes that transitions from adult education to postsecondary education could be strengthened with better synergy between noncredit and credit ESL.

Sometimes ESL students need to transition to ABE programs, rather than directly into college courses, in preparation for moving on to postsecondary education. In Yakima Community College in Washington, the ESL and ABE instructors have successfully collaborated on a transition program, working closely together to integrate a single curricular track for a program that serves about 300 students a year. Students in ESL Level 3 take a mathematics class taught by an ESL instructor. At Levels 4 and 5, they take a more advanced class and an ABE computer basics course taught by an ABE instructor. At ESL Level 5, they also take an ABE corrective reading class and an ABE computer basics class taught by an ABE instructor. Between 2002 and 2006, 73% of students who were enrolled in the transitions program went on to become solely ABE students. Furthermore, 20% enrolled in the college's developmental education classes in May 2006 (Chisman & Crandall, 2007).

Chisman and Crandall highlight yet another strategy for improving ESL student transitions; they find that articulated programs that integrate credit and noncredit ESL curriculum promote transitions. For example, the English for Academic Purposes (EAP) program at Lake Country Community College in Illinois provides a two-semester noncredit ESL program with academic content. Of students who entered in Fall 2002, up to 39% were in credit ESL or developmental English or both by Fall 2006, compared with 13% of non-EAP students.

D.6 Instruction and curriculum are designed and delivered in a way that integrates a variety of instructional methodologies.

Using a variety of instructional strategies has already been identified as a promising practice in the Center for Student Success report (2007) on effective practices for improving the success of basic skills students. Active learning, collaborative learning, contextualized learning, and learning communities are highlighted in that report. Similarly, the existing literature identifies the use of a variety of instructional methodologies as a promising strategy for improving transition rates from adult education to postsecondary programs. For example, studies of vocational/career pathways programs cited the use of a variety of instructional techniques as a promising strategy. Computer-aided instruction, the individualized instruction, and innovations such as team-teaching and project-based classes were key features of all three model pathways programs studied by Bragg (2007).

Examples of the use of a wide range of instructional methodologies are listed below. Some programs listed have been previously highlighted in this report.

‣ Integrating Adult and Developmental Education. The Mayo Campus of Big Sandy Community and Technical College seeks to improve transitions by unifying adult and developmental education. Classes are individualized and competency-based and most have mixed-ability students. According to data from 2002-03, up to 98% of students with a postsecondary goal entered postsecondary education.

‣ Modular Instruction. Jefferson County Community College offers individualized modular instruction and a short three-week college preparation program designed to help students with low COMPASS test scores. When retested, all students were able to skip at least one developmental education course; 59% were able to skip more than one (Chisman, 2004).

‣ Portfolios. The Community Learning Center (CLC) Bridge Program in Cambridge, Massachusetts, found that having students develop portfolios to individualize instruction was a successful technique. Before 2003, CLC used portfolios to keep writing assignments, but in August 2003 it shifted to an all-portfolio format. The percentage of students who applied to college by program graduation jumped from 44% in 2003 to 83% in 2004, and the percentage accepted into college jumped from 38% to 67% (NCTN, 2004).

‣ Creative Assignments. In the Portland Adult Education program in Maine, instructors assigned a mathematics murder mystery, hands-on labs, and student journals. Eighty-six percent of Algebra B transition students passed the Accuplacer test and placed into college-level mathematics (NCTN, 2004).

‣ Learning Communities. Students in Cape Cod Success cited being able to build a learning community as a key strength of the program. From Spring 2002 to Summer 2004, up to 83% of the 94 students completed the program; 78% completed one or more college semesters; and 4% transferred to four-year colleges (Gittleman, 2005). In addition, staff at William Rainey Harper College in Illinois identified having a fully integrated learning community as an essential component in the success of the Bridge to Heating, Ventilation, Air Conditioning and Refrigeration (Bell, 2008).

‣ Cohort Model. The students in a Bridge to Biotech program at City College of San Francisco find success in studying in a cohort. Over 90% of the program graduates find employment in bioscience and/or enroll in further bioscience education (CAEL, 2006). An effective cohort approach is also used at the Breaking Through Initiative Project at Central New Mexico Community College. Students receive instruction in basic skills mathematics, reading, and various construction trades in a 12-week program (Cross Mwase, 2007).

‣ Tutoring and Labs. Using lab-based and group instruction to accommodate different learning styles was found to be a promising practice by the ABE to Community College Transitions Project (MPR Associates, 2007).The Renton Technical College program, a particularly successful I-BEST program in Washington, includes peer tutoring and a language-learning lab (Washington State Board for Community and Technical Colleges, 2005).

‣ Adult-Centered Instruction. An inventory of adult learning models and innovations identifies using adult-centered implementation as one of the major steps that should be followed in designing adult learning and skill-training programs. Key features of an adult-centered program include engaging the learner as an adult, drawing on the learner's experience, varying techniques to appeal to different learning styles, and using blended learning, including online, instruction-led and hands-on learning (CAEL, 2006).

‣ Technology Integration. A survey of community college presidents shows that using technology attracts students and is a common characteristic of collaborative adult and developmental education programs (Boylan, 2004).

‣ Learning by Doing. A program guide developed for bridge training programs for adults who lack adequate basic skills to succeed in postsecondary education cited instruction emphasizing "learning by doing" through projects, simulations, and labs, as a key feature of such programs.

D.7 Institutions provide accelerated courses/programs that give transition students the opportunity to quickly meet their goals.

The Role of Accelerated Learning in Transitions

According to the literature, providing accelerated courses/programs is a promising strategy used by a variety of programs and recommended by studies of model transitions. Some of the programs are small, but their success at speeding up learning provides some evidence of a promising practice. Indeed, the seven-year longitudinal study of noncredit ESL students at City College of San Francisco found that 31% of students who took accelerated noncredit courses transitioned to credit courses, compared to 8% of all noncredit ESL students (Spurling et al., 2008).

Accelerated learning is also one of the four major promising strategies identified by Breaking Through. The key features of an accelerated learning approach are diagnostic assessment that creates individualized competency-based instruction, a focus on what the learner needs to master, short-term intensive programs, and contextualized course content (Liebowitz & Taylor, 2004). Moreover, the U.S. Department of Labor notes that accelerated learning is a key component in designing progress- and success-focused programs (CAEL, 2006). Offering compressed programs that allow quicker completion and movement to better jobs and further education is a key feature of bridge training programs (Women Employed, 2005).

Accelerated Learning Models and Approaches

The noncredit Lake County English for Academic Purposes program in Illinois is an example of an accelerated ESL program that has shown substantial success in transitioning adult education students to postsecondary education. This eight-course, two-level program for high-intermediate and advanced ESL students has classes that meet 12 hours per week over a 16-week semester that contains four four-week courses. The intensive instruction, along with an integrated curriculum and clear entry/exit criteria, has resulted in impressive transition rates. Of the Fall 2002 students, 39% had enrolled in credit ESL or developmental English courses or both by Fall 2006, compared to only 11% of those in regular ESL courses. Fifteen percent took one or more academic courses, compared to 6% of those in regular ESL courses. Furthermore, 21% enrolled in one or more vocational career courses, compared to 13% enrolled in regular ESL courses (Chisman & Crandall, 2007).

In the Central New Mexico Community College Breaking Through Initiative program, students participate in accelerated basic skills and career exploration activities as the first component of its program for transitioning low-skilled adults into college courses and job training programs. This successful three-week course includes a mathematics and reading focus applied to the construction trades, GED test preparation, a construction lab project, and a construction site visit (Cross Mwase, 2007, p. 23).

In addition, a number of community colleges in Kentucky offer short, intensive college preparation courses that have helped students make the transition to college-level coursework. Jefferson County Community College, for example, has a three-week intensive college preparation program that helps students who have low COMPASS scores. When retested after the completion of the program, all of the enrollees were able to skip at least one level of developmental education, and 59% were able to skip more than one level (Chisman, 2004).

The Community College of Denver also offers an accelerated, intensive educational program. The college has an intensive Social Services GED lab for welfare recipients which makes it possible for students with 7th grade skills to earn a credential in four months rather than several years. Students spend half their time in intensive mini-classes and the other half in independent study for up to 15 hours a week.

Another way to speed up learning is to individualize instruction and focus on only the areas in which students need to improve their skills. For example, the Mayo Campus of the Big Sandy Community and Technical College District in Kentucky, which offers both the adult and developmental education programs in Johnson County, emphasizes the precise determination of the skills students must master to get a GED or score high enough on the COMPASS test to start academic work (Chisman, 2004).

Finally, combining basic skills and workforce training is another way of accelerating student progress. As described previously, the I-BEST program in Washington was formed in part to speed up learning for ESL students. For ESL students at Level 3 and above, the I-BEST program links ESL classes with workforce education. ESL students do not have to complete all levels of basic skills before moving into workforce training. (Washington State Board for Community and Technical Colleges, 2005).

Suggestions for Further Research

The director of the Institute for Educational Sciences, as cited by Miller stated that evidence-based practice is "the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction" (Miller, 2006).The promising practices reviewed in this report draw upon professional wisdom and empirical evidence available in the literature. Practitioners, including instructors, staff, program coordinators, tutors, students, and administrators, acquired some of the evidence through concrete observation. Researchers acquired some of it through surveys, interviews, site visits, and their own literature reviews. Outcomes data, when available, have been included. In a few cases, so are data from scientific studies.

Despite all that has been observed and noted thus far, very little scientifically based research has been conducted to date to produce data on transition student performance that can be used to compare, evaluate, and monitor progress. Much more research is needed, with practitioners as well as researchers adding to the knowledge base. The research suggestions offered below are meant to encourage this additional research.

Teacher Research

Teachers can play an important role in gathering evidence to better understand transitions from adult education to postsecondary education. The following information comes from the website for the Graduate School of Education at George Mason University (http://gse.gmu.edu/research/tr/tr_definition/). In an "inquiry that is intentional, systematic, public, voluntary, ethical, and contextual," teachers as researchers can do the following: (Mohr, 2008)

- Formulate questions based on their own curiosity about their students' learning and their teaching.
- Investigate their questions with their students, systematically documenting what happens.
- Collect and analyze data from their classes, including their own observations and reflections.
- Examine their assumptions and beliefs.
- Articulate their theories.
- Discuss their research with colleagues for support, as "critical friends" to validate their findings and interpret their data.
- Present their findings to others.
- Talk to their students.
- Give presentations.
- Write about their research.

In order to act as on-the-ground researchers, teachers can begin by asking themselves the following questions:

‣ What key skills should my adult education students acquire to succeed in the next course level of the pathway to postsecondary education?

‣ What instructional activities help transition students in career planning?

‣ What are transition students interested in that will help contextualize the lessons and make learning more meaningful for them?

‣ What types of instructional methodologies help students learn best?

‣ What types of assessment best indicate what transition students already know and what they need to learn before I begin a unit of instruction?

‣ What types of assessment best show that transition students have absorbed the skills training and knowledge they received in class?

‣ What learning/coping skills do transition students need, in addition to academic skills, that will help them succeed in postsecondary education?

‣ What do adult students need to know about transitioning to college? What do adult students who have transitioned wish they had known before their transition?

‣ What are the biggest barriers that interfere with student success in school? What can I do to help students overcome these barriers?

‣ How can I identify and encourage adult education students who are most likely to transition successfully to postsecondary education?

Longitudinal Research

A number of the literature sources reviewed for this report refer to the need for more longitudinal research on programs and students to extend understanding of effective transition practices. Longitudinal research conducted on programs and large groups of students can provide valuable information that administrators, policymakers, and practitioners can use to improve programs.

All community colleges and adult schools in California have data collection systems, although fewer adult education institutions have extensive student grade and credit data systems. One-third of the respondents to a survey on the use of technology for evidence-gathering reported having some sort of data-collection and reporting system in place for measuring student learning outcomes. Another third expressed great interest in such a system (Gabriner, 2008). Collecting data across institutional systems that can measure the progress of students transitioning from adult to postsecondary education, remains a major challenge that could be met more easily with state and federal assistance.

Some of the research called for in the literature includes:

‣ How do we define the skills that are necessary for college readiness and success?

‣ What is the best way to assess the skills needed for college readiness and success?

‣ How well do the assessment instruments used in adult education align with those used for admission to postsecondary education?

‣ What types of transition/bridge programs are most effective?

‣ What are the transition rates, persistence rates, and outcomes of adult education students?

   ◦ What is the cost of education that prepares adult students to transition to postsecondary education?

   ◦ What curricula best meet the needs of transition students?

   ◦ What types of support services help increase transitions and student success in postsecondary education?

   ◦ What models of data collection are needed to share information across adult/ postsecondary institutions?

Addressing these questions through longitudinal research will make a critical contribution to the understanding of adult education students and their pathway to a college education.

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