

1221 Avenue of the Americas - 44th Floor New York, N.Y. 10020 http://www.caalusa.org

RANDOM ACTS OF PROGRESS

Certification of Readiness for Jobs & College

by James Parker and Gail Spangenberg

March 30, 2012



This project was made possible by the AT&T Foundation, the Dellar Caparal Corporation, the	
This project was made possible by the AT&T Foundation, the Dollar General Corporation, the McGraw-Hill Companies, Inc., the late Harold W. McGraw, Jr., and other individual donors.	
Published by the Council for Advancement of Adult Literacy © March 2012	

ABOUT THIS REPORT

Kudos for this super CAAL report. It challenges adult education and workforce development providers as well as employers and job and college readiness certification groups. It paints a picture of various national and state learner certification and credentialing systems, outlines relevant research findings, and poses the many questions and issues we need to address in validating student readiness. Implicit in *Random Acts of Progress* is the challenge to consider certification in the context of system-wide reforms so as to prepare students to qualify for current and emerging jobs and to succeed in college. This report is a call to action, another significant CAAL contribution to advancing adult education and workforce skills upgrading.

—Mary Ann Corley, Principal Research Analyst, American Institutes for Research

Mark Twain and CAAL are both right. Twain warned us that it is not just the things we don't know that cost us most dearly, it's the things we 'know' that aren't so. CAAL's *Random Acts of Progress* grabs us with a bit of a reverse twist on Mark Twain's message. CAAL says that it's not that we don't know what to do about certifying Americans' readiness for jobs and college...we know a lot... but not for sure because our impressive efforts are in their early stages, largely disconnected, and unevaluated. This is not a formula for success. But it can be a foundation on which to build. What is your state doing, or what could it be doing, to certify readiness for jobs and college? What are we doing as a nation? If you are looking for answers, *Random Acts of Progress* is for you.

—Mark Musick, James Quillen Chair of Excellence in Teaching and Learning, East Tennessee State University; President Emeritus, Southern Regional Education Board (SREB); Chair, Board of National Assessment of Educational Progress under three presidents; member, National Commission on Adult Literacy

CONTENTS

INTRODUCTION & CONTEXT	1
PART I – WHAT WE HAVE AND KNOW	2
A. NATIONAL CERTIFICATION MODELS	2
(1) The CASAS Workforce Skills Certification System	2
(2) The National Work Readiness Credential	4
(3) National Career Readiness Certificate	5
B. FEATURES OF SOME EXEMPLARY STATE MODELS	6
(1) The Workforce Alliance for Growth in the Economy (WAGE)	6
(2) Ohio's Stackable Certificates System	7
(3) Georgia Work Ready	9
(4) Certificates in California	10
C. WHAT RECENT RESEARCH TELLS US	12
(1) A Survey of Selected Work Readiness Certificates	12
(2) Certificates Count	13
(3) Focus Group Findings for Data Collection Needs	14
(4) Certifying Adult Education Students: Survey of State ABE Directors	16
D. CONCLUDING NOTES(1) Commonality and Differences Among the National Models	17 17
(2) Commonality and Differences Among the State Models	17
(3) Other Notes	18
(3) Other Potes	10
PART II – AT THE HEART OF THE MATTER: Hard Questions & Issues	19
A. THE BIG ISSUES	19
(1) Employers Say They Want Certificates, But Do They?	19
(2) Employers Must Value Certificates, But Do They?	20
(3) How Much Certification is Enough?	21
(4) What About "Pipeline" Skills?	22
(5) Lack of Consistency in Concepts and Approaches	22
(6) It's Not Just About Employers & Near-Term Jobs	23
(7) Certificates or Degrees?	23
B. OTHER IMPORTANT ISSUES TO CONSIDER	24
PART III – KEY NEXT STEPS	25
A. OVERCOMING THE BARRIERS	25
(1) Building Awareness	25
(2) Data Collection & Research	26
B. CONCLUDING COMMENTS	28
APPENDIX I — About the Authors	30
APPENDIX II – Roundtable Participants	31
APPENDIX II – Additional Resources and Readings	33

RANDOM ACTS OF PROGRESS

Certification of Readiness for Jobs & College

INTRODUCTION & CONTEXT

CAAL's special projects over the last three years have focused on a variety of themes that are strategically important to advancing an integrated adult education and workforce development system. A key feature of each has been a day-long invitational Roundtable. Nine reports (all available at www.caalusa.org) have been issued as a result of this work—on building the role of business in adult education, certification and credentialing of adult education teachers, pacesetter activities in adult education for work, local perspectives on WIA reauthorization, and adult numeracy.

Random Acts of Progress is the tenth and final report in our 2009-2011 Roundtable program. In September 2011, nearly two dozen national and state leaders came together (see Appendix II) to discuss the topic of adult learners' certification. We reviewed exemplary certification activities among some leadership states, looked at key features of the major national certification models, and sought to clarify issues, questions, and concerns in validating student job readiness. A primary interest was to consider next-step measures by which adult educators can better meet employer and employee needs.

The title <u>Random Acts of Progress</u> is adapted from comments by one of the Roundtable participants. The report is organized into three parts. PART I presents a straightforward summary of major national and selected state programs, and of recent research reports and their main findings. The summaries are based on presentations by Roundtable participants and CAAL's review of numerous websites and recent research literature. PART II discusses areas of Roundtable agreement and disagreement, unresolved issues, and a few surprises and new ideas worth exploring further. PART III presents several next-step recommendations. Information about the authors is given in Appendix I, Roundtable participants are listed in Appendix II, and additional resource material is suggested in Appendix III.

As this paper makes clear, there is substantial experience on which to build. At the same time, that experience is still relatively young and disorganized, pretty much without "crosswalks," and lacks a common language. Achievements can be aptly characterized as "random acts of progress." A key finding of the CAAL Roundtable is that if we are to proceed with clarity of definition and purpose in this challenging area, we need to know and understand a great deal more than we do now, and take steps to "connect the dots" that make up our current certification and credentialing system.¹

1

¹ Also see <u>Breaking New Ground: Building a National Workforce Skills Credentialing System</u>, ACT, 2011. <u>http://www.act.org/research/policymakers/reports/breakingnewground.html</u>

PART I WHAT WE HAVE AND KNOW

Surveys indicate that the majority of states have some kind of learner certification or credentialing system in use at the present time, with wide variety in sophistication and level of development and in sponsorship.² Some of these state efforts, such as the Florida Work Certified Program³ and the Arkansas WAGE program, are sufficiently proven to be of national utility.

The four state models selected for participation at the CAAL Roundtable, including WAGE, were chosen not necessarily because they are "the best or the only," but because they are well established and widely known, operate in different regions of the country, have interesting variations and heavy business buy-in, and reflect an array of important questions and issues. These efforts are summarized below.

Three national certification models, including WorkKeys, are in growing use across the country, and they underlie a good deal of the state activity. These are also reviewed below.

In the third section of Part I, the findings of several major research papers are presented. All were provided as background reading for the Roundtable participants.

A. NATIONAL CERTIFICATION MODELS

The three national systems presently in use are (1) the Workforce Skills Certification System of the Comprehensive Adult Student Assessment Systems together with Learning Resources, Inc., (2) the National Work Readiness Credential of the National Work Readiness Council, and (3) ACT's National Career Readiness Certificate, which is based largely on WorkKeys. Presentations by Roundtable participants and CAAL's review of various other materials show some of the system differences and similarities.

(1) The CASAS Workforce Skills Certification System

The Workforce Skills Certification System (WSCS) ⁴ was developed over a period of several years by the California-based Comprehensive Adult Student Assessment Systems (CASAS), in partnership with Learning Resources, Inc. (LRI). Based on the long-established CASAS system generally, WSCS is designed to specifically validate employer-valued learning by youth and adults—including individuals in correctional settings, the unemployed and underemployed, those

(b) http://www.yourworkforcesolutions.com/jobseekers/services/work-certified

² One such survey, from CAAL, is *Certifying Adult Education Students: A Survey of State Directors of Adult Education On Certificate Programs in Use,* by Garrett Murphy, April 2011. http://www.caalusa.org/StudentCert.pdf.

³ The Florida Work Certified Program is heavily marketed for national consumption. See:

⁽a) http://www.floridareadytowork.com/aboutprogram/

⁴ For detailed information, go to https://www.casas.org/workforce-development.

re-entering the labor market including TANF recipients, and learners in ESL, ABE, and GED preparation. Its first assessments were initiated in 1998.

The goal of WSCS is to promote transition of adult literacy learners into jobs and college. Learners use the skills identified in the WSCS process, which have been aligned with workforce needs in consultation with employers, to meet work readiness standards for jobs, better jobs, and college. Assessments are administered in 15 sites in California (which house the WIA-funded adult education and training programs, and programs for jails and parolees) and four other states. The number of assessments and certifications given since WSCS's inception is not known because the assessments were paper-based and locally issued until 2010, when the assessment and certification components became computerized.

WSCS uses a three-step process: The first step is to *profile* via computer *the basic academic and soft skills* that ABE and ESL adult learners currently have and need to acquire—from entry-level skills to first-line supervisory requirements. This includes the basics of reading, writing, math, and listening, and also such personal quality and customer care skills as self-management, social ability, responsibility, decision-making, and customer relations. These soft skills assessment elements were developed by LRI, which has worked for nearly 25 years with employer-validated programs and measurement systems and with various federal departments and agencies.

The second step is to *develop needed skills* by providing profile reports to program providers (and the individual learners), along with guidelines, learning materials, and program goals. TOPSpro competency reports and LRI Feedback and Development reports are used to design and target instruction, and skills achievement levels are assessed periodically to track learner progress.

The third step is to *certify acquisition of the essential skills*. Once this has been done, the National Workforce Skills Certificate, which carries the names of CASAS and LRI, is awarded by the local service provider (which may be an adult education program, a chamber of commerce, a workforce investment board, a community college, or others). CASAS aims to ensure that employers and colleges know that individual applicants read and can perform math, in terms of job-related tasks and situations, and at adult secondary levels, and that they possess critical thinking and problem solving skills as well as needed personal attributes.

Learners hear about WSCS through local marketing campaigns and counseling that promote the benefits of workforce readiness and help make connections among local employers, adult education service providers, and individual adults.

CASAS has also incorporated the WSCS into the National External Diploma Program (NEDP), at sites in Connecticut, Maryland, Rhode Island, and Washington, DC. NEDP is a high school diploma performance-based system where individuals have to show 100% mastery of some 70 competencies. Learners in these WSCS programs essentially earn a "diploma plus." WSCS has also been customized for a Workplace Literacy and Numeracy program accepted by more than 2,500 employers in Singapore, and it is an element of Maine's Work Ready program and Washington State's I-Best program. A key feature of WSCS is that it includes a literacy skills training component, in which CASAS can prepare local adult and workforce education and training personnel to go to a workplace and perform a literacy "task analysis." This task analysis, which involves employers, helps employers better understand the profiles needed for specific jobs.

According to a CASAS official, WSCS is "changing the way classrooms are set up and that skills are taught because instructors increasingly understand how to incorporate soft skills into their offerings along with the basic skills." And, significantly, WSCS is aligned to the functional levels of the National Reporting System. Moreover, both LRI and CASAS are collecting data about the extent to which WSCS assessments are a good predictor of job success.

(2) The National Work Readiness Credential

The National Work Readiness Credential (NWRC)⁵, with executive offices based in Florida, was developed over the past five years by the National Work Readiness Council, a collaboration of businesses, unions, chambers of commerce, education and training professionals, state workforce investment boards from half a dozen states (FL, NJ, NY, RI, WA, and DC), and Junior Achievement Worldwide. Its first assessments were given in 2007.

It is built on the functional context foundation developed by the pioneering Equipped for the Future, a 1994 initiative of the National Institute for Literacy. NWRC has been extensively piloted in several states, incorporating input from numerous focus groups, and is currently coming into active use in hundreds of sites around the country. New York and California are especially heavy users. Walmart and General Electric are two of many companies that have adopted the NWRC, to the point of making it a part of their hiring process.

NWRC is a four-test credential for entry-level workers and line managers. In most cases, individuals learn about the credential through licensed sites that promote it in their communities, and that provide computerized tests to them. A paper-and-pencil version is being piloted as a result of growing demand from prisons. A main purpose of the credential is "to give that business person who's going to make the decision on whether or not to hire that individual the comfort level to know that they're making a solid decision."

It assesses and validates a basic level of ability in math, reading, situational judgment, and active listening, all of which must be passed to earn the credential. The skill levels it is designed to work with are typically between 6th and 9th grade reading levels. All test questions are set in a business context and were developed in close cooperation with the U.S. Chamber of Commerce and its membership. Issues at the core of testing are all business related and based on the needs of seven important business sectors in today's economy. But the assessments are not industry specific; they are designed to be national and portable.

_

⁵ For more information, although the site needs updating, go to http://www.workreadiness.com.

⁶ Equipped for the Future sought to develop the building blocks and rationale, a framework of standards, for adult education that would make it more responsive and productive for individuals and adult education program designers in a global economy. It is based on established principles of functional context learning and reflects input from literally dozens of professionals across the country who spent some six years reaching consensus on what makes a valid and appropriate set of standards for teaching, assessing, and improving adult literacy programs. It does not prescribe a program or curriculum, but gave critical guidelines for educators and adult students to follow in designing curricula and assessing outcomes that relate specifically to student needs in their roles as workers, parents, and citizens. See http://www.caalusa.org/efftoolsstandards.pdf.

The NWRC exams are administered by a large number of licensed sites located in 29 states—which professionals trained by Castle Worldwide supervise. To date, according to an official of NWRC, of the 10,714 persons who have taken all four exams, 5,890 have earned the Work Readiness Credential.

For marketing purposes, NWRC has partnered with Steck-Vaughn, the adult education unit of the Houghton Mifflin Harcourt Publishing Company, which works actively to bring the System to the attention of private employers (for their in-house programs), community colleges, workforce development agencies, adult education groups, and others.

All kinds of resources are available from the NWRC website—handbooks, training guides, skills profiles, module descriptions, brochures, and statements of purpose. A National Work Readiness Credential Network is in development to encourage participation and sharing.

The Roundtable participant from NWRC pointed out that "in those states where the state is paying for it, there's a lot more fluctuation, more wavering, more flexibility in terms of who's leading and what kind of money [is involved], but business buy-in is critical in any case" or the programs will "tank" if public funding is lost. He also pointed out that employees need to be consulted in the design of programs to be sure businesses do buy into them.

(3) National Career Readiness Certificate

ACT's National Career Readiness Certificate (NCRC)⁷, introduced in 2006, is a portable evidence-based credential that measures "foundational" workplace skills. According to ACT, based in Iowa, it is a reliable predictor of workplace success. The NCRC credential is used across all sectors of the economy. It measures problem solving, critical thinking, reading, and using work-related text. It also tests the ability to apply information to solve problems, apply mathematical reasoning to work-related problems, set up and perform work-related math calculations, and other skills. It is based largely on WorkKeys assessments that were first introduced in 2001.

WorkKeys' process is quite similar to that of CASAS. According to ACT's Roundtable participant, "ACT has one of the largest and most robust occupational profile databases available, and it continues to grow." This database provides a powerful foundation for the WorkKeys program. Drawing on it, WorkKeys profiles jobs in terms of the basic, foundational, and soft skills required to perform them. A second phase assesses students' and job applicants' skill levels. A third phase provides reports and guidelines to individuals, and to employers and service groups that offer education and training to correct skills deficiencies.

THE NCRC Assessments are based on three of WorkKeys many assessment areas, those that ACT considers most important to about 77 percent of all jobs: Locating Information, Reading for Information, and Applied Mathematics. The Certificate validates that an individual has essential skills in these areas appropriate to a range of jobs and sectors. It provides a common language by which employers, career seekers, economic planners, and educators can work together to improve workforce quality.

⁷ For more information see http://www.ACT.org/certificate. Also see http://www.act.org/workkeys/.

ACT emphasizes that the NCRC is industry-recognized, portable, and evidence-based. Passing the three WorkKeys assessments verifies that individuals have sufficient problem solving and critical thinking skills, that they can read and apply information using work-related documents, that they are able to do basic math calculations and reasoning, and that they can effectively handle data presented in graphic formats. It was explained at the Roundtable that individuals can learn and be assessed at four different levels. At the bronze level, the person is eligible for about 16% of the ACT profiled jobs. At the silver level, eligibility jumps to about 67%. At the gold level, it increases to 93%. And, at the platinum level, in the words of our Roundtable participant, "you are ready to rock and roll." Certificate earners at these levels are about 21%, 47%, 18%, and one percent, respectively. To date, some 1,245,000 individuals have been awarded Certificates at one of the levels. The higher the assessment performance level, the greater the chance of success on the job.

Assessments are usually given at community colleges and One Stop centers, by both paper-and-pencil and computer. Some are also given at established WorkKeys testing sites or at company sites, where companies have established their own test centers following ACT guidelines. Learners find out about the assessments through their employers and at the colleges and One Stops. In the words of an ACT executive, "Many employers overwhelmed by stacks of applications ask for the NCRC because it is a quick way to pinpoint individuals who have the skills they want, and colleges and One Stops say that NCRC greatly strengthens their occupational and career pathway programs."

ACT is currently working with the National Association of Manufacturers, the National Center for Construction Education and Research, and a few others to align its certificate with the assessment and validation needs of those groups.

B. FEATURES OF SOME EXEMPLARY STATE MODELS

The four states present at CAAL's September 19 Roundtable were Arkansas, California, Georgia, and Ohio. The main features of their certification activities are summarized below, based on Roundtable participant presentations, website information, follow-up conversations, and other available resources.

(1) The Workforce Alliance for Growth in the Economy (WAGE)

WAGE is a job-readiness training program developed, produced, and conducted by the Adult Education Division of the Arkansas Department of Career Education. It includes 112 competencies determined by the Secretary's Commission on Achieving Necessary Skills (SCANS) to be essential to employers. WAGE offers five state-issued certificates (Industrial, Clerical, Employability, Bank Teller, and Customer Service), all of which carry the Secretary of State's signature. Out of 3 million adults in Arkansas 18 and older, more than 13 percent (400,000) are judged to function below 12th grade level. Arkansas also has a large high school dropout rate. These adults lack adequate basic literacy skills and are WAGE's target population. Testing, which was a 33-page paper test for some 18 years, is now completely web-based. Questions can be customized to meet employers' specific needs.

⁸ For more information, see http://ace.arkansas.gov/adultEducation/programs/WAGE/Pages/default.aspx

WAGE began in 1992 with a partnership between the Adult Education System and L'Oreal (formerly Maybelline). Built on that foundation, WAGE grew over the years to its current level of operations, programs in 20 of Arkansas' 51 adult education centers. It is funded with state tax dollars and totally driven by the needs of business and industry. Oversight of the program is through quarterly meetings of the statewide WAGE Advisory Committee, chaired by a business CEO or a top human resource executive. Some businesses in the state now require an applicant to have a WAGE certificate to be eligible for hire at all.

At the local level, adult education programs sign up their chamber of commerce and draw in area businesses as partners. Participating employers agree to give added consideration in job decisions to WAGE graduates. A cost-free task analysis, done by teachers with specialized training, is conducted on site at the local business. They collect documents, do readability analyses, identify the literacy skills needed to do a specific job, and prepare a report for the company on the findings. This information is then used to customize classes, which are free, given either at the workplace or in local adult education settings. In addition to its basic and soft skills testing, which may also draw on the TABE test, WAGE assesses computer literacy, mechanical aptitude, customer relations skills, and manual dexterity.

Certificates validate learning at different grade-level equivalencies in different skill areas required by specific jobs. To hold a low-level customer service job, an individual must demonstrate a 9.0 grade-level skills proficiency. To qualify for a bank teller position or a higher-level customer service job, a higher and more varied skills proficiency level is needed. But regardless of the certificate goal, WAGE can work with adults who have at least a 6th-grade reading level.

WAGE's Roundtable participant again underscored the need for business buy-in and effective marketing to achieve that. But he noted that a big challenge to developing business engagement is in "just getting out to see them." "We don't have enough staff to recruit businesses," he said, "but when we can get out to them, they say 'yes, this is a no brainer.' If we had the money to hire four or five more people to help recruit, it would all go much faster."

(2) Ohio's Stackable Certificates System

There are about 8.8 million adults 18 and older in Ohio. About 45 percent between the ages of 25 and 54 (2.1 million) are judged to have low skills proficiency. The state has long had a wide range of disconnected services available to serve low-skilled adults, but realized that to respond to emerging economic and employability trends, these services would have to be more closely interconnected, geared more to college- and job-readiness, and involve a new partnership among the adult basic education system, community and technical colleges, business interests, and other groups.

The legislature mandated that by 2007-08, the state would begin developing a program of "precollege stackable certificates." These certificate programs would operate in 12 different

⁹ Source: U.S. Bureau of the Census

¹⁰ Source: *Ohio Stackable Certificates: Models for Success*, Community Research Partners, Columbus, 2008, p. 1. www.communityresearchpartners.org/uploads/publications/Ohio Stackable Certificates Models for Success.pdf

economic regions and sectors, be customized to the needs of each, and aim to move adults along a continuum to college and job readiness. There are presently 19 fully articulated sectors and another 39 more in the pipeline.

The certificate program with its related instructional components is based on sectoral and regional labor market trends. The ultimate goal is to qualify Ohio adults for jobs in health care, information technology, advanced manufacturing, and other content areas that vary by region. But the framework for instruction is the specific goal of enabling adults to enter college and successfully complete one year with an advanced technical certificate. It is based on the "tipping point" research carried out by Washington state, in which it was found that completion of one year of college is the point at which "adults have a tangible payoff from postsecondary education, in the form of a measurable boost in earnings."

It provides business and individual needs assessment as well as instructional services for adults with reading, writing, math, and language skills between 6th-grade equivalency and a high school diploma. Learning is certified in discrete incremental units to give students a sense of accomplishment, and certificates can be accumulated, or "stacked," in various content areas, building to increasingly higher levels of proficiency. Certificates are portable across the state and transferrable to college credit. They are based on competencies and experience rather than classroom time per se.

The Adult Basic Education and Literacy (ABLE) system of Ohio has overall leadership responsibility for the program, which is tied operationally to community colleges; the Accelerate Ohio and Career and Technical Transfer programs; and the Ohio Skills Bank¹²—existing programs that state planners feel should be connected to the certificate effort.

Certificates are offered at entry, intermediate, and advanced levels, in three areas—college- and work-ready skills, advanced skills, and basic skills. Each area covers a set of competencies, deemed essential by a task force of adult basic educators in the state, with instructional content adapted to regional need. (The program does not necessarily align with NRS measures.) ABLE provides GED and ESL instruction from the basic level through advanced levels needed to demonstrate college readiness. The colleges and ABLE together provide IT foundation courses (for college credit), math and English transition skills, and study- and critical-thinking skills. ABLE has moved various instructional services to the campuses to save time and resources and to give students an easy pipeline into college courses.

Ohio's stackable certificate program is a work in progress. The partners are working steadily to create uniform statewide definitions and to develop clearer pathways to college (and jobs). It

¹¹ Ibid., *Ohio Stackable Certificates: Models for Success*, p. 2. www.communityresearchpartners.org/uploads/publications/Ohio Stackable Certificates Models for Success.pdf

¹² "Accelerate Ohio" is primarily a community college effort to provide instructional services to low-skilled adults. It is legislated by the state and considered the "funding trigger" for the statewide Stackable Certificate program. The "Career and Technical Transfer" program (CT2) was legislated to provide the technical expertise to establish and validate standards for college credit transfer. (CT2 faculty panels tested and recommended coursework in such fields as automotive, electrical and mechanical engineering, nursing, information technology, and medical assisting.) The "Ohio Skills Bank" is a repository for labor market data on jobs in various industries and regions, licensing requirements, layoffs and plant closings, wages, and education and training venues.

was reported at the Roundtable that ABLE has about 45,000 enrollees annually across the state, and that some 80,000 adults are currently in the process of accumulating industry-valued credentials in some part of the instructional system. About three percent of all incoming community college students in the state currently come from an ABLE program and attention is being given to increasing this percentage. About 21 percent of people who move from the one-year certificate programs are going within a year into an associate degree program.

One Roundtable participant observed about the Ohio program: "What I find particularly intriguing is the fact that you look at businesses and are able to articulate business-recognized certificates and translate them into college credits, because that serves several purposes. One of the most important is that students and employees who don't realize that they're capable of going further actually experience success, and success builds on itself. Once they know that 'what I've done here is credit-worthy in college,' that gives them the motivation and incentive to move on. That's pretty remarkable."

(3) Georgia Work Ready

Former Governor Perdue and the Georgia Chamber of Commerce launched Georgia Work Ready in August 2006. The statewide Workforce Investment Board (WIB) recommends policy to the Governor's Office for Workforce Development. The WIB was chaired until recently by a member of the National Commission on Adult Literacy, who deeply understands the Commission's recommendations and brought years of national educational assessment and business partnering experience to the table. At the local level, local WIBS serve as the link between Work Ready and Workforce Investment Act program directors. The overall goal of Work Ready, in which participation is on a voluntary basis, is to improve the job training and marketability of Georgia's workforce and drive future economic growth for the state. More specifically, it aims to ensure that Georgia's adults have the best skills, easy training access, and world-class jobs.

Work Ready is based on ACT's nationally accredited WorkKeys measures for applied math, locating information, and reading for information. Since 2006, it has been assessing the skills of both potential and incumbent workers for work readiness in terms of these skill areas. Those whose skills test below established readiness levels (which are geared to certain kinds of jobs through job profiling) are given free needed instructional services. The Georgia System of Technical Colleges and two Board of Regents colleges provide assessments at no cost to all areas of the state. The Technical Colleges and local workforce investment boards offer free online "gap" training to help upgrade workforce job skills. Individuals are then reassessed.

Georgia Work Ready has four main elements: (a) The Certificate program itself includes assessment, instruction, and awarding of certificates (at bronze, silver, gold, and platinum levels). (b) The job profiling component puts adult educators and employers together to profile the skill requirements of jobs, so that employers can make better hiring decisions and develop more appropriate training programs. (c) A third component develops community commitment to and engagement in the program, with substantial planning and other ongoing involvement by partnerships of adult education and business. Once these partnerships meet certain criteria, they are designated Certified Work Ready Communities. (d) A Work Ready Region is built up consisting of several counties that have earned or are working toward Work Ready Community status. The Region must also meet a number of criteria consistent with Work

Ready's long-term goals. Community and Regional groups meet frequently, as often as four times a year.

By the time of CAAL's September 2011 Roundtable, a large number of employers were making significant use of Work Ready. For example, the Solo Cup Company profiles all vacant jobs to align them with the Work Ready Certificate, uses the results of profiling in their promotional and training activities, and it also factors level of Work Readiness certification into job promotions. Eastman Chemical's job postings list Work Ready Certification as a job eligibility preference and encourages incumbent employees to earn a certificate.

As of last fall, achievements in Work Ready were impressive. (Note that demographic and achievement data has been regularly collected on most aspects of the initiative from the beginning and is available online.) More than 300,000 adults had been assessed. About 250,000 had achieved some level of certification (and had gone to a technical college campus, many never having been on a college campus before.) Of these, 25 percent were incumbent workers and the balance came from the "available workforce." More than half of Georgia's 159 counties were designated Work Ready Communities, and there are more than a dozen Work Ready Regions. About 500 job profiles have been developed, and business involvement across the state is substantial.

The Georgia Roundtable participant indicated that, "industry involvement starts right at the top, which is the case in nearly every one of our twelve regions." He said that although extensive data is available on Work Ready, solid evidence is still limited [to prove] that a certified individual going into the workplace does a better job, performs better, than a non-certified person. "But plant managers are claiming that as a result of Work Ready they have reduced turnover dramatically, and are a better company."

In January 2012, under newly elected Governor Deal, the Governor's Office of Workforce Development announced a major policy change to the Georgia Work Ready program. The Work Ready assessment will now be offered only to unemployed individuals or those looking to apply for a job listed on the new Work Ready Connect.¹³ The aim at this stage is to tailor the program to get unemployed Georgians back to work. The Office of Workforce Development is making the Connect website available free of charge to individuals and companies that recognize Work Ready as part of their hiring process. Work Ready Communities are being encouraged to focus on improving high school graduation rates and, according to a recent press release, to actively "drive" adults without a high school diploma to the General Educational Development (GED) test. The effect of this change in emphasis and direction is not yet known.

(4) Certificates in California

California does not have a statewide system of credentials and certificates, but the state has an abundance of local certification approaches, which collectively offer a wide range of "stackable certificates." And all of the national certification and credentialing programs summarized above operate in various settings throughout the state.

_

¹³ For more information, go to http://www.workreadyconnect.org.

Local programs use WorkKeys, TABE, CASAS, and other assessment programs, and they collect extensive data on their students and program outcomes. They also work closely with their own local economic development groups and workforce investment boards. But because data is collected primarily at the local level, and is not comparable across locales, there is no way for the state to usefully aggregate this experience, which some state officials see as a problem to be overcome when funds and needed resources are available. The state has data to meet NRS reporting requirements, but it cannot indicate the full range of population groups served, program activities, or outcomes achieved at the local level.

The population needing adult education and workforce skills services in California is huge, as would be expected in a state of its size and demographic make-up. About 5.3 million out-of-school adults do not have a high school diploma, and half of these people have less than a 9th grade education. And a third of all limited-English-proficient adults in the U.S. live in California. Most of these students fall short of "readiness" for both college and jobs or job advancement. And when they are able to attend college and adult basic education programs, it is usually on a part-time basis because many have other responsibilities and are holding down one or more jobs to make ends meet.

It is widely known that most U.S. states have undergone large adult education budget cuts. But in California, the cuts have been draconian in scale. In 2008, there was about \$800 million in state funding for adult education (serving about 1.2 million students), supplemented by \$90 million in federal funds. Three years ago, the money was redirected and put under the control of K-12, which was itself experiencing reductions. Adult education has since had to ask K-12 for funds for their work. As a result of these constraints, service in the state is currently running at about \$400 million, and "with half of the money we had we're serving far fewer students, although the numbers in need and the challenges facing us haven't changed." ¹⁴

In the words of the California Roundtable participant, "We have a half-baked loaf of bread—and it's truly in the leavening. Planners have dialogues and conversations all the time and we realize we can't keep doing this in silos. It must be a system-wide effort that includes industry and other stakeholders. We can design certificate programs at the local level, or the state level, or even on the ABE or community college side of things, but until we can do a coordinated program system-wide, with all of those partners, industry, economic, and education, it won't have legs."

Recognizing that its entire adult education enterprise needs to be redirected, with certificates and assessment for workplace and college readiness as key features, California has been engaged in statewide planning for adult education reform over the past few years. With all stakeholders at the table, it has developed an ambitious, comprehensive, long-term visionary reform plan (still in draft), titled Linking Adults to Opportunity: Transformation of the California Department of Education Program. It is impossible to predict how fully implemented this plan will be given recent changes in adult education leadership and the state's ongoing economic

¹⁴ California's Little Hoover Commission recently recommended that Adult Education be put under the community college system instead of K-12. http://www.lhc.ca.gov/studies/210/PressRelease210.pdf and http://www.lhc.ca.gov/studies/210/Executive%20Summary.pdf.

¹⁵ Available from the California Council for Adult Education at http://www.ccaestate.org/pdf/AE-SP-112811.pdf.

stringencies. But the plan itself has been reviewed by dozens of local, state, and national leaders, including CAAL, and is a model worthy of attention well beyond California.

The challenge is formidable because of the need to balance state-level leadership and essential local service controls. But the California Roundtable participant said that "Our industry certificates, manufacturing, the apprenticeship programs, those very formalized certificate programs [throughout the state] are, in our judgment, making a real difference already. We've simply got to be able to aggregate that local experience and translate it into policy."

C. WHAT RECENT RESEARCH TELLS US

As the above discussion illustrates, a remarkably large number of certificate systems are in use. As will be evident in Section II, they point to a wide variety of challenging issues and questions. Several recent certification and credentialing reports also help define the universe and the issues. They are A Survey of Selected Work Readiness Certificates (2007); Certificates Count: An Analysis of Sub-Baccalaureate Certificates (2010); Focus Group Findings for Adult Education and Training Data Collection Needs (2011); and Certifying Adult Education Students: A Survey of State Directors of Adult Education on Certificate Programs in Use (2011).

The main findings of these reports are summarized below; all are available in full from the website links given in the footnotes. It should be kept in mind when reading through these summaries that the reports' findings are not necessarily consistent in every respect (and not all give primary emphasis to the basic skills). The Roundtable discussion was also lacking in consensus on some key issues, which Part II shows. (One example is the relative merit of short-term certificates compared to long-term certificates.)

(1) A Survey of Selected Work Readiness Certificates

A Survey of Selected Work Readiness Certificates¹⁶ (34 pp, 2007) was prepared by Norma Rey-Alicea and Geri Scott of Jobs for the Future for "Skill-Up Rhode Island." Five work readiness certificate systems are reviewed: The Arkansas WAGE program, CASAS' Workforce Skills Certification System, Florida's Work Certified Program, ACT's WorkKeys Career Readiness Certification, and the National Work Readiness Credential.

The report looks at each of the certificate programs in terms of range, target populations, geography, the role of state politics, costs, benefits, and other factors at the time. It suggests several criteria/questions to guide Rhode Island, its workforce boards, and others in the state in considering a work readiness certificate. It makes 10 concrete recommendations on how to achieve the goal:

- Ensure that the credentials are valued and used by employers.
- Market effectively to employers and job seekers, and monitor quality.
- Seek participation and support from a diverse group of stakeholders.
- Choose a certification system that is easily administered and implemented.
- Understand your target population(s) so as to shape the kind of certificate to use.

 $^{16} \ Available \ from \ \underline{http://www.jff.org/publications/workforce/survey-selected-work-readiness-certifica/364}.$

- Adopt a system that is accessible to underserved populations.
- Analyze testing instruments for terminology and bias.
- In a statewide system, invest in building the capacity of the group responsible for implementation.
- Develop a well-planned component for evaluation including cost/benefit data.
- Identify and dedicate public and private resources to support the system.

(2) Certificates Count

Certificates Count: An Analysis of Sub-Baccalaureate Certificates (40 pp., 2010)¹⁷ was prepared by Brian Bosworth of FutureWorks under a commission from Complete College America. The study was sparked by President Obama's call for restoring American leadership in college attainment, and specifically for completion of at least one year of education past high school.

The report calls attention to the value of certificate programs, and the role of certificates in enabling faster and portable knowledge in postsecondary achievement. It discusses differences between certificate programs in terms of length, subjects studied, quality, and availability by geographical area. Its overarching recommendation is to establish "a national goal of doubling the number of long-term certificates produced within the next five years," and then doubling that number during the five-year period after that.

It examines certificates (sometimes called "technical certificates") issued by educational institutions, finding healthcare to be the most popular program area, accounting for some 43 percent of all certificates issued. (Personal and culinary services account for 12.75% of the "technical" certificates issued; Mechanical 8.9%; Business 7.9%; Security 3.4%; Transport, Construction, and Engineering 6.9%; and all other about 17%). Among its other findings are:

- Public sector institutions, mostly community colleges, award more than half of all certificates.
- Women account for close to two-thirds of certificate holders, and certificates are especially appealing to Black and Hispanic students.
- Certificate programs vary in length from less than an academic year to up to four years of full-time study.
- In recent years, the awarding of short-term certificates has increased more rapidly than long-term certificates.
- There is no research analyzing the labor market payoff of certificates of varying length.
- Some state-level research suggests that (a) certificates from at least one-year of study have nearly identical returns as associate degrees, and that (b) long-term certificates, especially in nursing and allied health areas, have "significantly higher labor market value...because of their greater academic rigor, and because of the wider range of jobrelated skills they provide graduates." However, short-term certificates may be more helpful in meeting the skills needs of adult workers who are well along in their

¹⁷ The full report is available from http://www.completecollege.org/path forward/certificates count release/ .

occupations, although there is reason to be skeptical about their labor market value for young adults and dislocated workers.

- Colleges that focus exclusively on certificate programs have completion rates two to three times higher than colleges that offer both associate degrees and certificates.
- In general, state certification approaches are greatly varied and offered in a seemingly haphazard way.
- Some regional economies, despite the states' size, may not offer as many job opportunities for certificate completers as others. Institutional inertia and state policy can be prohibiting as well.

Certificate Counts stresses that to secure America's competitiveness and again make the U.S. a world leader in college attainment, states must make sure their certificate programs are high quality, readily available, lead to good jobs in high-demand fields, and built for completion. To these ends, the following recommendations are offered:

- Count certificates toward attainment goals that are consistent and uniform. The Department of Labor has certified some goals—and the White House agrees with them. 18
- Set aggressive goals. The federal government and the state should set aggressive goals for long-term certification, certificate production, and help colleges meet those goals.
- Through funding formulas and policy incentives, reward robust certificate programs of one or more years. Short-term programs without significant labor-market payoff should be discouraged.
- Collect outcomes data and promote labor market alignment and consistent program offerings.
- Focus on program completion. Federal and state policymakers should work with colleges to significantly improve certificate completion rates.

(3) Focus Group Findings for Data Collection Needs

Focus Group Findings for Adult Education and Training Data Collection Needs¹⁹ reports on nine focus group meetings convened by MPR Associates (fall 2010 through early 2011) for the National Center for Educational Statistics of the U.S. Department of Education. Key policy,

¹⁸ The Secretary of Labor has proposed a number of High Priority Performance Goals in the Department of Labor's (DOL) 2011 Strategic Plan. About credential attainment, the plan states: "By June 2012, increase by 10 percent (to 220,000) the number of people who receive training and attain a degree or certificate through the following programs: Workforce Investment Act (WIA); adult, dislocated worker, and youth programs; National Emergency Grants (NEG); Trade Adjustment Assistance (TAA); and Career Pathways," including Community-Based Job Training grants. http://wdr.doleta.gov/directives/attach/TEGL15-10acc.pdf.

¹⁹ Focus Group Findings... is available at http://www.skilledwork.org/resources/focus-group-findings-adult-education-and-training-data-collection-needs. The main report is only 15 pages long.

program, research, and philanthropic leaders were invited to provide their views on data collection needs for adult education and training. Main areas of discussion and some of the recommendations are highlighted below. It should be noted that four appendix items provide a rich array of information including detailed notes on each of the focus group meetings and a description of the National Assessment of Adult Literacy (NAAL) and the Programme for the International Assessment of Adult Competencies (PIAAC).

Scope of Adult Education and Training. Focus Group Findings offers a collective definition of the scope of adult education, which was generally taken as the context for considering data collection needs (although recognized as needing refinement). The five main components of the definition are consistent with thinking in the field generally. Broadly stated, they are (a) Basic skills instruction (programs including ESL that are commonly included in WIA Title II); (b) workforce training (workforce skills, occupation at a sub-baccalaureate level, and informal/formal on-the-job training for incumbent workers, programs commonly included in WIA Title I); (c) integrated programs that combine basic skills instruction and workforce training; (d) certain college programs (noncredit, developmental, and continuing education); and (e) other (online, self-directed, and lifelong learning; credit for prior learning; and alternative programs for youth).

Policy, Program, and Research Topics. This area of *Focus Group Findings* discusses a wide range of topics. For example, who needs what kind of baseline data on adult education and for what purposes? How are key groups currently getting the data they need? What kinds of data are needed (i.e., data to better track student progress and outcomes, inform understanding of employer needs, better align jobs and job profiles with the kinds of education and training needed for college- and job-transition purposes, and data to better understand how and why adults make transitions from one "system" to another). Two areas of need are emphasized—postsecondary completion rates for adult education students and data on strategies that improve student persistence and speed up program completion. Data is also called for to help service providers, planners, and policymakers better understand access to and movement along "career pathways." And special attention is given to the data needed to support special populations and to develop the use of technology to improve access and instruction.

Data Collection Needs. This section of the report synthesizes the groups' data collection recommendations. It is expressed in terms of general needs, participation in adult education and training (population make-up, program characteristics), learner goals and demands for service, monitoring of adult skills and competencies over time, adult education outcomes (employment, learning gains, and transition outcomes, program completion), and data in various areas that would show connections among the preceding items. Moreover, the different kinds of focus groups involved in the exercise have their own specific data needs depending on their organizational needs and goals, and these are summarized—for OVAE, the ETA, the Office of the Undersecretary, adult education programs and associations, state adult basic education directors, philanthropies, and state and federal legislative bodies. For example, OVAE would like to have better data on how adults *access* various forms of education, and on industry skill level requirements for entry-level jobs, career and college readiness, program completion, workforce participation, and pathways from adult education to further education and employment. Adult education research groups stress the importance of gathering longitudinal data and the need for a better understanding of how adults use technology.

Assessment Needs. This final area of *Focus Group Findings* discusses adults' skills assessment in terms of administration and content of the NAAL and PIAAC. Pros and cons of these two systems are discussed with attention given to elements of PIAAC's approach that may hold special relevance for the U.S.

(4) Certifying Adult Education Students: A Survey of State ABE Directors

In 2010 CAAL carried out a simple survey and in April 2011 published an information brief titled *Certifying Adult Education Students: A Survey of State Directors of Adult Education on Certificate Programs in Use.*²⁰ Because the survey was administered only to state ABE directors, it provides only a partial snapshot of usage among the states at the time.

About half of the state ABE directors reported no certificate activity. However, in some states, programs are actually in operation through entities other than state adult education agencies and state ABE directors may not necessarily be aware of them.

As of July 2011 (based on an update of the survey findings), 24 states reported certificate systems in use, to the knowledge of the state ABE directors. Among the survey findings are:

- In all but one case, certificates are being awarded mostly for work-related purposes.
- Thirteen of the responding states operate their certificate programs as statewide initiatives, which are adopted or adapted from existing commercially available certificate assessments, especially WorkKeys.
- Only seven of the states report service to incumbent workers, ranging from 5 percent in Ohio to 70 percent in Michigan.
- The largest enrolled populations tend to be in states that admit a wider range of participants than those eligible under WIA Title II.
- In all cases, certificate programs are offered in collaboration with partner agencies, usually a state workforce agency or a workforce investment board but sometimes postsecondary institutions.
- The extent of state education agency control is varied in terms of awarded certificates, preparation of programs leading to those awards, and data collected on use and progress.
- Enrollment and success data from the 24 states are extremely mixed. Many programs are relatively new and do not yet have a track record. However, the survey does suggest that programs that enroll the lowest-level participants have the lowest completion percentage.

²⁰ Available from www.caalusa.org/StudentCert.pdf.

• Online participation in certificate programs is minimal.

The survey's main conclusion is that while important certification activity known to state ABE directors is in process in about half the states, and they have significant potential for growth, most states do not maintain or collect essential data, which is a major impediment to further development of the field.

D. CONCLUDING NOTES

(1) Commonality and Differences Among the National Models

The three national systems outlined share some important common features. For example, all certify work readiness for lower skilled adults, though in varying degree and at different levels, as well as intermediate and advanced adults. All appear to have awarded a significant number of certificates. All rely on job-task analysis for assessment content. Employers are significantly involved in all cases, although in different ways. Both basic and soft skills are assessed. All operate in numerous states already, especially WorkKeys. None appear to focus explicitly on ESL populations. And all track *at least some data* on participant progress to help determine program effectiveness and impact.

The systems also have significant differences. For example, there is considerable variation in the skills assessed, system design, and criteria for certification. WSCS is founded on CASAS' general competency standards, whereas NWRC is based on the functional context approach of Equipped for the Future, and NCRC is built on WorkKeys. In WSCS, the focus is on learners, whereas it is more specifically on meeting employer needs in NWRC and NCRC. Assessments are given in substantially different kinds of venues. Both WSCS and NCRC are aligned to the National Reporting System, although NCRC at the upper functional levels only. Although employers are involved in all systems, there are substantial differences in the nature and degree of business involvement, and in the expressed purposes of certification.

(2) Commonality and Differences Among the State Models

Similar commonalities and differences are evident in the state models discussed as well. Job readiness is a focus of all of them, although college readiness is the priority focus in the Ohio model and an equal focus in some others. All offer certificates at different proficiency levels. All test for both basic and soft skills, and all provide free testing and classes. All appear to follow a planning process that involves all key stakeholders, including business, even in California where control is heavily at the local level. All provide some level of service to the lowest skilled adults, though most recognize the need to do more. Most appear to be carried out in the context of labor market realities. And all have awarded an impressive number of certificates to date.

There are also many variations across the models: Some emphasize stackable certificates, some do not. Different assessment systems are in use—including WorkKeys, CASAS, TABE, and a variety of other assessments. Services and planning are integrated in varying degrees. One system (WAGE) has been in operation for over 18 years, while the other three are relatively young. And the programs in the states target different population groups and have great variety in the content area of the certificates they award. All collect *some* data, but this remains a huge challenge in all cases.

(3) Other Notes

It is important to keep in mind that some of the research reports outlined above include *any* type of technical/industrial certification and preparation, whether or not it entails assessment of or upgrading basic skills. For example, successful completion of a community college/vocational institute course or lesson sequence to prepare an individual for an occupation or activity is often rewarded with a certificate (and promoted in college catalogs that way). So the findings cited may or may not be as relevant for certification of gains in basic skills as for higher-level technical or industrial skills.

However, as the above discussion makes clear, there is a proliferation of certification systems across the U.S. and they have collectively awarded a large number of certificates. Although all are not equally robust at this stage, they certainly show a greater awareness in adult education of the need to be responsive to workforce and employer needs. They reflect a wide range of experience and understanding, are future-oriented, offer a good deal of useful data, and appear to be making progress in other ways. Attention to the needs of low-skilled students is always a concern among adult educators and policy makers, so it is encouraging that the systems discussed at the Roundtable are trying to provide at least some services to low-skilled adults, though just how low-skilled is not clear.

But the array of activity reviewed in Part I also points to a host of unresolved questions, data collection problems, and other issues—which are the focus of Section II.

PART II AT THE HEART OF THE MATTER Hard Questions & Issues

As Part I shows, there is a wide variety of promising activity in job- and college-readiness certification. But the overall effort is still in the early stages of development, both conceptually and operationally, and there is little connectivity among the multitude of approaches. One of the most surprising findings of the CAAL Roundtable was that most of the people present had never before talked together about certification. Moreover, it should be emphasized that few of the national and state systems summarized above have yet been independently evaluated for effectiveness.

Roundtable participants were in agreement on these fundamental facts: We have a rich laboratory of experience on which to build, but we do not yet have an integrated or coherent effort. We lack needed data to judge what the collective effort really adds up to and to soundly guide future developments. And, a substantial amount of research needs to be done. The following discussion focuses on these broad conclusions and the tough questions and issues that were explored in the Roundtable discussion.

A. THE BIG ISSUES

(1) Employers Say They Want Certificates, But Do They?

Employers, both large and small, have been saying for many years that there is a mismatch between the skills of the available workforce and the requirements of current and emerging jobs, and the extent of this mismatch has been constantly growing. Indeed, a common refrain of Workforce Investment Boards and many business leaders today is that K-12 academic standards alone are meaningless for employment purposes, given the changing nature of jobs, the fact that so many adults with high school diplomas are neither job- nor college-ready, and the fact that some college education is needed for many current and emerging jobs. They say that they need better ways to know ahead of time that workers are prepared for and will succeed in employment.

The programs outlined in Part I illustrate the form the collective response has taken to date. And they are bolstered by a plethora of major new studies—including the work of the National Commission on Adult Literacy—that show a strong need to redirect our adult education and workforce skills development efforts.

However, even though employers *say* that they want employees with the foundation skills that certification systems verify, Roundtable participants had a difference of opinion about the extent to which we can be sure, based on available evidence, that they value independent certification. They were also concerned about the extent to which employers may be asking for certificates and credentials beyond what jobs actually require.

(2) Employers Must Value Certificates, But Do They?

Many Roundtable participants represent important certification systems, but all attendees agreed that we do not have the data or interconnections needed to know what employers *really* want and value. It is far from clear which specific certifications employers find most useful, how they use the systems they have or are part of, and what they need to know to make appropriate judgments about their specific certificate service needs. This is a very important issue because readiness certification depends upon both employer buy-in and high quality services that generate useful outcomes.

To further complicate the situation, a good many employers have their own internal methods of assessing work readiness or qualifications for particular jobs (often commercial tests), and the Roundtable participants think that possibly many are satisfied with them. Moreover, they say, where independent certification is concerned, some employers are primarily interested in validation of technical skills (e.g., engineering, scientific, or computer-related skills) rather than basic and soft skills per se.

The problem for planners is that little is actually known about these internal systems or about whether employers are fully aware of the kinds of external models available to them. Do existing public models constitute a menu of items employers *should* value and can reliably choose from in making their hiring and workplace education decisions? The fact is we have no way of knowing. Of course, as one participant stressed, this does not necessarily mean that the "buffet of options" we have are not legitimate or of high quality or that they are without value to employers or employees, only that because we must rely largely on anecdotal evidence, we cannot know that for sure.

The Indiana Chamber of Commerce is a leader among the states for comprehensive planning for adult education and workforce skills services for employment purposes. It appears to have adopted the view that the best it can do with the present array of certification systems in Indiana is to pass information about them on with the hope that employers will adapt them to their needs. A related variable, which makes the situation even murkier, is that some companies do their hiring primarily through employment agencies and other third parties.

Johns Hopkins Medical Center is an example of how a large healthcare employer addresses its employee readiness needs, and what they would consider to be valuable from external sources. They know that people for certain jobs at Johns Hopkins need to be able to perform basic math and read directions that deal with chemicals, so they offer testing for the level of skills in these areas and then provide instructional services internally that they have determined will ensure job readiness while also being OSHA compliant. They test every entry-level employee with or without a high school diploma, because experience shows that they cannot assume that holding a high school credential indicates readiness.

This Hospital Skills Enhancement Program has a long track record and can boast considerable success, but the Johns Hopkins participant suggested that while the Program is to date an entirely internal operation, they would find it valuable to be able to turn to outside groups for help with their job audits. "It would help us to know exactly where we should be setting the bar," she said. And she noted that what she and probably other employers would find important is to be able to

count on the quality of a credential or certificate, and more standardization among certificates. They want to be able to "compare apples to apples."

In setting the norms for certification, some participants also stressed that we need to better understand *what kind of employers* should be given the highest priority by adult educators and test designers. Businesses are not some generic entity on which to base things. "There's a huge difference between the 'common-practice' businesses that dominate a local labor market and those leading-edge businesses that really define the 'value added' part of their sector and have the best sense of skills required to be successful in doing that. Our systems are sometimes too responsive to local common-practice employers and not responsive enough to employers that are driving the future of that industrial sector."

In short, the field of certifying student learning for workforce or college purposes, which seems straightforward at first glance, is surprisingly complex and fragmented. It is not at all clear what it adds up to.²¹

(3) How Much Certification Is Enough?

The increased employer call for more work-ready certification may be problematic in itself. Regardless of the type of certification system being considered, some Roundtable participants raised serious concerns that workers often do not really need the level of skills required by certification tests or licensure requirements. Employers sometimes ask for a college or high-level credential that may not in fact be needed for the job(s) available. Among other problems, this can create unnecessary barriers for lower skilled and ESL students, in terms of employment, advancement, and progression along education and training career pathways.

All jobs do not need the full range of skills required for a GED, for example, and not all cosmetologists necessarily need the skills demanded for licensure in that field, a problem that is especially acute for limited-English adults. According to the ESL expert present, some work on the ESL front has found that the language skills required to pass the certification exams are far greater than what is necessary to actually perform the job. "We need to be careful as we proceed," she said, "not to create, especially at the reading level, excessive notions of what's required, and not to fall into the role of gatekeeper."

Another participant stressed that it is important to acknowledge the difficulty in working with lowest-level learners in order to get them certified at even the most basic level. That population is unfortunately huge and expected to increase in the future, especially in urban areas. And still another raised the question of how much the outsourcing of low-level jobs reduces the need for this kind of workforce upgrading. Again, no one had the answers.

In brief, the question about how much is enough needs considerably more thought as we work to strengthen and develop certification programs. It matters because there are jobs in the workplace

21

²¹ For a major groundbreaking initiative on what works for whom in adult education and workforce skills development, including certification, see the major new grant program of Jobs for the Future, *Accelerating Opportunity*, at http://www.acceleratingopportunity.org.

for the basic skills learner with minimal certification, and because low-level students *do* need to achieve job- and college-readiness as well.

(4) What About "Pipeline" Skills?

The discussion also pointed to an important side issue. Employers not only care about whether workers have adequate basic and soft skills, but they are also concerned about "pipeline skills." This has been known for some time. For instance, they want to know that incoming employees have a good work ethic, will show up for work on time, can solve and anticipate problems, and know how to resolve conflict. These kinds of skills need to be addressed too, probably involving new kinds of partnerships, if a certificate is to have high value.

Put another way, there must be a place for intangibles such as creativity, resourcefulness, judgment, and responsibility within credential-focused instructional systems.

(5) Lack of Consistency in Concepts and Approaches

As shown above, the public work-readiness certificates in use come in many different forms. Each has its own purposes, target populations, and competencies to be assessed. A few target some low-skilled adults; others cover a range of people from youth entering the job market to adults seeking to move up the career ladder. The greater focus seems to be on higher skilled and "middle-job" adults. Views differ about what should be certified. Although there are common threads among the programs and systems, there is little commonality in the language, and few seem to take workers' and potential students' perceptions into account. Some are driven solely by business interests, others are not. It seems certain that much greater variety would be revealed if a complete canvassing were done of all approaches and systems in use.

States and independent agencies have developed a remarkably large number of systems to certify workforce readiness. As noted above, these differ considerably in the skills assessed, the system design, the criteria for certification, and the expressed purpose of the certification. WorkKeys is the core of the most commonly used system, but it is used in different ways in different places, and some of its users actually depart from it considerably.

Local literacy skills training for professionals is an important feature in some of the certification programs discussed. In those cases, personnel in local adult education and WIA Title I programs are trained to do literacy task analyses with employers in their area and prepare the basic skills profiles that certain jobs require. With that profile, it is expected that an employer and trainer can together decide whether an individual and their profile fits the job. Some systems strive to be flexible enough to accommodate a variety of employer-specific job requirements.

All this variety is good in one sense, but it is clear that much of our current certification activity takes place in "silos" and works in some ways at cross purposes. Even though no one feels that it is desirable or even possible to mandate a single national workforce skills certification system, it was agreed that we do need to better define the multiple systems we have, especially those with national reach, and move toward a more integrated system-wide approach.

(6) It's Not Just About Employers & Near-Term Jobs

A Roundtable union representative from New York City cautioned that our focus on determining what employers need and want and what near-term jobs require should take into account the experience and views of incumbent and displaced workers. Indeed, few of the models considered at the Roundtable appear to have consulted seriously with these groups. It was agreed that we need these individuals to tell adult educators (and the employers) what they actually *do* on the job, what *they* believe they need to know, what they think would increase their marketplace skills, and what certification programs should to do to help preserve jobs or help them get a promotion. Programs would almost certainly be stronger if that were the case.

One of the liveliest areas of Roundtable discussion was the need to take a larger worldview as we consider certification further. Several participants concurred that we should be looking at goals and needs more in terms of longer-term competitiveness issues than just the jobs of today or tomorrow. They felt that we should aim not only to prepare adult learners for specific jobs, or to engage employers in conversations that seem to do that, because those jobs may in fact be gone tomorrow. If our focus is on employability and on meeting the needs of business and of employees, we must develop resiliency in learners and prepare them for the rapidly changing job market. This line of thought gives added weight to the importance of "stackable" certificates. And it raises a question, discussed at the Roundtable, of the relative merits of long- and short-term certificate programs and of certificate programs contrasted to college degrees.

(7) <u>Certificates or Degrees?</u>

A main purpose of the *Certificates Count* paper summarized in Part I was to legitimize long-term credentials as a measure of education attainment. The FutureWorks participant said that this is consistent with foundation and U.S. Department of Education goal setting, and is appropriate for some purposes. He also stressed that recent evidence shows that short-term credentials are just as valuable as long-term ones, in some cases more so, and that certificates are just as good as associate degrees for certain purposes.²²

Indeed, research shows that labor market returns for one-year certificates are consistently on a par with returns for an associate degree. In fact, "completion rates are much higher in certificate programs because of the way they are typically structured, and they are much more accessible to low income adults, minority youth, and working adults." This is especially important because not all low-skilled adults can or need to be made college-ready.

Finally, it is important to note that one-year certificates, or even programs of shorter duration, have the advantage of being very portable. That is because smaller units of learning can be

²² Also see *Beyond Degrees: Lessons Learned from Skills2Compete-Maryland,* by Rachel Unruh and Eric Seleznow, August 2011, National Skills Coalition, http://www.nationalskillscoalition.org/assets/reports-/beyond-degrees.pdf.

²³ Certificates Count: An Analysis of Sub-Baccalaureate Certificates, http://www.completecollege.org/path_forward/certificates_count_release/.

bundled and stacked in different ways. Although, it was suggested, we may need to develop better ways to "bundle" certifications.

B. OTHER IMPORTANT ISSUES TO CONSIDER

Due to time constraints, many other issues that merit serious attention could only be touched on in the Roundtable discussion. Because of their importance, several are listed below:

- Local programs are getting too many mixed messages. The field is still trying to find out how to build capacity and strategies for new outcomes being urged upon them. National and state leaders need to clarify and integrate their messages, and speak in a common language. Moreover, a common language is an essential ingredient for sustainability.
- We do not have adequate data to show that various certifications are predictive of short-term job performance and productivity, or individual career advancement for that matter. This is a highly important Return-on-Investment issue.
- Vocational training programs and colleges are key customers for readiness certification
 right along with employers, and their needs and values may differ substantially. However,
 we know little about the differences.
- Similarly, although ESL populations almost certainly are among the adults assessed and certified in many of the programs examined here, very little explicit attention is given to them. There are two kinds of adult ESL learners, those who are fully educated in their native countries (some to the point of holding a degree) but need only reading, writing, and speaking skills in English to qualify for jobs, and those who have poor home-country basic and soft skills as well as needing to gain English proficiency. We appear to have insufficient understanding of how to accommodate these different needs in assessment and instructional programs, and of how adult ESL needs differ from other categories of adult learners.
- We do not have an adequate understanding of how to move low-skilled adults into career pathways and certification systems.
- There is a need to change the "unit of analysis" in adult education from educational levels to competencies, and to build in the notion of "momentum points." (Note: Interest in more extensive use of momentum points has come up in other CAAL Roundtables.)
- We need to do a much better job of using technology in certification programs to promote accessibility and scheduling flexibility, and possibly to help open up competency-based assessments. (Note: CAAL's limited survey of state directors of adult basic education indicates that online participation in certificate programs is minimal.)

PART III: KEY NEXT STEPS

Few people interested in improving employability and success in college would dispute the need for college- and job-readiness certification programs. The good news is that a wide array of programs and systems are available, and public programs appear to be getting important results. That is a rich foundation on which to build. The bad news is that the overall effort is still in its infancy. It is haphazard and disconnected and has been subjected to almost no independent evaluation.

CAAL does not think it possible to make policy recommendations at this stage, based on its project findings. But there are three main immediate barriers to moving ahead, and steps can be taken to address them: poor communication at all levels, lack of data, and a sizeable unaddressed research need. To turn our "random acts of progress" into an integrated and coherent certification effort and to establish a firm enough base for state and national policy development—which both CAAL and the Roundtable participants believe to be worthy goals—these barriers, which are obviously interdependent, need to be overcome.

A. OVERCOMING THE BARRIERS

(1) **Building Awareness**

Most of the programs reviewed by the Roundtable provide "supply-side" solutions, but the "demand side" is using a whole set of tools that we know very little about. Whether they are public or private in nature, all parties providing or seeking certification services can only benefit from activities that create more awareness about what exists and what would be most useful. Among other things, improved communications will also help clarify gaps and areas of duplication. (Note: It should be recognized that some certification programs are in direct competition with each other, so certain kinds of communication and sharing are probably not feasible. But the overall effort and the field generally would clearly benefit from more regular contact.)

An aspect of improved communications is the need for a common language. At present, local programs, states, employers, community colleges, K-12 groups, national certification groups, and other players all have their own language, although these systems are striving to serve the same people. "If there's one thing that should come out of this meeting," one participant said, "it's to develop a firm understanding of our own glossaries," even a term as fundamental as "work readiness."

Who should take responsibility for improving awareness? It is *everybody's* business! Further meetings like CAAL's Roundtable, a first for most of the invited participants, would help. But many other groups should take an active leadership role as well, individually and collaboratively —for example, the U.S. Departments of Education and Labor, sectoral leaders, state agencies with responsibility for adult education and workforce development, business and industry groups, and the certification programs themselves. A great deal could also be accomplished at the conferences of state and national associations, coalitions, and commissions that represent adult education and workforce skills development. Some obvious candidates are the American

Association of Community Colleges, the Institute for Workforce Development of the National Association of Manufacturers, the National Skills Coalition, the Commission on Adult Basic Education, the GED Testing Service, the California Adult Educators Administrators Association and counterpart groups in other states, the National Council of State Directors of Adult Education, and involved union groups such as the Consortium for Workers Education.

(2) <u>Data Collection & Research</u>

As we go forward, we will need to have far better data to support awareness building, aggregate the experiences we are having, and make the most informed and efficient use of credential programs and systems. And much more research and development work must be done if adults' employment and college certifications, especially those for low-skilled adults, are to go to scale, and certainly if any systems or approaches are to be awarded a "seal of approval" for any purpose. This will require a concerted effort and a substantial investment. The Office of Vocational and Adult Education of the U.S. Department of Education is the logical agency to organize and fund this kind of work in collaboration with various stakeholder groups.

There are all kinds of audiences for this data collection and research effort, including the types that participated in the Department of Education's *Focus Group Findings* project (pp. 14-16); the disparate groups that offer certification services; legislators at all levels whose funding support is needed; and employers, chambers of commerce, and workforce investment boards.

What are the most important next steps to take on these fronts?

- a) As a top priority, we need to carry out *surveys that identify the major public credential programs in use*, and we <u>must</u> undertake *independent evaluations of* their effectiveness.
- b) As an equally high priority, we need to *determine what systems employers presently use* to assess the skills of their workers, whether they believe they need supplementary public certifications (and what kind), and what lessons can be learned from the systems they now use. (Note: To do this, employers will have to be engaged in a much richer dialogue than has occurred so far.)
- c) We also need to know *what data is currently being collected* by state level entities, and by colleges (especially community colleges), and business partners—and to what extent this data is comparable.
- d) The threshold issue for any R&D effort is *defining what the focus of certification should be*. Who, specifically, do we want to certify for what purposes? What skills are relevant to certification of different kinds? Who is the "customer" for different kinds of certifications? Can these customers be best served by certifications or some other means? Can or should the GED assume some part of the certification burden?
- e) A question underscored at the Roundtable is whether there is any really *useful data on short-term or long-term job performance* and career advancement or success in college? Apparently, there is not. For both existing and new workforce certification systems, it is essential to know whether certified workers or students make better workers than uncertified adults (in terms of higher productivity, retention, advancement, or simply the

- likelihood of being hired). A participant pointed out that an answer to this question is especially relevant to further policy development, at least at the federal level.
- f) Return-on-investment data is needed by almost everyone, and it is all the more pertinent in the present economic climate. *New ROI research is definitely needed*, but an immediate step should be to *identify and disseminate ROI data that already exists* (where certificates are a factor in the programs' operations). There is at least some such data, according to the Roundtable participants, in the U.S. and abroad.

The Roundtable participants also deemed the following questions and issues to merit research attention in due course:

- What instructional designs and practices in workplace education and literacy instruction would move students most effectively toward credentialing?
- If needed, how can postsecondary education, especially community colleges, be motivated to be more responsive for serving and credentialing lower-skilled adults?
- How do we appropriately connect certificate development and testing (and programs) with cultural differences among ESL populations? Body language, for instance, is often fundamentally different in different cultures. But what *are* the "cultural expectations" of employers and of colleges?
- How can adult education programs help low-level students prepare for industry-specific training?
- How and what kind of technology should be used to improve workforce instruction and certification? It is widely recognized that we cannot reach substantially larger numbers of adult learners and achieve economies of scale without a dramatically increased use of technology.
- Formalized certificate programs such as industry certificates, manufacturing
 apprenticeship programs, and other efforts have been successful and are making a
 difference. They should be recognized and replicated. We should also know much more
 than we do about the extent to which apprenticeship programs in particular are a valuable
 resource for work readiness.
- We need to identify effective accelerated training program models, understand how students access training within both the education and the labor systems, and connect the adult pipeline with community colleges and other postsecondary education to help achieve the President's 2020 goal of increased program completions.
- Consideration might be given to creating tax incentives that will encourage more companies to invest in their own basic skills and readiness training (as in the Johns Hopkins example) or to contract with outside adult educators to customize programs to meet their needs—whether or not this entails certification systems.

- A substantial number of states indicate problems in reporting certificate-based outcomes
 to the federal NRS—e.g., in terms of data matching, minimum hours of instruction
 allowed, recognition of certificates to prove instructional outcomes, and the timing of
 reports. It should be noted that OVAE has begun to address these issues and has already
 changed NRS policies to reflect concerns about how employment and training outcomes
 are determined.
- Developing effective career pathway systems and/or certification systems may well require that we develop statewide (and possibly national) unit record data systems that track adults' progress through the entirety of the E&T system and in their subsequent employment experiences. This is a formidable task that only the federal government can undertake. Although new data elements would have to be created in such an enterprise, many needed elements are already in place. It is a step well worth further consideration.

Whatever data collection and research is carried out, the results must be effectively disseminated. To this end, a specific suggestion offered at the Roundtable is to develop a national registry of certificate information.

B. CONCLUDING COMMENTS

A theme CAAL stresses at every opportunity is that the U.S. cannot meet the President's employability and college achievement goals without addressing the needs of under-skilled adults—both potential and incumbent workers—and without factoring in the key role of the often-overlooked adult education system.

Any discussion of certification, which is large and complex in its own right, is necessarily part of this much larger and more complicated agenda about advancing and reforming adult education and workforce skills services generally, including the development of career pathways systems.

At this stage, meetings about readiness certification are apt to raise more questions than they answer. That was certainly the case in this project. But our findings indicate that there is promise in the many certification systems and approaches we have, and that these activities are being carried out with determination, a sense of the future, and some important achievements. Despite all the questions and issues raised, there is no reason to doubt that in one way or another they are or can become valuable indicators of readiness for certain college or job purposes. The challenge is to answer the tough questions that stand as barriers to understanding and buy-in by potential users, planners, and policymakers.

Developing return-on-investment evidence is stressed as a priority need in various ways in this report. But we should point out that return on non-investment may be even more crucial. The cost to our society and our economy will be staggering if we do not provide the basic and other workforce instructional services called for in study after study, if we fail to meet the

needs of our large and growing ESL population, if we do not find ways to more fully engage the business community, and if we continue our haphazard approach to college- and job-readiness certification.

Finally, regardless of state and federal budgets in the coming months, or the nature of legislative action, we believe it is important to press ahead. We hope the ground covered in this report will contribute usefully to the national discourse and bring greater focus and understanding to some of the key issues and challenges.

APPENDIX I About the Authors

James Parker (Policy & Research Associate, CAAL) joined CAAL part-time in 2006 after retiring from federal service, and undertakes other independent consulting work. He has conducted research in workforce education, business partnerships, and adult learner certification. He also has contributed to many of CAAL's legislative initiatives. He began his career with the U.S. Department of Commerce, and also served with the Library of Congress, District of Columbia Public Health, and the U.S. Department of Education. At Education his roles included Coordinator of Programs for Mid-Atlantic, Southern, Mid-West and Mountain States; National Coordinator for Professional Development and Workforce Education; and Project Manager for Competency-Based Adult Education, Workplace Literacy, Homeless Adult and State Leadership projects. He has written and edited numerous books and other publications on competency-based education, workforce education, program policy and evaluation, professional development, and adult education futures.

Gail Spangenberg (President, Council for Advancement of Adult Literacy) founded CAAL in 2001. In 2006, she initiated and managed the National Commission on Adult Literacy study of adult education, whose *Reach Higher, America* report was released in June 2008. She has since directed CAAL's follow-up and implementation activities, including an important role in fostering the Adult Education and Economic Growth Act. Prior to forming CAAL, Ms. Spangenberg served lengthy terms as chief operating officer of the Business Council for Effective Literacy and program officer in nontraditional education at the Ford Foundation. She was a member of the Harold Howe II team that studied the governance, funding, and facilities needs of the City University of New York (for Mayor Koch). She has directed several major studies, including a study of the New York State Regents External Degree and College Proficiency Examinations Programs, a study of the role of public libraries in adult literacy (*Even Anchors Need Guidelines*), and written widely on adult education and open learning. She had a key player in developing the National Literacy Act of 1991, including its provisions for creation of the National Institute for Literacy.

APPENDIX II Roundtable Participants

Keith Bird, Senior Policy Fellow for Workforce & Postsecondary Education, Corporation for a Skilled Workforce; Chancellor Emeritus, Kentucky Community & Technical College System

Brian Bosworth, President, FutureWorks

Mary Ann Corley, Principal Research Analyst, American Institutes for Research

JoAnn Crandall, Professor and Director, Interdisciplinary Ph.D. Program in Language, Literacy, and Culture, University of Maryland-Baltimore Campus

Kris Deckard, Executive Director, Ready Indiana

Amy Ellen Duke-Benfield, Senior Policy Analyst, Center for Law and Social Policy

Ralph Edds, State WAGE Coordinator, Arkansas Department of Career Education

Barbara Edwards, Workforce Education Manager, Johns Hopkins Hospital Skills Enhancement Program, Johns Hopkins Health System

Christopher Guidry, Director of Community and Technical College Development, Workforce Development Division, ACT Inc.

Debra Jones, Dean, Career Education Practices, Workforce and Economic Development, California Community Colleges Chancellor's Office; former Administrator, Adult Education Office, California Department of Education

Joe McDermott, Executive Director, Consortium for Worker Education

Joe Mizereck, Acting Executive Director, National Work Readiness Council

Bonita Moore, Assistant Executive Director, National Adult Education Professional Development Consortium

Mark Musick, Former Chair, Georgia State Workforce Investment Board; Founding Chair, Georgia Work Ready Regional Industry Network; Quillen Chair of Excellence in Teaching & Learning, East Tennessee State University; Chair (retired), Southern Regional Education Board (SREB); member, National Commission on Adult Literacy

Gloria Cross Mwase, Program Director, Jobs for the Future

James Parker, CAAL Policy & Research Associate; Director, Student Certification Project and Roundtable

Patricia Rickard, President, Comprehensive Adult Student Assessment Systems (CASAS)

Gail Senese, Interim State Director of Adult Education & Family Literacy, Maine Department of Education

Gail Spangenberg, President, Council for Advancement of Adult Literacy; Chair, CAAL Student Certification Project and Roundtable

Andy Tyskiewicz, Director of Community Education, Capitol Region Education Council, CT; Past President, Commission on Adult Basic Education

Johan Uvin, Senior Advisor to the Assistant Secretary, Office of Vocational and Adult Education, U.S. Department of Education

Brett Visger, Vice Chancellor of Adult Education, Ohio Board of Regents

APPENDIX III Additional Resources and Readings

The American National Standards Institute (ANSI) oversees the creation, promulgation, and use of thousands of norms and guidelines that directly impact businesses in nearly every sector. ANSI is also actively engaged in accrediting programs that assess conformance to standards—including globally-recognized cross-sector programs such as the ISO 9000 (quality) and ISO 14000 (environmental) management systems. www.ansi.org/

The NAM-Endorsed Manufacturing Skills Certification System is a system of stackable credentials applicable to all sectors in the manufacturing industry. These nationally portable, industry-recognized credentials strive to validate the skills and competencies needed to be productive and successful in entry-level positions in any manufacturing environment, and can be learned and earned in secondary and postsecondary education. The credentialing partners that comprise the Skills Certification System are ACT, the American Welding Society, the Manufacturing Skill Standards Council, the National Institute of Metalworking Skills, and the Society of Manufacturing Engineers.

www.themanufacturinginstitute.org/

SkillsUSA is a national nonprofit organization serving teachers and high school and college students who are preparing for careers in trade, technical, and skilled service occupations, including health care. It was formerly known as VICA (Vocational Industrial Clubs of America). www.skillsusa.org/educators/nocti.shtml

ABE to Credentials supports states across the country to ensure that more workers have the skills they need for today's good jobs. www.jff.org/projects/current/education/abe-credentials/1172

The GED® 21st Century Initiative will transform the GED® test into a comprehensive program to prepare more adult learners for postsecondary education, training, and careers. http://gedtestingservice.com/

The Adult Career Pathways Training and Support Center (ACP-SC) is a comprehensive website to help adult education providers in designing, implementing, and improving adult career pathway programs. This site gives unlimited access to a large collection of instructional resources, implementation strategies, best practices, research, and other tools as well as collaborative peer learning opportunities and resource sharing. www.acp-sc.org/about

A Better Measure of Skills Gaps proposes a simple definition to describe the skills gap phenomenon and sets forth detailed and specific measures to analyze skills gaps in four major industry sectors. www.act.org/research/policymakers/pdf/abettermeasure.pdf

Narrowing the Skills Gap: States Ramping up Efforts to Meet Workforce Demand Across the Nation, an article from Grayway, discusses the Georgia Work Ready program and an ACT Communities Initiative to extend and adapt the model to several other interested states. www.gray.com/sites/default/files/grayway/the-new-age-of-workforce-development-grayway.pdf.

Giving Credit Where Credit is Due seeks to contribute to the conversation about how to move the postsecondary and employment and training fields toward a qualifications framework for awarding educational credit for occupational education and training based on demonstrated competencies. https://www.skilledwork.org/sites/default/files/Creating Competency-Based Qualifications Framework for Postsecondary Education Training.pdf

Career Pathways Toolkit by the Social Policy Research Associates, 2011 (with support the U.S. Department of Labor/ETA) outlines a Six Key Elements of Career Pathways framework of components and strategies considered necessary for a comprehensive career pathways system. https://learnwork.workforce3one.org/view/2001135442016073646/info

Doing Business Together: Adult Education and Business Partnering to Build a Qualified Workforce, James T. Parker, Council for Advancement of Adult Literacy, 2011, highlights several outstanding models of business and adult education collaborations, and discusses five essential ingredients of successful partnerships. http://www.caalusa.org/Doing.pdf

Beyond Degrees: Lessons Learned from Skills2Compete-Maryland, from Rachel Unruh and Eric Seleznow of the National Skills Coalition, 2011, reports on how one state is building a more integrated, training-focused, labor-market driven, and accountable workforce and adult education system. The approach includes an external public information campaign to encourage more residents to pursue postsecondary credentials. It also includes an innovative approach to counting Marylanders' degree, credential, and basic skills attainment across a broad array of public programs. http://www.nationalskillscoalition.org/assets/reports-/beyond-degrees.pdf

Developmental Students: Their Heterogeneity and Readiness. This is the sixth of nine Working Papers by Policy Analysis for California Education, 2012. W. Norton Grubb, Elizabeth Boner, and members of the Research and Planning Group of the California Community Colleges continue their series on basic skills education in California Community Colleges. They indicate that the developmental classroom contains many different kinds of students with vastly different needs, while the instructor has only a few instructional approaches to offer. This paper argues that community colleges need to respond to this mismatch in order to more effectively meet students' needs. It offers a number of suggestions to this end. http://www.stanford.edu/group/pace/cgi-bin/wordpress/developmental-students-their-heterogeneity-and-readiness