



Acknowledgments

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There is a strong and growing argument for higher educational attainment in the United States. The jobs that are expected to support our economy in the coming years will depend on a skilled workforce that is able to learn and adapt quickly to new challenges. However, demographic patterns demonstrate that relying on the traditional K-16 pipeline to meet the educational and workforce needs of our states and the nation will not be enough. In addition, the economic and personal benefits that individuals gain from education also argue for greater focus and emphasis on adult learning.

Yet not enough is known or publicized about the scope and potential of adult learning in the U.S. or about the barriers to adult participation. While many colleges and universities have entered the market for adult students, and while some enlightened corporations have encouraged participation in education among their front-line employees as a strategic investment, both federal and state policy remain largely concerned with the traditional educational pipeline.

This report was produced by the Council for Adult and Experiential Learning (CAEL), with funding from Lumina Foundation for Education and in partnership with the National Center for Higher Education Management Systems (NCHEMS). Our objective is to provide a comprehensive look at adult learning in America at the national and state levels.

The picture is striking:

- In the U.S., more than 59 million people, or 30 percent of the adult population, are untouched by postsecondary education—and in 35 states, more than 60 percent of the population does not have an associate's degree or higher.
- Over 26 million adults in the U.S. currently have no high school diploma, more than 32 million have not attended college and are earning less than a living wage, and over 8 million have not attended college and speak little or no English. Overlaps among these populations are substantial. For example, more than three million individuals have all three of these characteristics: they do not have a high school diploma, they earn less than a living wage, and they speak little or no English.
- 32 states cannot catch up to the educational attainment levels of the best performing countries internationally by relying solely on strategies related to traditional-age students—even if students in those states graduate from high school at the rate of the best performing state, even if high school students enter college at the rate of the best performing state, even if these students graduate from college at the level of the best performing state, and even if educated immigrants continue to enter the U.S. at the levels of the recent past. Educating adults must be part of the solution.
- The good news is that adults are making up an ever larger share of the total enrollment in postsecondary institutions. By 2004, adults made up approximately 43 percent of total enrollment at community colleges (includes full-time and part-time). Increases over time are most dramatic for part-time adult enrollment. From 1970 to 2002, adult part-time enrollment at all institutions increased from 7 percent to 12 percent, and adult part-time enrollment at community colleges increased from 17 percent to 26 percent of all students.

- States vary widely in the number of their adults enrolled in associate's or bachelor's degree programs. Arizona shows the greatest success, with about 40 percent of adults enrolled in postsecondary learning. Another 3 states have more than 20 percent of adults with only a high school diploma enrolled in postsecondary learning, but 37 states have adult postsecondary participation in the 10-19 percent range, and 9 states have fewer than 10 percent of adults in postsecondary learning.
- Affordability: Community college attendance is relatively affordable for the nation's adults, but private college attendance is likely out of reach for many. Average tuition and fees at a public community college constitute 7 percent of median income for the poorest 25- to 44-year-olds and 5.4 percent of median income for the poorest 45- to 64-year-olds. Public four year college tuition and fees constitute 19.5 percent of median income for the poorest 25- to 44-year-olds and 15 percent of median income for the poorest 45- to 64-year-olds. In contrast, private college tuition and fees constitute more than 70 percent of median income for the poorest 25- to 44- year-olds and more than 54 percent of median income for the poorest 45- to 64-year-olds.
- States vary widely in their support for part-time students. Fourteen states do not provide any need-based aid to part-time students, and another seventeen states devote less than 10 percent of need-based aid funds to part-timers. But nine states devote between 10 percent and 20 percent of need-based aid to part-time students and six devote more than 20 percent of need-based aid funds to this group.
- Employer tuition support constitutes a key avenue for addressing affordability. According to the 2005 National Household Education Survey, 45 percent of those attending college or university degree or certificate programs part-time and 54 percent of those attending vocational/technical diploma programs had some form of support from their employers. In both cases, financial support tended to be disproportionately provided to workers aged 25 and older.
- Accessibility: Nontraditional students—for example, those who have delayed enrollment in postsecondary education, work full-time while enrolled, or have dependents other than a spouse—were more likely than traditional students both to participate in distance education and to be in programs available entirely through distance education.

While the major purpose of this report is to present what is known about adult participation in education nationally and across the fifty states, a secondary purpose is to highlight what is not known. The nation faces significant gaps in available data about adult participation in many areas. For example, not all 50 states have data on the degrees and certificates granted to adults, enrollment by adults in noncredit programs as a proportion of all adults in the population, college-going rates, GED recipients, participation in distance learning by age group, or progression by level through basic literacy training. Addressing these data gaps in order to gain a better understanding of education levels and patterns of learning for all citizens and members of the workforce should be a priority in state and national policymaking over the next decade.

Yet the data we already have can be instrumental in focusing a state's attention on adult learning and workforce development. An important first step for states will be to relate the data they have to the factors that influence enrollment figures and educational attainment outcomes, such as the state's workforce demographics, local and state economies, state policies and funding. Understanding what underlies the data can help state policymakers identify priorities for state action and use limited resources in the most effective and efficient manner.

This report is part of a larger CAEL initiative funded by Lumina Foundation for Education that is designed to help states understand the data on adult learning that is available to them and use that information to pursue adult learning policy change. In addition to this report, the project provides a number of tools and resources to help in this process, including:

- Individual state profiles for each of the fifty states, together with customized text highlighting distinctive policy challenges or advantages.
- A guide for policymakers on the implications of the data and recommendations for action. This guide also includes an Adult Learning Policy Review Framework to help states undertake a systematic adult learning policy audit and to aid efforts to change policies that affect adult learner participation and success.
- Links to other useful publications on adult learning and workforce development policies and practices.

Education is an important asset for individuals, for employers, for our state economies, and for our future.

- ° Downloadable files containing data presented in the Adult Learning in Focus report.
- A link to NCHEMS' Information Center for State Higher Education Policymaking and Analysis, which provides access to a comprehensive database on higher education in the United States, including a new section with adult learning indicators, www.higheredinfo.org. (Selected adult learning indicators will be updated and maintained over time.)
- An annotated bibliography of important research on adult learning

These tools and resources are available at www.cael.org/adultlearninginfocus.htm.

Education is an important asset for individuals, for employers, for our state economies, and for our future. However, our current educational system has not produced the educated workforce we need, and it has not always served the nontraditional student well. We need to understand how to engage more adults in learning—in our current system and also outside of the traditional learning pathways. The first step is to get and understand the data that exist.

The next step is to find ways to address the barriers to adult learning in this country, particularly the affordability of postsecondary learning and the accessibility of education for the "nontraditional" learner. The federal government has an important role to play, for example, in restructuring financial aid for adults and offering more assistance to part-time learners, even those taking only one course, or three credits, at a time. Significant change, however, may best be driven by the states, who have both the responsibility for education and much to gain from an educated citizenry. As state policymakers become more aware of the need for a focus on adult learning and adult learners, and how their respective states perform compared with other states and the best educated countries in the world, the will to act will grow.

Knowing where we are raises awareness. Knowing where we want to go provides motivation. Real change will come from state leaders who understand the need, see adult learning as an essential aspect of addressing the need, and act accordingly.

Introduction

Not long ago, postsecondary education was a privilege enjoyed by only a few. The economy did not require much more of our grandparents than a high school diploma. Many workers were able to get along well enough without even that. But today, the stakes are much higher. A high school diploma or GED may not be enough for many entry-level jobs and certainly does not provide an avenue to the high-skills/high-wage jobs of choice. Further, the evidence suggests that while our ability to compete internationally depends on the skills of our workforce and its ability to learn and adapt to new situations, the U.S. can no longer claim to be the world leader in education that it once was.

This report's systematic portrayal of adult participation in education opens the way for an informed and focused policy debate on adult learning.

State policymakers care now, perhaps more than ever before, about the educational attainment of their states' working populations. They also care about the responsiveness of their states' educational systems to the needs of adult learners. They know that an educated workforce is more employable, that it helps attract new kinds of business, and that it can support the economic needs of families better. Quite aside from the personal gains from higher levels of education, these increments contribute significantly to state and federal tax revenues, and the people with these levels of education are more likely to contribute to civic life as well as the economic competitiveness of their region and the nation as a whole.

Yet not enough is known or publicized about the scope and potential of adult study in the U.S. and what barriers exist to greater adult participation. While many colleges and universities have entered the market for adult students, and while some enlightened corporations have encouraged participation in education among their front-line employees as a strategic investment, both federal and state policy remain largely focused on the traditional educational pipeline. There are few published statistics about the full extent of adult participation in such nontraditional educational areas as Adult Basic Education, corporate training, or noncredit instruction, leaving us with an incomplete picture of adult learning in our country.

This report was produced by the Council for Adult and Experiential Learning (CAEL), with funding from Lumina Foundation for Education and in partnership with the National Center for Higher Education Management Systems (NCHEMS). The objective is to provide a comprehensive look at what we know about adult learners in America at the national and state levels.

The report highlights the importance of adult education in helping to close the growing gap between this nation's postsecondary attainment and that of other leading countries. It makes the associated case for the ways in which states and the nation will benefit if larger numbers of adult citizens earn postsecondary credentials. It describes the many kinds of adult learners and learning that currently exist and how effectively the various systems are working. Finally, it looks at the barriers facing adult learners, and the state and national policies that can help remove them.

But it is the systematic portrayal of the current extent and potential of adult participation in education—wherever possible on a state-by-state basis—that opens the way for an informed and focused policy debate around this important topic. At a minimum, we believe it will bring the adult learning issue to a new level of awareness among policymakers and institutional leaders, thereby stimulating increased attention to removing the barriers faced by potential adult learners.

This exercise has also shown that, unlike the data available about traditional higher education, consistent and comprehensive data about many aspects of postsecondary education and other adult education options are uneven across states in the U.S. This is because definitions are inconsistent, state assignments of responsibility for adult learning are dissimilar, and states' willingness and capacity to collect the needed data are varied. Accordingly, this report is as much a call for action to address these important data gaps as it is a policy tool in its own right. It is imperative that we develop sound state and national policies to facilitate greater levels of postsecondary attainment beyond the traditional high school diploma—and sound policies can only be evolved if policymakers are well-informed enough to understand what needs to be done.

Other Components of this Project

This report is part of a larger CAEL initiative funded by Lumina Foundation for Education that is designed to help states understand the data on adult learning that is available to them and use that information to pursue adult learning policy change. In addition to this report, the project provides a number of tools and resources to help in this process, all of which can be accessed through the CAEL website at www.cael.org/adultlearninginfocus.htm. They include:

- Individual state profiles containing a subset of the adult learning data for each of the fifty states, together with customized text highlighting distinctive policy challenges or advantages
- ° A guide for policymakers on the implications of the data and recommendations for action. Included in the guide is a state policy framework suitable for reviewing state policies affecting adult learners in any state developed by CAEL in partnership with the Southern Regional Education Board.
- ° Links to other useful publications on adult learning and workforce development policies and practices
- o Downloadable files containing data presented in the full Adult Learning in Focus report
- A link to NCHEMS' Information Center for State Higher Education Policymaking and Analysis, which provides access to a comprehensive database on higher education in the United States, including a new section with adult learning indicators, www.higheredinfo.org (Selected adult learning indicators will be updated and maintained over time.)
- ° An annotated bibliography of important research on adult learning

The Payoffs of Education: Why an Educated Citizenry Is Important

Over the past decade, many voices have called for increased levels of postsecondary education. For the most part, these calls take for granted the proposition that increasing postsecondary attainment—whether for young adults or for older adults—will automatically result in public benefits. Accordingly, these sources see the policy problem of adult participation only in "supply side" terms: how can we increase the numbers who participate and are successful?

It is important, though, to carefully consider the case for adult learning and lifelong learning. There is much evidence available about the concrete benefits that will accrue to the workforce—and to society in general—by increasing adult learning and educational attainment. Raising awareness of these benefits supports the "demand side" of the adult learning. Extant research that links economic and societal benefits with postsecondary attainment can be organized around two headings: opportunities for citizens and economic vitality.

Opportunities for Citizens

Achieving the "American Dream" is a historic driver of citizen behavior in the U.S. It has been a deeply-held article of faith among native-born Americans, and it has been a significant motivator for many generations of immigrants. The ideal of the "American Dream" is composed of many elements, but is centered on the notion of "opportunity" in both social and economic terms. These opportunities are closely tied to individual educational attainment.

No "Dead End" Jobs

One component of achieving the "American Dream" is that workers can earn a "living wage" (defined by some as 150 percent of minimum wage) and have access to clear paths for career or occupational progression. Education is demonstrably related to this condition. For example, in 2005 21.4 percent of families with no high school diploma were living below the poverty line, compared to 7.1 percent of those with high school diplomas and 1.8 percent of those with bachelor's degrees (Baum and Ma 2007). Having a bachelor's degree also makes one more likely to be employed (Baum and Payea 2004), and each level of education provides more return than the level below (Averett and Dalessandro 2001).

State-by-state and national data demonstrate these returns as well. First, greater levels of education benefit the country because they lead to higher rates of workforce participation. Nationally, those with high school diplomas have work participation rates that are 14 percentage points higher than those without a high school diploma, and those with college degrees have work participation rates that are an additional 9 percentage points higher. Individual state benefits vary and likely can be partially explained by state and regional economies and dominant employers. States like Vermont, for example, experience a more-than-30-percent increase in workforce participation between those with no high school diploma and those with a high school diploma, while workforce participation increases less than 5 percent for the same comparison in Nevada. The payoff in terms of workforce participation is similarly varied for earning a college degree—17 percent in West Virginia versus less than 2 percent in Utah (Figures 1 and 2). While patterns have a lot to do with the structure of a given state's workforce and economy, comparing patterns and trends can help state policymakers in their efforts to set priorities and to compete economically.

Figure 1. Increase in Workforce Participation from No High School Diploma to a High School Diploma, 2006

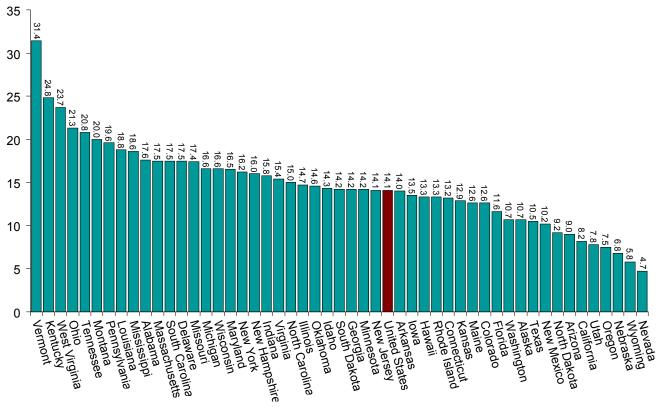


Figure 2. Increase in Workforce Participation from a High School Diploma to a College Degree (Associate's and Bachelor's), 2006

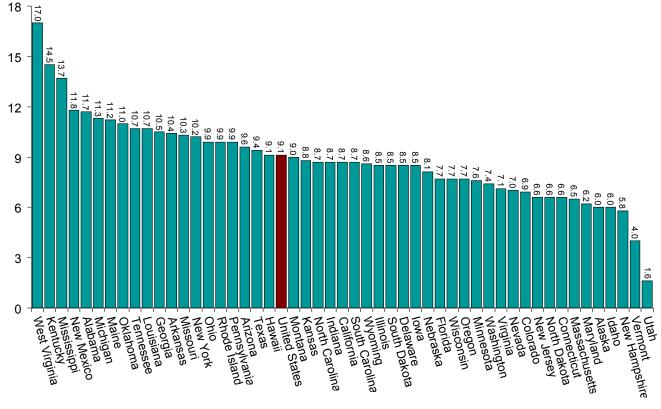
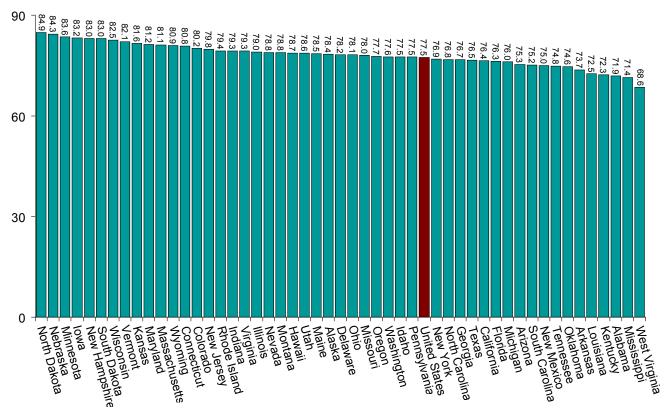


Figure 3. Participation of Adults Aged 25-64 in the Workforce, 2005



Conditioning both these rates is each state's workforce participation among adults, which ranges from almost 85 percent in North Dakota to less than 70 percent in West Virginia (Figure 3). In other words, increases in workforce participation have different starting points, depending on the state.

The returns of education are also evident in the average salaries at different educational attainment levels. Among adults aged 18-64, for example, those who earn an associate's degree can expect, on average, over \$7,200 more in annual earnings than those who do not do so. Differences in median earnings across educational levels can vary greatly between states. For example, the bump in median income between having a high school diploma and not having one ranges from a low of \$3,858 in Hawaii to a high of \$10,766 in Washington (Figure 4). The increase attributable to having an associate's degree over a high school diploma ranges from a low of \$4,063 in Montana to a high of \$14,860 in California (Figure 5). And the increase attributable to having a bachelor's degree over a high school diploma ranges from a low of \$10,379 in South Dakota to a high of \$27,597 in California (Figure 6). These differences are due, in part, to the employment structure of each state's economy.

Higher levels of education are also associated with better working conditions (Institute for Higher Education Policy 1998), and educated workers are more likely to have employer-supplied health insurance (Baum and Ma 2007). According to Williams and Swail, "Degree holders enjoy better fringe benefits, longer vacation time, and better health care than nondegree holders" (2005, 9).

Figure 4. Difference in Median Earnings Between Less than a High School Diploma and a High School Diploma, 2006

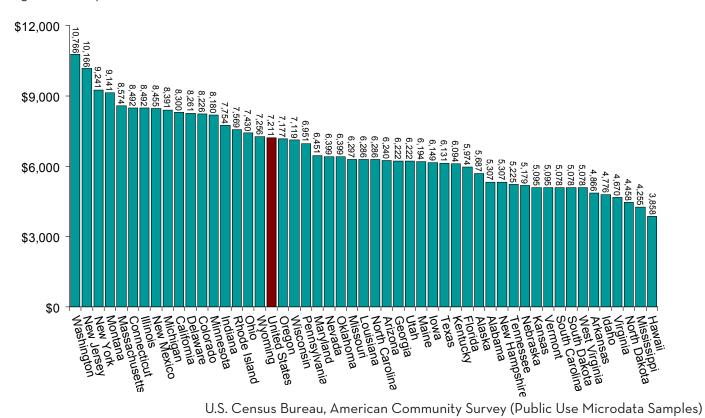
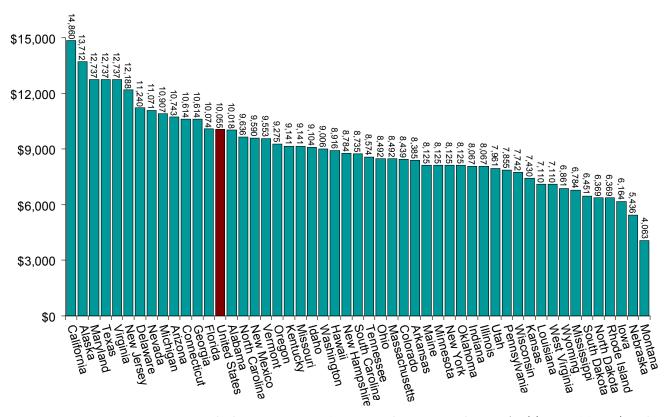


Figure 5. Difference in Median Earnings Between a High School Diploma and an Associate's Degree, 2006



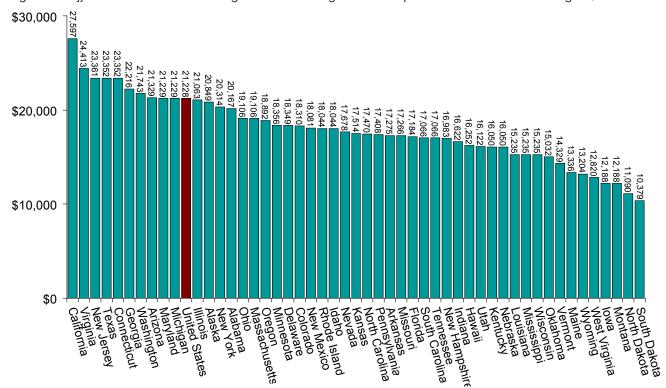


Figure 6. Difference in Median Earnings Between a High School Diploma and a Bachelor's Degree, 2006

Social and Geographic Mobility

Another component of the "American Dream" is social—"making one's way" toward higher levels of social status and having the freedom and opportunity to change residence and careers. People who graduate from college enjoy greater social status in the form of more prestigious jobs. First generation college graduates experience a particular enhancement in personal status as leaders within their families. In addition, the ability to change jobs or to readily move to a different location is related to educational attainment because college graduates tend to be able to save money at higher rates and can more easily find other employment when they are not happy with their work conditions (Williams and Swail 2005). Individuals who have attended college have more work opportunities and tend to have skills that transfer more readily across different job settings and/or geographic locations than those who have not completed a postsecondary credential (DaVanzo 1983).

Public Voice

A third component of the "American Dream" is political—that citizens have the right and obligation to serve as active members of a functioning democracy at the local, state, and national levels. Evidence is strong that participation in civic life varies by educational level. For example, one study found that 79 percent of persons aged 25-44 with a bachelor's degree voted in presidential elections compared to 67 percent of those with some college, 50 percent of high school graduates, and 27 percent of those with less than a high school education (IHEP 1998). Higher levels of educational attainment are also positively related to group membership, attitudes toward free speech, and newspaper readership (Dee 2004). And at least one study found that education is more strongly related to civic engagement than any other factor (Putnam 1995). This may be because increased cognitive skills make it easier to process complex political information, to make decisions, and to circumvent the various bureaucratic and technological impediments to civic participation (Dee 2004). Finally, educational attainment is strongly related to volunteerism. For example, 74 percent of adults aged 25 to 44 with a college degree participate in voluntary service, compared to 59 percent of those with some college, 45 percent of those with a high school degree, and 25 percent of those who did not graduate from high school (Baum and Payea 2004).

Collective Quality of Life

A final component is collective-living in a community that is safe, supportive, and provides an environment in which important services (both public and consumer) are provided competently and effectively. Higher levels of education are associated with decreased reliance on government financial assistance through welfare and other kinds of public support (IHEP 1998). For example, in 2005 Food Stamp participation rates were 15 percent for those not graduating from high school, 6 percent for high school graduates, 5 percent for those with some college but no degree, and 1 percent for those with bachelor's degrees (Baum and Ma 2007).

Public services of all kinds can benefit from a better educated citizenry. For example, growth in personal income, which is influenced significantly by higher levels of educational attainment, yields substantially greater returns to a state in the form of tax revenues. But a low tax state such as New Hampshire realizes somewhat less of this potential benefit than other states (Figure 7).

Participation in leisure activities including playing sports, exercising, visiting art museums, and attending sports events are all strongly correlated with educational attainment (Nichols 2003).

Finally, an important correlation exists between educational level and health. At every income level and age group, people with bachelor's degrees report that they are healthier than those without (Baum and Payea 2004). A state-by-state analysis shows that there is indeed a trend of overall educational attainment being associated with more favorable health outcomes (Figure 8). But there are outliers in this relationship as well. Alaska, Wyoming and Montana have a lower health index than their educational attainment rate might suggest, while Texas and California appear to have a higher health index, given their relatively low percentage of adults with a high school diploma or higher.

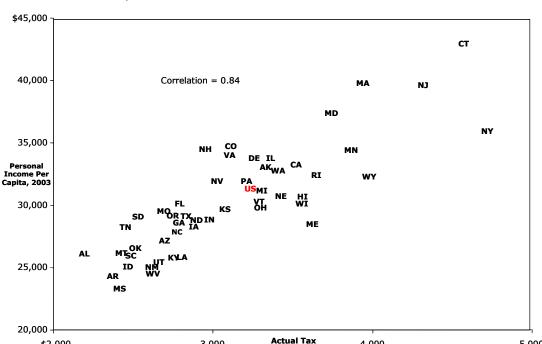


Figure 7. The Relationship Between Personal Income and Tax Revenues

\$2,000

State Higher Education Executive Officers (SHEEO), State Higher Education Finance, 2005; U.S. Bureau of Economic Analysis

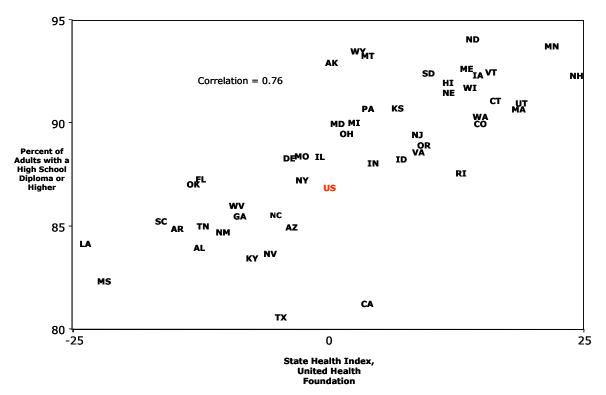
Revenues Per Capita, 2003

3,000

4,000

5,000

Figure 8. The Relationship Between Education and Health



U.S. Census Bureau; United Health Foundation, America's Health Rankings, 2005

Benefits such as greater health and reduced reliance on government assistance are especially important for the nation's citizens who have been deprived in the past. As Williams and Swail put it, "If we truly want to expand educational opportunity, the greatest impact, from an economic standpoint, is to focus on those students who have the greatest opportunity to benefit. This suggests targeting first-generation, low-income students, because an education will provide them with the tools to lift themselves up from one social stratum to another. In turn, these individuals will pay more taxes, rely less on public subsidies, become more informed consumers and citizens, and break the cycle of poverty that plagues urban and rural communities alike" (2005, 39).

Economic Vitality

While the "American Dream" has always been an important individual motivator, one key to achieving it has been an unusually productive and inventive economy. The American economy achieved world dominance in the late twentieth century through substantial increases in individual worker productivity made possible by technology and workforce organization. But it also attained this position because of high levels of entrepreneurship and the ability to create new products and industries. Both of these are increasingly at risk in a highly competitive global economy.

Worker Productivity

American workers are among the most productive in the world. In the past, in the manufacturing sector, this was because of highly capitalized technology. In the future, it will be because technology is applied to an information-intensive service economy. According to a recent report, "During the past 20 years, the U.S. has accounted for one-third of all growth in the global economy, a figure that is nothing short of astounding... The US leads the world in productivity and household wealth growth, job creation and foreign direct investment. Wealth is growing in the US only for people who have a college education. Technological change and globalization have increased the demand

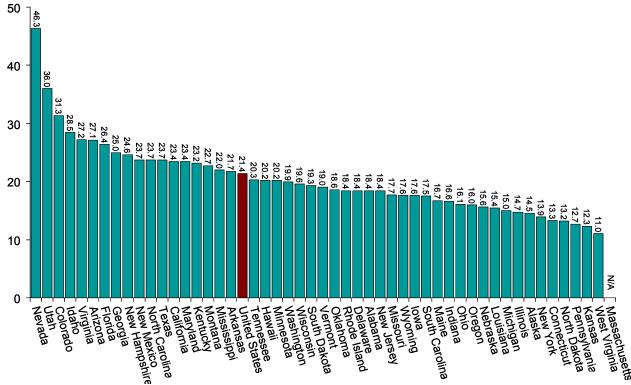
for higher-level skills, such as complex communication and creative thinking" (Shoeff 2006). Studies of employer practices in workplace education and training also show that substantial benefits accrue to lower-wage workers. They acquire skills and knowledge that make them more productive and valuable employees, and the companies providing the training benefit as well because they experience improvements in employee retention and customer satisfaction (Ahlstrand, Bassi, and McMurrer 2003).

Retooling Human Capital

A second driver of economic vitality has been the nation's ability to replace old, nonproductive industries with new ones through the process of "creative destruction." But doing this requires a different kind of worker—flexible and adaptable, with an array of higher-order competencies and information-gathering skills that support rapid retraining. High wage, fast growth occupations require higher levels of education. In 1950, 80 percent of jobs were classified as "unskilled," while today an estimated 85 percent of jobs are classified as "skilled"—requiring education or training beyond high school (Council on Competitiveness 2007). The nation's economy is in the early stages of a shift from an old corporate mass-production economy to a new entrepreneurial economy. Workers will need to learn new skills to be able to compete in this new economy (Atkinson 2004).

The fastest-growing occupations between 2000 and 2010 are expected to be in sectors where a postsecondary credential is required (Williams and Swail 2005). Another consideration for policy leaders is the extent to which this will be true in their own state's economy and, particularly, whether employment growth is anticipated to occur in occupations that require postsecondary training. For example, this will likely be very important in a state like Nevada, where jobs requiring at least some postsecondary training or a college degree are projected to increase by over 46 percent, and somewhat less important in states like West Virginia, where they are projected to increase by only about 11 percent (Figure 9).

Figure 9. Projected Change in Occupations Requiring Some Postsecondary Training or a College Degree from 2002 to 2012



America's Career Information Network (ACINET). Data Provided by the State Departments of Labor

Inventiveness/Entrepreneurship

A final historic U.S. advantage has been an unusual level of inventiveness and entrepreneurship. Partly this has been a function of an open, flexible economy unfettered by class traditions. But in large measure it has been due to a citizenry in a position to take appropriate risks and seek new ways of doing things. According to the Council on Competitiveness, "innovation is arguably the most important area of economic performance for the long-term prosperity of this country" (2007, 74). As a result, employers are increasingly interested in hiring people who not only can execute well, but also can create the next wave of innovation (AeA et al. 2005). Recent shortfalls in educational attainment have increased the nation's dependence on immigration as an engine of entrepreneurship. As Bowles puts it: "During the past decade, immigrants have been the entrepreneurial sparkplugs—starting a greater share of new businesses than native-born residents, stimulating growth in sectors from food manufacturing to health care, creating loads of new jobs and transforming once sleepy neighborhoods into thriving commercial centers" (2007, 3).

Taken together, the available evidence supports the "demand" case for increasing postsecondary learning among adults. The nation will need more adults with postsecondary credentials and will have to continue to reinvest in this element of human capital in order to continue to fulfill the "American Dream."

A Note on Defining Adult Learners

Simply defining the "adult learner" population in the U.S. is becoming more challenging as we learn more about all who are taking part in educational activities. The most common definition is based only on age. For example, most studies define "adults" as individuals aged 25 or older (see Paulson and Boeke 2006). By this definition, 37.8 percent of undergraduate students enrolled for credit in postsecondary study are adult learners.

Yet, using a definition based solely upon age may miss a large number of younger people who behave like adults with respect to educational participation. A significant proportion of younger people enrolled in postsecondary education can also be categorized as "nontraditional students," as defined by the National Center for Educational Statistics (NCES), because they exhibit one or more of seven characteristics:

- Have delayed enrollment into postsecondary education
- Attend part-time
- Are financially independent of their parents
- Work full-time while enrolled
- ° Have dependents other than a spouse
- ° Are a single parent
- ° Lack a standard high school diploma (Horn 1996)

Due to how data on learners are currently collected in the U.S. and at the state level, most of the measures used in this report rest on the age-based definition. The data in this report typically present learners in terms of a young adult component (aged 25–34) and an older adult component (aged 35–64). But it is important to remember that many younger people attempting to enter and complete postsecondary education in America may face the same barriers and challenges as adults.

The National Portrait of Adult

Postsecondary Education and Adult Literacy

More than 59 million adults, or 30 percent of the total adult population, are untouched by postsecondary education. The payoffs of an educated workforce are significant for both individual citizens and for our economy as a whole. Nationwide, 37 percent of adults aged 25-64 have at least an associate's degree and approximately one in five have some college experience but no postsecondary degree (Figure 10). Adults (aged 25 and over) are somewhat more likely than their younger counterparts to have earned a baccalaureate degree, though this is in part because many of the 18- to 24-year-old group are still in school. Nevertheless, a significant portion of the adult population has never taken a single college class toward a degree. More than 59 million adults, or 30 percent of the total adult population, are untouched by postsecondary education.

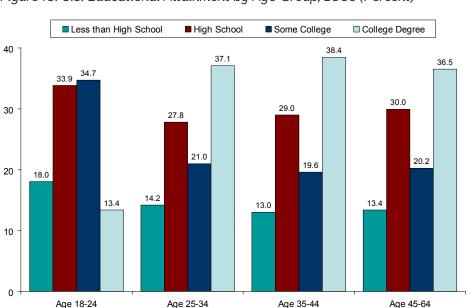


Figure 10. U.S. Educational Attainment by Age Group, 2006 (Percent)

The Numbers in Context: Reclaiming a U.S. Strength

It has become well known that other nations are overcoming the historic lead that the United States has enjoyed in educational attainment. According to the latest figures, the U.S. now ranks tenth among Organization for Economic Co-operation and Development countries in the percentage of young adults (aged 25–34) with a postsecondary credential (OECD 2007).¹ This is not because the U.S. has declined, but because other nations have caught up with and surpassed us. NCHEMS has estimated that in order for us to meet the standard of today's leading nations, we need to set a goal of having 55 percent of the adult workforce earn at least an associate's degree. At our current 34 percent, we have a long way to go as a nation. NCHEMS has estimated the gap at 16 million degree earners. (NCHEMS and Jobs for the Future 2007).

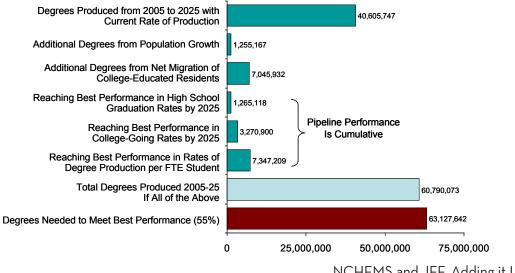
As many have pointed out, this shortfall has potentially serious implications for our ability to compete in a global "knowledge-based" economy. Equally important are the implications of this shortfall for participation in a functioning democracy and for our individual and collective quality of life.

Most proposals about how to address this growing gap concentrate on the established "educational pipeline"—
the flow of young people through high school to graduation, into postsecondary education, toward a two-year
associate's or four-year baccalaureate degree. Lumina Foundation for Education's "Making Opportunity Affordable"
project has shown, however, that those strategies, even when combined with projected population growth and
migration, will be insufficient to reach our 55 percent target (NCHEMS and Jobs for the Future 2007) (Figure 11).

States vary significantly in their success in moving students through this traditional educational pipeline (National Center for Public Policy in Higher Education 2004). Documenting these differences, and precisely where enrollment "leakages" occur, has proven helpful to state policymakers in deciding how to address the challenge. But reliance on and attention to the traditional educational pipeline alone will not be enough.

Figure 11. Can the United States Close the Degree Gap Without Educating Adults?

Current Degree Production Combined with Population Growth and Migration, and Improved Performance on Student Pipeline Measures



NCHEMS and JFF, Adding it Up, 2007

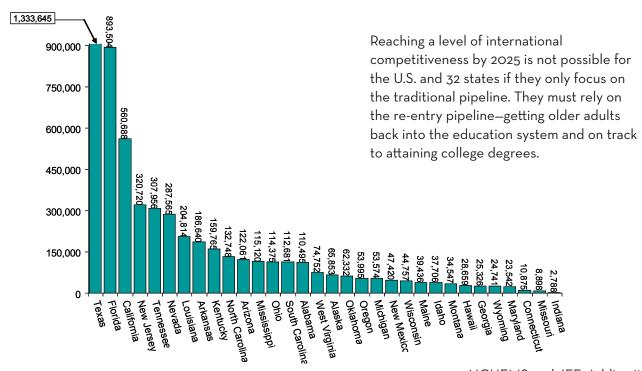
¹ Because of its far earlier lead in mass higher education, the U.S. remains the top performer for the whole adult working-age population (aged 25-64).

Even if students in all states graduate from high school at the rate of the best performing state, even if high school students in all states enter college at the rate of the best performing state, even if students graduate from college at the level of the best performing state, and even if educated immigrants continue to enter the U.S. at the levels of the recent past, the U.S. will likely be unable to regain its place of primacy with respect to postsecondary attainment by relying solely on strategies related to traditional-aged students. Given current levels of performance, only nine states are on track to meet the competitive benchmark of 55 percent of adults with college degrees, and another nine states could meet the benchmark if they improve their performance to match the best-performing states. This leaves 32 states unable to meet the benchmark, even if they could match the best state performance with traditional college-age students at each stage of the educational pipeline (Figure 12).

32 states will be unable to reach a level of international competitiveness even if they could match the best state performance with traditional college-age students at each stage of the educational pipeline

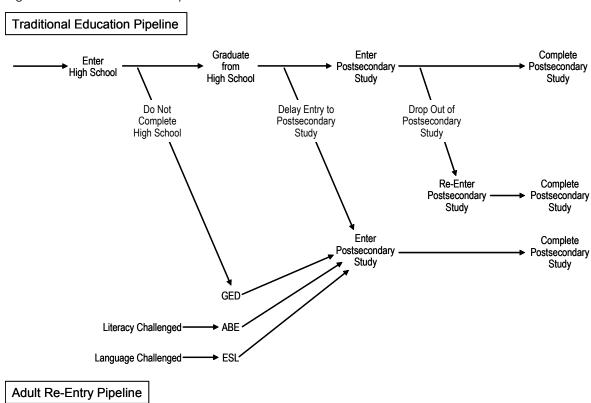
The issue of declining numbers of high school graduates, projected in a recent study by the Western Interstate Commission for Higher Education (2008), is yet another reason why a focus on the education of younger populations will not be sufficient.

Figure 12. Degree Shortfall in States Without Educating Adults



NCHEMS and JFF, Adding it Up, 2007

Figure 13. Two Educational Pipelines



Target Populations for Closing the Gap

Two main sources will have to be tapped to rectify this shortfall in the traditional educational pipeline (Figure 13). One source is adults who have graduated from high school but have not completed a college credential. In the population aged 25–64, 29.2 percent (a total of 56,371,283 individual adults) never went to college and 19.4 percent (42,548,055 individuals) attended college but did not complete a degree. The objective for this component of the "re-entry" pipeline is to enroll adults in postsecondary study and ensure that they earn a credential.

The other, more challenging, source consists of the 13.3 percent of the adult population (26,455,554 individuals) who never completed high school. Many of these adults may face basic literacy challenges as well. One way to help this population is to address skills shortfalls through Adult Basic Education (ABE), gain a high school credential by completing a GED, then enter postsecondary study.

But what does it mean that my state is an outlier on this chart...?

The data presented in each chart are the result of a wide range of influences including, but not limited to, workforce structure and demographics, local and state economies, state policies and funding. For some of the outliers presented here, readers may be able to infer which influences are at play based on their familiarity with the states' conditions and policies. We encourage policymakers and state leaders to engage with these data, seek out answers, and identify priorities for state policy action.

But there are also many areas where the "pipeline" metaphor breaks down as a descriptor of how adults enter and move through education. Indeed, for many adults the educational "journey" is not one-way or linear as suggested by the "pipeline" metaphor. It is characterized instead by:

- Multiple paths and "on and off ramps" instead of a single unidirectional source and flow. Adults engaged in learning tend to enter and re-enter numerous times, and they have many paths from which to choose. One of the challenges of painting a portrait of adult learning in America is to describe this complexity. The challenge is exacerbated because there is no single national data set to describe participation in the many available forms of adult education, as there is in traditional credit-bearing work.
- An interconnected "network" of opportunities. Although the adult learning universe is complex and largely uncoordinated, its components frequently are connected to one another so that work done in one context can be rendered equivalent to work done in another. If the proper channels are used, training acquired in a corporate context or in the military, for example, can be evaluated for college credit. Similarly, accumulated learning from experience can be evaluated, certified and assigned a college-level credit equivalent through Prior Learning Assessment (PLA). Moreover, many of the educational programs offered to adults are certification- or competency-based, allowing ready documentation of what has been learned.
- The intentional development of individual personal capacity aimed at providing a payoff that is tangible and direct. While myths persist that adults pursue largely avocational coursework (the classic case of "flower arranging"), the vast majority of provision is directed toward increasing job skills to either move upward in a current career or to change careers. Less frequently, adults engage in learning activities to build personal skills that will improve their quality of life. The adult learning "journey" is focused, practical, and intentional.

While the indicators presented in this report provide a place to start in understanding this complexity, each state will need to collect and analyze its own data to understand best how its adult populations are participating in learning and how the participation levels can be increased.

Adult Learning in the Fifty States

In order to meet the challenge of increasing the proportion of citizens achieving a postsecondary credential to world-class standards, states must tap significant numbers of their adult populations that lack such credentials.

States vary significantly in the proportion of working-aged adults (aged 25-64) who have earned at least an associate's degree, ranging from a high of almost 50 percent to a low of only about 25 percent (Figure 14). In 35 states, more than 60 percent of the population does not have an associate's degree or higher.

In 35 states, more than 60 percent of the population does not have an associate's degree or higher.

In order to raise educational attainment, state approaches will differ depending on the specific target populations most in need. Earlier in this report, we discussed two groups to be targeted. One is the group of individuals who never completed high school, perhaps the most difficult target population. In 30 states, 10 percent or more of the adult population has less than a high school diploma. Individual states range from a high of almost 20 percent in Texas to a low of just over 5 percent in North Dakota. The proportion of low-skilled adults rises to 15 percent or more in 13 states (Figure 15). This is the target population for GED and ABE programming, which prepares adults to access postsecondary learning opportunities.

The other target population consists of those individuals who have completed high school without having earned a college degree. Some in this group have never taken a college course, while others have some college experience but have not earned a degree.

Adults who have never attended college range from 43.5 percent in West Virginia to 22.7 percent in California, with 35 states clustered in the range of 28–38 percent (in other words, close to one-third of the entire adult population has never attended college) (Figure 16).

Approximately one in five adults nationally has some college experience but no degree. At the state level, proportions in this category range from of 27.5 percent in Alaska to 15.5 percent in Massachusetts, but most state proportions of adults with some college and no degree cluster around the national average of 20 percent (Figure 17).

Figure 14. Percentage of Adults Aged 25-64 with an Associate's Degree or Higher, 2006

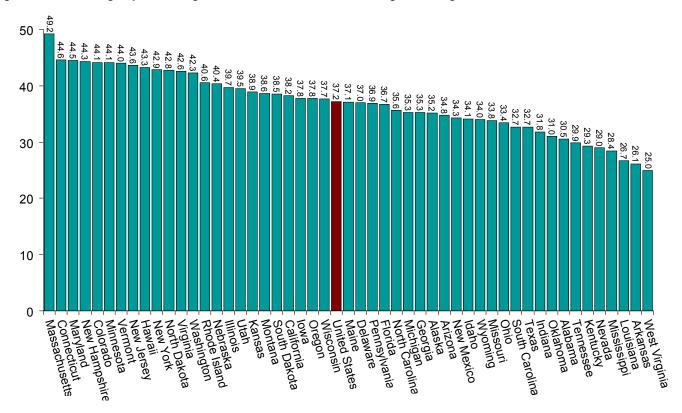


Figure 15. Adults Aged 25-64 with Less than a High School Diploma, 2006

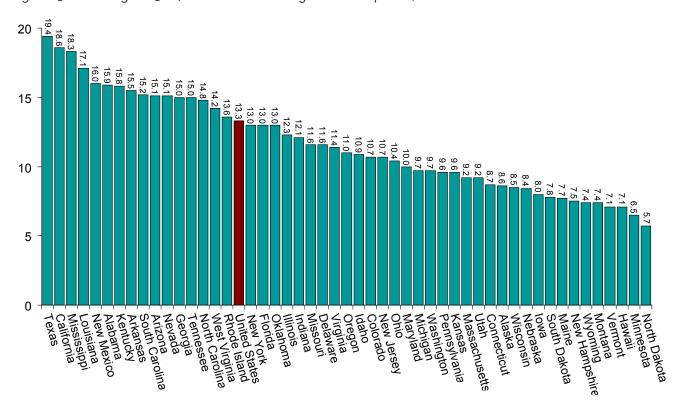


Figure 16. Adults Aged 25-64 with Only a High School Diploma but No College, 2006

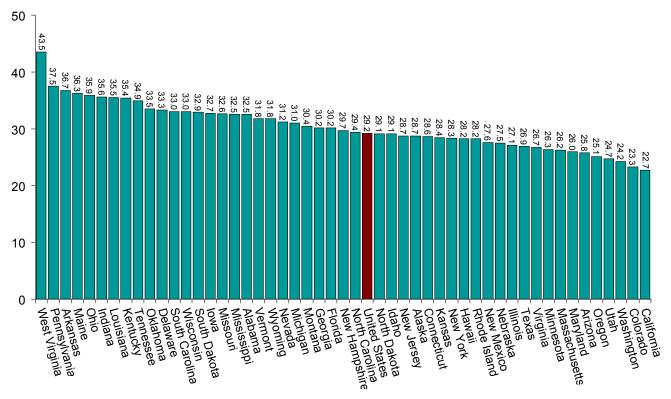
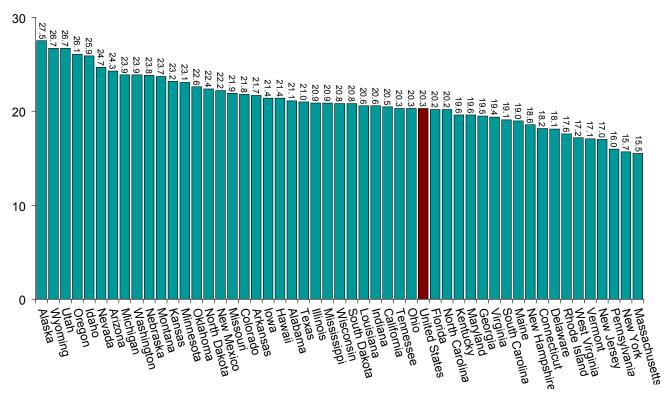


Figure 17. Adults Aged 25-64 with Some College but No Degree, 2006



A Look at Target Populations and Multiple Barriers

The above data examine target populations based on their position in, or outside of, the educational pipeline. There are other categories of target populations that states could also consider when designing strategies to raise the number of adults with a postsecondary credential. Additional potential target populations of interest to state policymakers include adults challenged by the lack of English language skills, under-educated low-wage earners, and incarcerated adults.

Nationally, of the more than 45 million adults who do not have a college degree:

- Over 8 million speak little or no English
- More than 32 million are earning less than a living wage (here we define living wage as 200 percent of the national poverty level)
- More than 10 million have the dual barrier of no high school diploma and the inability to earn a living wage

Additional overlaps among these populations demonstrate the extent of the challenge. For example, more than three million individuals have all three of these characteristics (Figure 18).

More than three million U.S. adults have multiple barriers: have no high school diploma, speak little or no English, and do not earn a living wage.

The extent of these challenges varies by state. For example, the percentage of individuals aged 18-64 who speak English poorly or not at all ranges from over 13 percent in California to below one percent in states like North Dakota, Vermont, Montana, and West Virginia (Figure 19). These data suggest widely differing needs for ESL programming.

Figure 18. Adults Aged 18-64 in the U.S. with No College Education, 2006

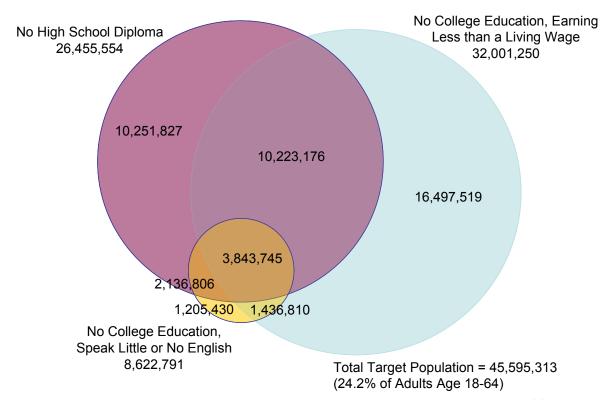
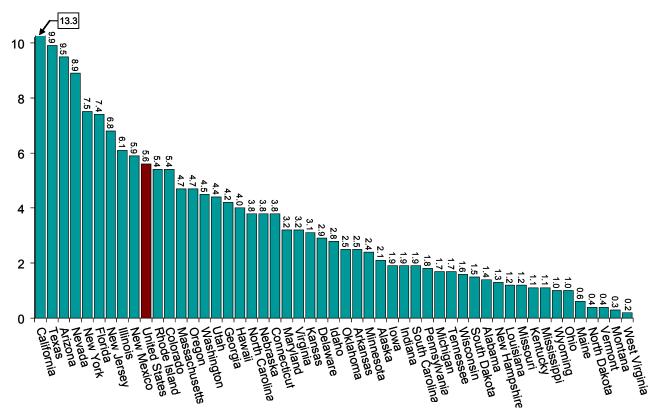


Figure 19. Adults Aged 18-64 Who Speak English Poorly or Not at All, 2006



States also vary widely with respect to the proportions of their adult populations who are working poor, (earning less than 200 percent of the national poverty level). For example, such individuals represent around 20 percent of the population in states like Mississippi and West Virginia, but less than a tenth of the population in New Hampshire (Figure 20).

Finally, while incarceration rates have quadrupled nationally since 1980, the rates vary by state, which leads to different potential priorities for prison-located programming. Prison populations in states like Delaware, Louisiana, and Texas are almost five times the relative sizes of those in states like Maine, Massachusetts, and Minnesota (Figure 21).

These substantial variations in the relative size of target populations should be carefully analyzed by each state in order to help set adult learning priorities. Each state has a unique combination of needs, which advocates should know and policymakers should understand.

Figure 20. Adults with a High School Diploma or Less in Families Not Earning a Living Wage, 2006

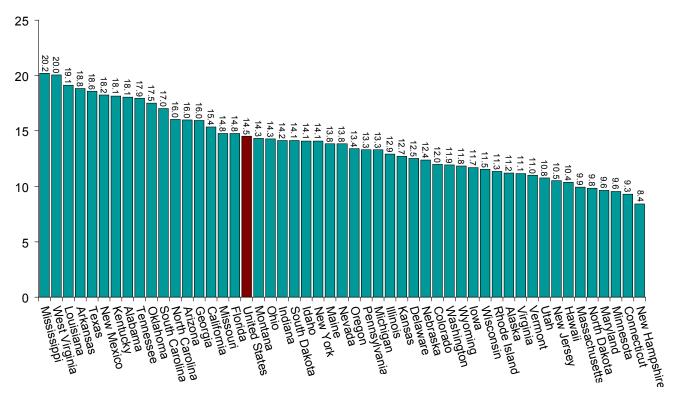
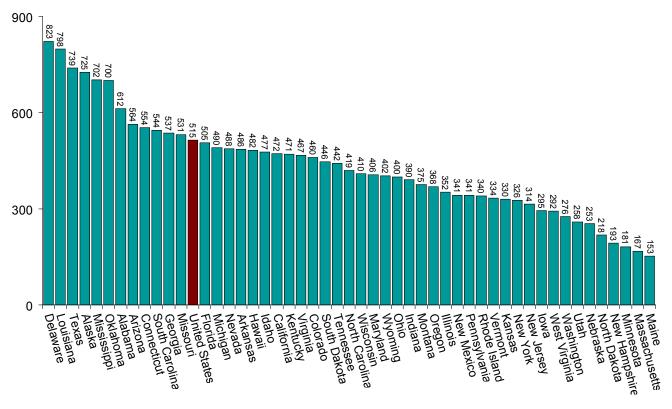


Figure 21. Incarceration Rate by State in 2005—Prisoners Under Federal and State Jurisdiction per 100,000 Residents



Source: U.S. Bureau of Justice Statistics, U.S. Census Bureau

Participation in and Results of Adult Learning

Unlike traditional college programs, adult learning activities may occur in many forms and are offered by many different kinds of providers (Table 1). Among the most common forms of adult learning provision for which we have data are credit-bearing courses, work-related or apprenticeship training, adult basic education, GED training, and English as a Second Language.

As noted earlier in this report, adults do not always follow a linear path, but may in fact pursue multiple paths depending on their interests or needs. This complexity is not reflected in the data sets currently available.

Table 1. Types of Adult Learning

Туре	Traditional Postsecondary Education	Formal Non-Credit Education	Informal Adult Education
For-credit courses leading to a degree or certificate	Х		
English as a Second Language (ESL)		X	
Adult Basic Education (ABE) (also Basic Skills Education)		X	
Adult Secondary Education (GED and high school equivalency)		Х	
Work-related courses	X	X	
Apprenticeship courses	X	X	
Personal interest courses	X	X	
Supervised training or mentoring			X
Self-paced study using computers			X
Attending "brown-bag" or informal presentations			X
Attending conferences or conventions			X
Reading professional journals or magazines			Х

Source: Paulson and Boeke, 2006, p.2

Studies also indicate that work-related learning occurs in multiple environments (Table 2).

National figures on overall participation in adult learning vary but converge on several statistics collected by the U.S. Department of Education and the U.S. Census Bureau. For example, the National Center for Education Statistics (NCES) reported that participation in adult learning increased from 40 percent in 1995 to 46 percent in 2001 and then declined to 44 percent in 2005. Similarly, the 2005 National Household Education Survey (NHES) reported 44 percent of all adults taking some form of formal adult educational activities. Within this group, work-related courses were taken by 27 percent of adults, according to NHES, followed by 21 percent for personal interest courses.

Table 2. Percentage of Adults Receiving Work-Related Instruction By Type of Provider

Provider	Percent
Business or Industry	51
Postsecondary Institution (college/university, community/junior college, vocational/technical school)	21
Government agency (federal, state, local)	19
Professional or labor association/organization	19
Other (religious or community organization, tutor, etc.)	8
Elementary/secondary school or school district	6
Public library	1
NOTE: Some adults took courses from more than one type of provider; therefore, percentages sur than 100.	m to more
Paulson and Boek	re 2006 n

According to an NCES 2007 report, participation rates among adult students varied by sex, age, race/ethnicity, employment/occupation, and education. For example, a greater percentage of females than males participated in personal interest courses (24 percent versus 18 percent) and work-related activities (29 percent versus 25 percent). Individuals aged 16-24 had a higher overall participation rate in adult education activities than their counterparts

aged 55 or older. Blacks and Whites had higher rates of overall participation in adult education than their Hispanic peers. Among those employed in the past 12 months, the overall adult participation rate in postsecondary learning was higher for those in a professional or managerial occupation (70 percent) than for those employed in service, sales, or support jobs (48 percent), or those in trade occupations (34 percent). In addition, the overall participation rate in adult education for those with a bachelor's degree or higher was greater than for those individuals who had some college or less education.

From 1970 to 2002, adult part-time enrollment at all institutions increased from 7 percent to 12 percent, and adult part time enrollment at community colleges increased from 17 percent to 26 percent of all students.

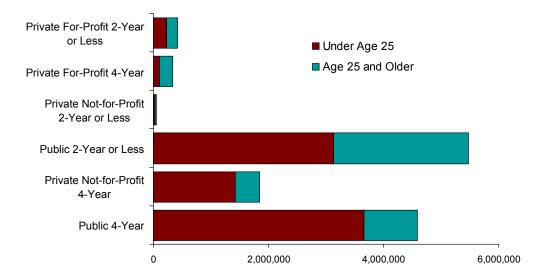
Credit-Bearing Courses

Traditional college courses are usually credit-bearing courses leading to a certificate or degree. This is the form of provision for which the most data are available. Most adults engaging in this form of education, like their younger counterparts, enroll at public institutions, predominantly at two-year institutions. Although the numbers are smaller, larger proportions of the enrollments at for-profit institutions consist of adults 25 years old and older than is the case for not-for-profit institutions (Figure 22).

The share of total headcount enrollment represented by adults 25 years old and older has also increased markedly in the last thirty years. Adult part-time students at all institutions increased from 7 percent to 12 percent, and part-time enrollment of adults in community colleges increased from 17 percent to 26 percent of all students (Figure 23). In 2004, adults made up 43 percent of total enrollment at community colleges (includes full-time and part-time adult students).

Finally, transfer and co-enrollment rates at credit-bearing four-year colleges and universities are a good deal higher for older students than for traditional-aged students (Figure 24).

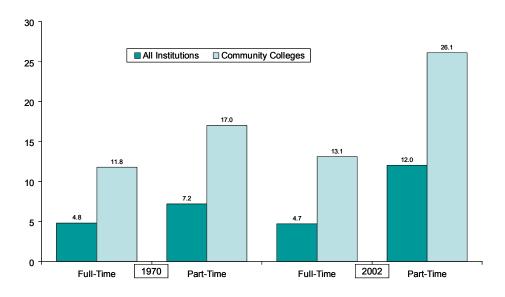
Figure 22. Undergraduate Enrollment by Age Category and Sector, Fall 2004



Note: "Not Assigned" and specialty categories omitted from chart.

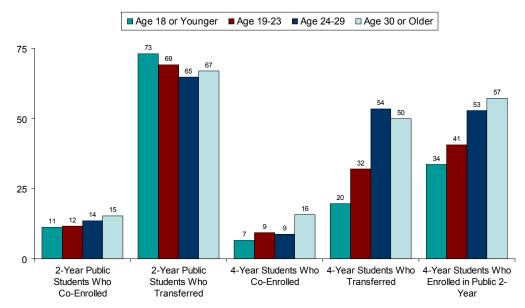
Source: Paulson and Boeke, 2006, p.21

Figure 23. Percent Distribution of Adults in Credit-Bearing Work, 1970 and 2002



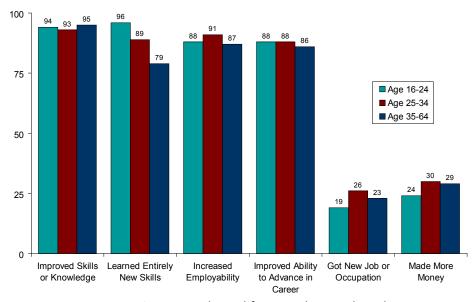
National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

Figure 24. Percentage of 1999-2000 First-Time Bachelor's Degree Recipients (According to Multiple Institution Attendance Patterns by the Age They Began Postsecondary Education)



Source: Paulson and Boeke, 2006, p. 22

Figure 25. Reported Outcomes of Participation—Colleges and Universities (Percent)



Source: Adapted from Paulson and Boeke, 2006, p. 20

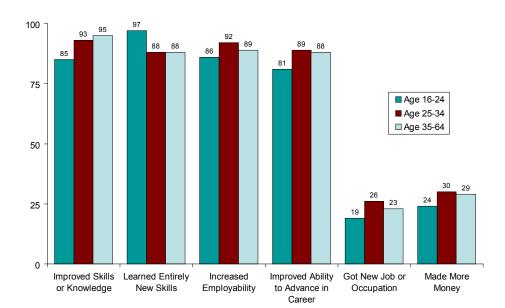


Figure 26. Reported Outcomes of Participation—Vocational/Technical Diploma Program (Percent)

Source: Adapted from Paulson and Boeke, 2006, p. 20

Unfortunately, the NCES does not collect data about the ages of those who are awarded a postsecondary credential, so it is not possible to provide an age breakdown of degree earners by degree level. But special surveys have examined self-reported outcomes for work-related participation in regular college and university degree programs (O'Donnell 2005). These surveys report relatively few differences across age groups, except that younger participants are more likely to report that they learned entirely new skills (Figures 25 and 26).

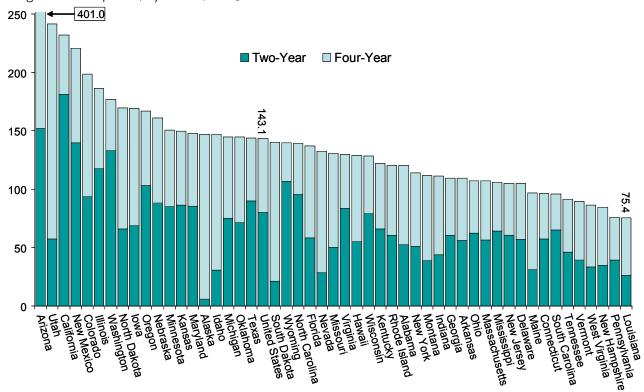
State by State: Participation in Credit-Bearing Courses

In part reflecting differences among target populations in need, there are large variations in patterns of adult participation and success in postsecondary learning across the fifty states. With respect to traditional college and university study, about half the states are fairly close to the national average of 143 enrollees per 1,000 people aged 25 to 49. Arizona, Utah, California, and New Mexico report a higher proportion with more than 200 per 1,000, and Louisiana and Pennsylvania report a lower proportion with fewer than 80 per 1,000 (Figure 27).

A valuable data resource on adult learning in the U.S. is the Integrated Postsecondary Education Data System (IPEDS), the data collection program for NCES. As noted above, IPEDS does not collect data by age for credentials awarded. An interesting exercise is to use the data that do exist to get an approximate picture of adult degree earning in each state by juxtaposing each state's degree production against its adult population without a college degree. Accordingly, Figure 28 presents fifty-state data on the total number of degrees and credentials awarded in a given state in relation to the size of its population aged 18 to 44 with no college credential. (This chart should be examined with caution because adults may or may not earn degrees and credentials in the same proportion as younger individuals. In actuality, adults may, for example, earn certificates at a higher rate than degrees, compared with younger people. This speaks to the value of having IPEDS provide the age breakdown of credentials awarded.)

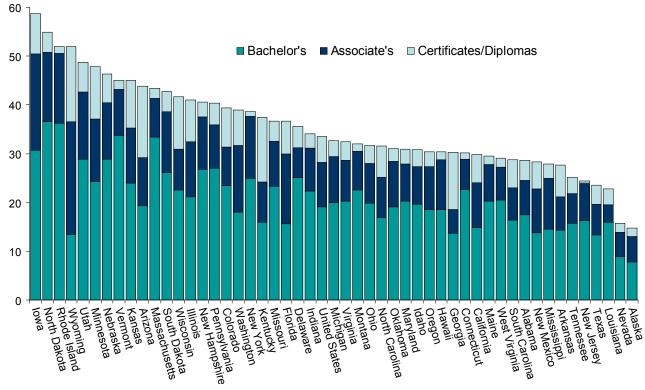
It is important to note that states differ a great deal with respect to the mix of college credentials they grant, regardless of how many degrees and certificates they produce. Some, like Massachusetts, Connecticut, and Vermont, award relatively large proportions of baccalaureate degrees. Others, like Georgia, Wyoming, and Arizona, award relatively large proportions of associate's degrees and certificates.

Figure 27. Participation of Adults Aged 25–49 per 1,000 Adults Aged 25–49 with Only a High School Diploma, by Sector, 2005



NCES, IPEDS Completions Survey, U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples)

Figure 28. Undergraduate Credentials and Degrees Awarded at All Colleges per 1,000 Adults Aged 18-44 with No College Degree, 2006²



NCES, IPEDS Completions Survey, U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples)

² NCHEMS has learned from its work in several states that, currently, fewer older adults pursue formal degrees and certificates than younger adults; therefore, the younger cohort has been used for this analysis.

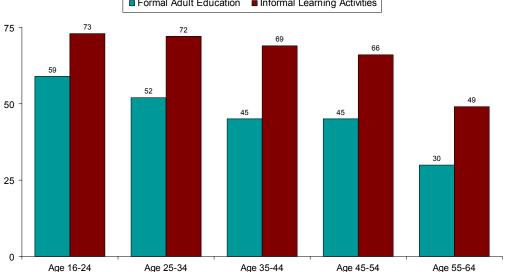
Work-Related or Apprenticeship Training

Work-related or apprenticeship training comes in a variety of lengths and formats and is offered by a variety of providers. This is the area of adult provision about which the least is known because few data are collected systematically. But several recent studies have found high participation rates in both formal and informal work-related education and training among those employed (Figure 29). According to a recent survey of adult learners, for example, most of this activity is informal and not for credit, and the majority is provided by employers (O'Donnell 2005).

Some information on the outcomes of work-related training is also available from special surveys (O'Donnell 2005). These results suggest that older participants are less likely to report that they learned entirely new skills (Figure 30).

Figure 29. Percentage of Adults Participating in Education for Work-Related ReasonsBy
Type of Activity and Age, 2002–03

Formal Adult Education Informal Learning Activities



Note: Participants can participate in both types of learning (formal and informal); therefore, the percentages do not total 100%.

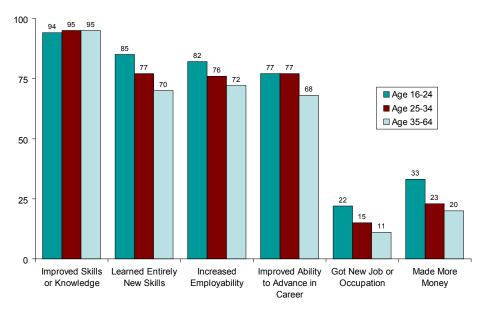
Source: Paulson and Boeke, 2006, p. 9

Workforce Investment Act Training

For some populations—primarily disadvantaged or dislocated workers—training may be supported by the Workforce Investment Act (WIA) of 1998. Some of the key goals of WIA are to help individual workers become employed, stay employed, and/or gain the skills needed for long-term employment.

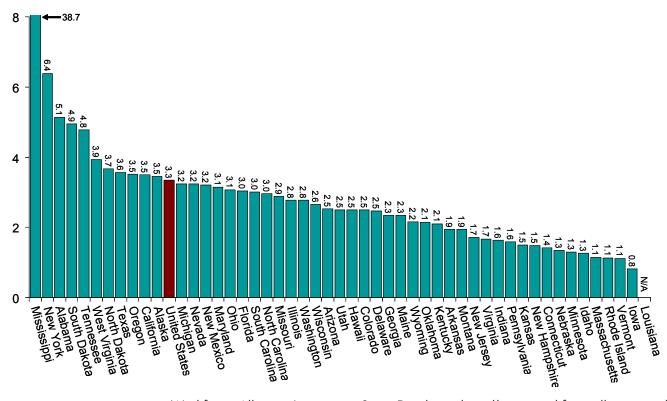
WIA is implemented through the U.S. Department of Labor Employment and Training Administration. Funding is provided by the federal government to states and is then dispersed to the local entities that administer the programs. In 2004, 3.3 individuals per 1,000 adults aged 18 to 64 participated in the WIA adult program nationally, together with 2.5 per 1,000 in the WIA dislocated worker program. Successful exit rates were 38 percent for adults and 37 percent for dislocated workers.

Figure 30. Reported Outcomes of Participation—Work-Related Courses or Training (Percent)



Source: Adapted from Paulson and Boeke, 2006, p. 20

Figure 31. WIA Adult Participants per 1,000 Working-Age Adults Aged 18-64 with No College Degree, 2004



Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

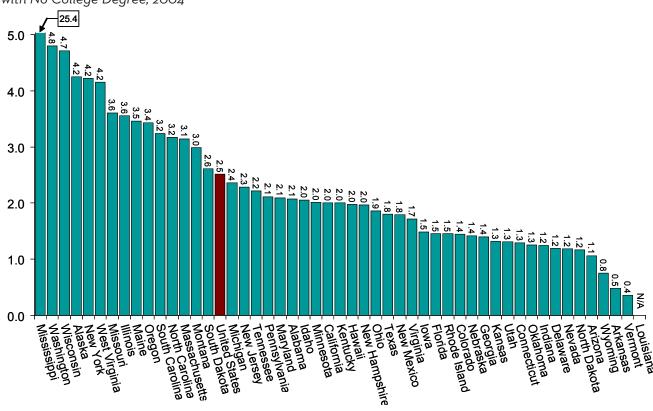


Figure 32. WIA Dislocated Worker Participants per 1,000 Working-Age Adults Aged 18-64 with No College Degree, 2004

Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

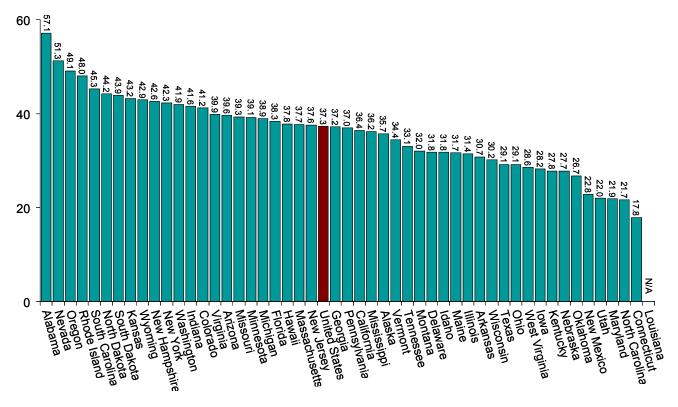
Wide variations exist across states with respect to the participation reported for state-funded WIA adult and dislocated worker programs, with more than fivefold differences in participation rates between the top and bottom performing states (Figures 31 and 32). Some of this difference is explained by varying federal funding allocations. Also, some of the differences may be attributable to variation in how states define "participant." Some states count every individual that receives core services (labor market information, job search assistance, skill assessment) while others may only count those who proceed to intensive services or training.

States also differ in the success rates they report for their WIA programs. The percent exiting the program varies from below 20 percent to above 50 percent for adult participants and from below 20 percent to above 80 percent for dislocated workers (Figures 33 and 34). But care must be taken because states also vary in how they define program "exits." In some states, "exit" means successfully completing a training program and getting placed in a living-wage job; in other states, simply securing a minimum-wage job can meet the criteria for exiting the program.

Adult Basic Education

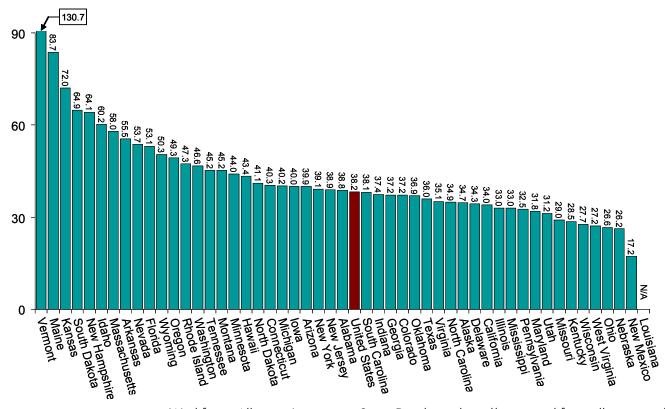
Adult Basic Education (ABE) programs, offered primarily through public school districts, community colleges, technical colleges, and private nonprofit organizations, serve learners aged 16 and over who are not formally enrolled in school and have educational skills below the high-school completion level. The primary audience for ABE is adults who need literacy skills required for employment, self-sufficiency, and the completion of secondary education. Adult education and literacy programs are often funded through federal grants to the states. The amount each state receives is based on a formula established by Congress. States, in turn, distribute funds to eligible local entities to provide adult education and literacy services.

Figure 33. WIA Adult Exiters as a Percent of Participants, 2004



Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

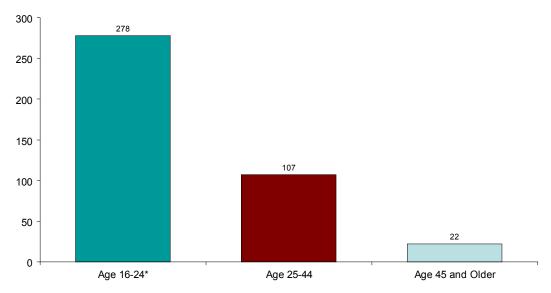
Figure 34. WIA Dislocated Worker Exiters as a Percent of Participants, 2004



Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

Almost a third of enrollees in state-administered ABE programs were 25 years old and older in 2005, with four-fifths of these counted in the young adult population (NCES 2007) (Figure 35). Variations across states are wide. For example, participation in state-administered ABE programs relative to the population aged 18 to 64 without a high school diploma is more than six times higher in Florida than in Nevada (Figure 36).





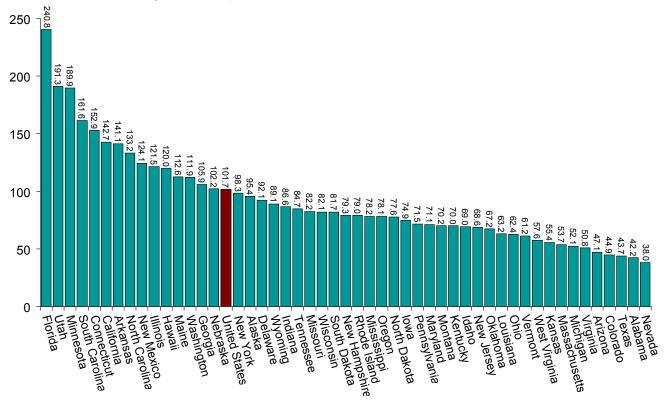
*Population age 16-24 with no high school diploma or equivalent, not enrolled U.S. Department of Education, Office of Vocational and Adult Education (OVAE)

States vary widely in how they administer ABE programs, as well as in the degree to which they track and report outcomes. A few states, like lowa, Oregon, and North Carolina, deliver the vast majority of ABE programming through public community colleges (Van Noy et al. 2008). But most states employ a combination of providers including high schools, postsecondary institutions, and other entities. States in which community colleges bear the primary responsibility for delivering ABE instruction can provide outcomes data about student progress. For example, North Carolina reported 33 percent of participants advanced at least one level of proficiency in 2004 (Whitfield 2005). At the same time, 42 percent of participants earned a high school credential and 25 percent of participants went on to a postsecondary institution, while 17 percent entered employment and 20 percent maintained employment. Colorado has reported that 70 percent of enrollees completed the level in which they were enrolled in 2003–04 (Lance 2000)

GED Awards

The GED Testing Service, a component of the American Council on Education (ACE), is a nonprofit, private organization, which develops the GED tests and sets the rules for their use (e.g., residency; educational, enrollment, and age limitations). The GED Testing Program is jointly administered by three separate entities: the GED Testing Service of the American Council on Education; each participating state, provincial, or territorial government; and each of the 3,400 official GED Testing Centers that serve as the main point of contact for GED candidates in communities across North America and overseas. The GED Testing Service does not receive federal funds.

Figure 36. Enrollment in State-Administered ABE Programs per 1,000 Adults Aged 18–64 with Less than a High School Diploma, 2005



U.S. Department of Education, Office of Vocational and Adult Education (OVAE); U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples)

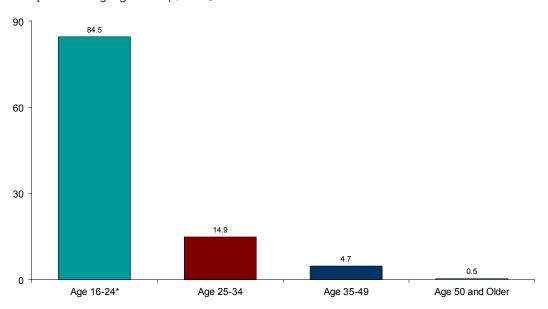
More than fifteen million individuals have received a GED credential since the program began in 1942. In 2005, GED completers represented 13 percent of all high school completers (ACE 2006; NCES 2007) (Figure 37).

As with ABE participation, there are wide variations among states in the award of GEDs per 1,000 adults with less than a high school diploma. Wyoming and Alaska award GEDs to about one in five adults with less than a high school diploma, while Delaware and California make such awards to fewer than one in 20 (Figure 38).

On a national basis, the proportion of GEDs awarded to younger people has risen markedly since 1990 (ACE, 2005 Statistical Report, 2006)(for current data, see Figure 37). The main reason for this is that increasing numbers of high-school-age students (aged 16-18) are completing the GED instead of taking mandated high school exit examinations. States vary significantly in the extent to which this is the case. For example, awards to high-school-age individuals increased 33.7 percent between 1990 and 2005 in Massachusetts, while this proportion only grew 1.9 percent in Connecticut. The growth in these numbers has implications for adult learning, because it could mean that fewer youth take advantage of established pathways between high school and postsecondary learning opportunities, and as these young people mature, they will add to the numbers of adults left behind.

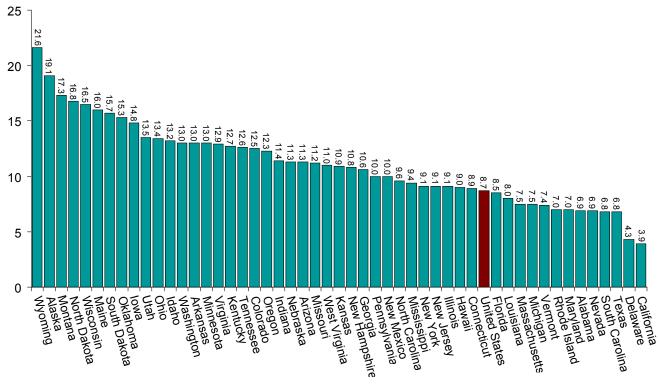
More than 60 percent of GED test takers say they intend to further their education. But relatively few follow through on this intent. A 1998 study by the National Center for the Study of Adult Learning and Literacy, for example, found only 4 percent of GED recipients had actually earned an associate's degree (cited in Mingle and Chaloux 2005). Another national study found that about 30 percent of GED holders enrolled in a two- or four-year institution at some point (Tyler 2004). As shown by the National Postsecondary Student Aid Study (NPSAS, 2004), some 30 percent of GED awardees who do go on to postsecondary education choose to attend for-profit institutions, while 26 percent elect to go to public two-year or less-than-two-year institutions.

Figure 37. GEDs Awarded per 1,000 U.S. Adults with Less than a High School Diploma or Equivalent by Age Group, 2005



^{*}Population age 16-24 with no high school diploma or equivalent, not enrolled American Council on Education, GED Testing Service; U.S. Census Bureau, 2005 ACS (Public Use Microdata Samples)

Figure 38. GEDs Awarded per 1,000 Adults Aged 25-44 with Less than a High School Diploma, 2005³



American Council on Education, GED Testing Service; U.S. Census Bureau, 2005 ACS (Public Use Microdata Samples)

 $^{^3}$ The 25-44 age cohort was chosen because very few older adults currently pursue GEDs.

Several states also track the subsequent behavior of GED recipients. Because Kentucky emphasizes awarding GEDs as part of its larger strategy of increasing its proportion of young adults with college credentials, it tracks the percentage of GED recipients who go on to college. This has increased from 12 percent in 1998 to 19 percent in 2002. Similarly, Oklahoma reported that 22 percent of those who passed the GED test enrolled in public postsecondary institutions between 2001 and 2003 (Mingle, Birkes, and Chaloux 2005). Finally, a 1998 study in Colorado indicated that 57 percent of GED graduates were working toward an associate's degree (Lance and Bates 1998).

English as a Second Language (ESL)

English as a Second Language (ESL) programs offer instruction intended to build language proficiency in English among native speakers of another language. ESL instruction is provided by many different kinds of institutions, and students can demonstrate their proficiency through a variety of assessments, like the Test of English as a Foreign Language (TOEFL) offered by the Educational Testing Service. In 2006, 113.7 ESL enrollments occurred for every 1,000 adults aged 18 to 64 who speak English poorly or not at all. Again, there are wide variations at the state level, with Minnesota and Maine reaching a significant proportion of individuals in need of English training, while seventeen states are only able to scratch the surface by reaching fewer than 100 individuals out of every thousand needing such services. For some states, the ability to address the need may be directly related to the size of the need in that state. For example, Texas and Arizona are both states which have relatively low adult enrollment in ESL programs, but because of their high proportion of non-native speakers of English, the relative need in those states is very high (Figure 39).

Some of the states in which primary responsibility for ESL is placed in community colleges report outcomes statistics. For example, 31 percent of participants in North Carolina in 2004 advanced at least one level, while 17 percent obtained employment and 20 percent maintained employment (Whitfield 2005). In Colorado, success rates depended upon level: four out of five beginning and pre-beginning students advanced, seven out of ten intermediate students advanced, and just under half of those enrolled in advanced programs moved forward (Lance 2005).

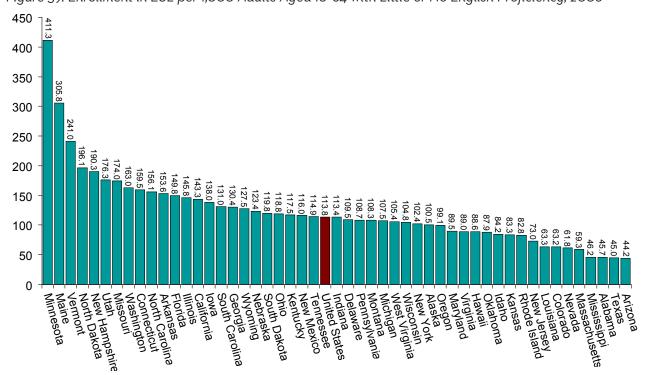


Figure 39. Enrollment in ESL per 1,000 Adults Aged 18-64 with Little or No English Proficiency, 2006

U.S. Department of Education, Office of Vocational and Adult Education (OVAE); U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples)

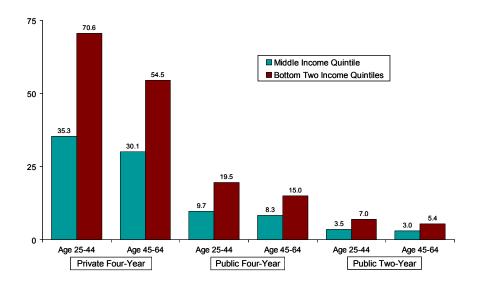
Barriers to Adult Participation and Policies that Address Them

Adults in the re-entry educational pipeline must face and overcome multiple barriers to participation and success in postsecondary education. Among the most important of these are affordability, accessibility, and aspiration.

Affordability

Citizens face challenges in paying for postsecondary study regardless of age. But poorer adults face particular challenges in this respect. One way to look at affordability is to examine the percentage of income required to pay in-state undergraduate tuition and fees at various types of colleges and universities. Average tuition and fees at public four-year colleges constitute 9.7 percent of the median income of the nation's middle income quintile for adults aged 25 to 44 and 8.3 percent for adults aged 45 to 64. These percentages are a good deal higher for the lowest two income quintiles—19.5 percent for those aged 25 to 44 and 15.0 percent for those aged 45 to 64. Community-college attendance is relatively more affordable for the nation's adults, but private-college attendance is almost out of reach for many. Average tuition and fees at a private four-year college constitute 70.6 percent of median income for the poorest 25- to 44- year-olds and 54.5 percent of median income for the poorest 45- to 64-year-olds (Figure 40).

Figure 40. Average Tuition and Fees as Percent of Income, 2006



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Student Financial Aid Survey

Affordability State-by-State: Public Two-Year Colleges

There is a good deal of variation across states on available affordability measures for adult students. Among public two-year colleges, for example, the percentage of annual income required for 25- to 44-year-olds with high school diplomas but no college degree (using median family income, or the middle income quintile) ranges from less than 2 percent in California and Hawaii to more than 7 percent in Vermont and New Hampshire. For the two poorest income quintiles, these respective extreme percentages are less than 4 percent and more than 14 percent. Among college-eligible 45- to 64-year-olds, these extremes are similar. When looking at the percentage of income required, across all age groups and across the lower income groups, the states with the most affordable public two-year colleges are: California, Hawaii, Arizona, Texas, Nevada, New Mexico, and North Carolina (Figures 41-44).

Figure 41. Public 2-Year Undergraduate Tuition and Fees as a Percent of Median Family Income—Adults Aged 25-44, 2005-06

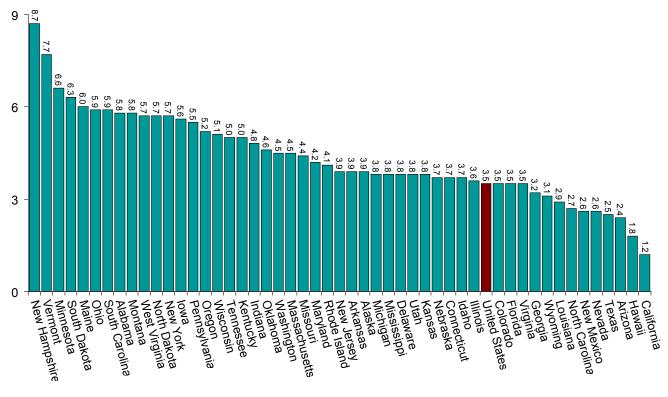
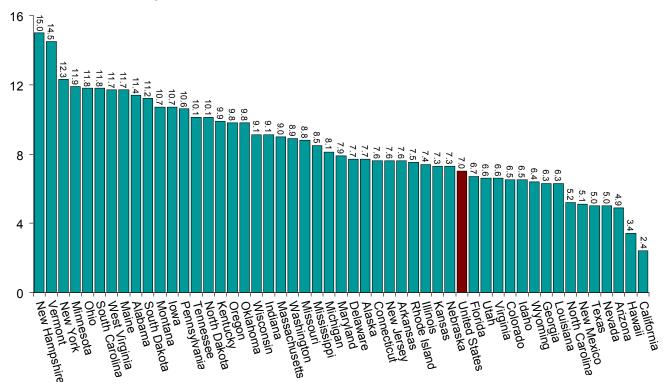


Figure 42. Public 2-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 25–44, 2005–06



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Institutional Characteristics Survey

Figure 43. Public 2-Year Undergraduate Tuition and Fees as a Percent of Median Family Income—Adults Aged 45-64, 2005-06

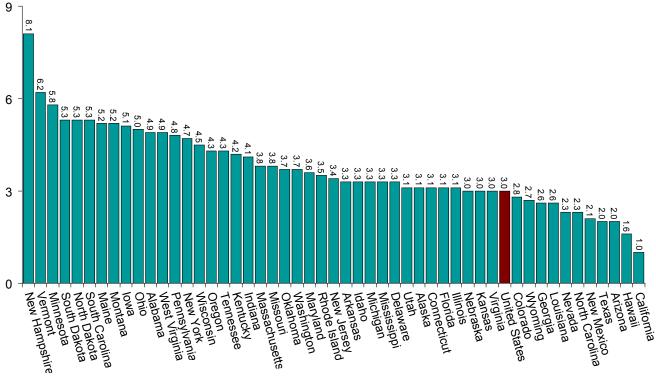
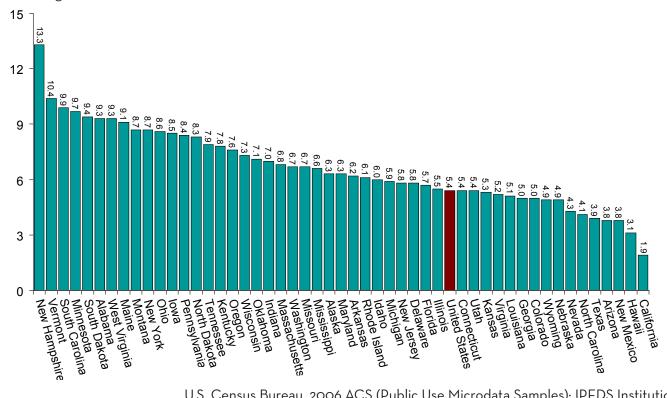
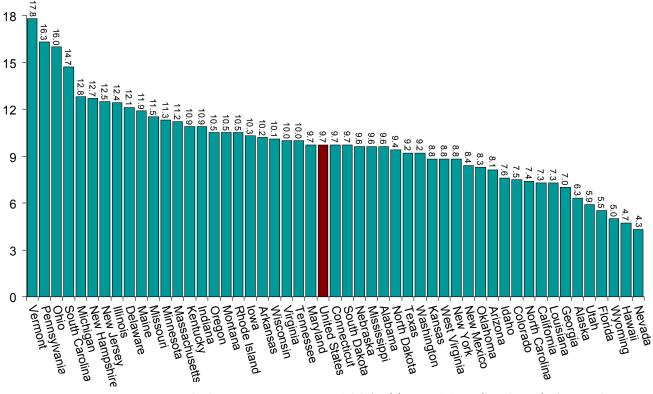


Figure 44. Public 2-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 45-64, 2005-06



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Institutional Characteristics Survey

Figure 45. Public 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income— Adults Aged 25-44, 2005-06



Affordability State-by-State: Public Four-Year Colleges

A good deal of interstate variation is also apparent when this same calculation is applied to public four-year colleges. Here the percentage of annual income required for 25- to 44-year-olds with a high school diploma but no college degree, using the middle income quintile, ranges from less than 5 percent for Nevada and Hawaii to 16 percent or more for Ohio, Pennsylvania, and Vermont. The respective extreme percentages for the two poorest income quintiles are less than 10 percent and more than 30 percent. Among the older college-eligible 45- to 64-year-old population, the percentage required is slightly less, but the relative rank of the states is about the same. When looking at the percentage of income required, across all age groups and across the lower income groups, the states with the most affordable public four-year colleges are: Nevada, Hawaii, Wyoming, Florida, Utah and Alaska (Figures 45-48).

Figure 46. Public 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 25-44, 2005-06

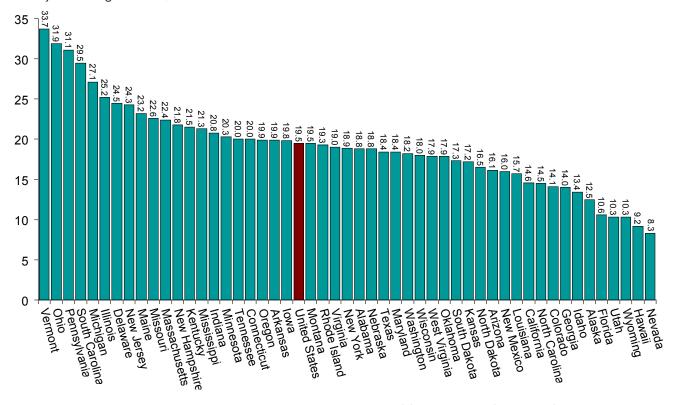
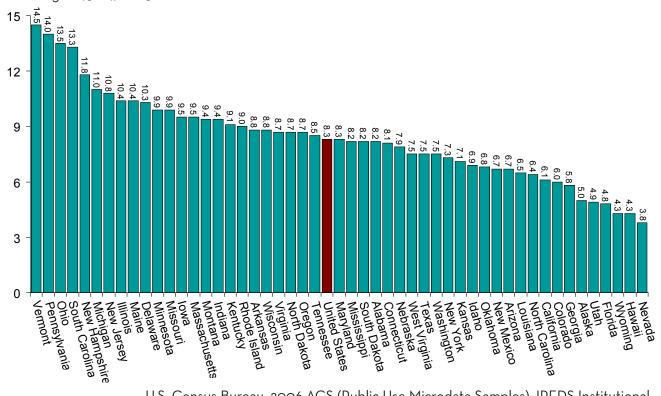
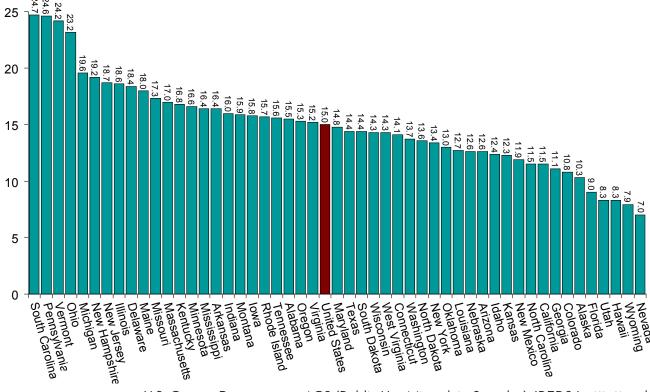


Figure 47. Public 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income— Adults Aged 45-64, 2005-06



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Institutional Characteristics Survey

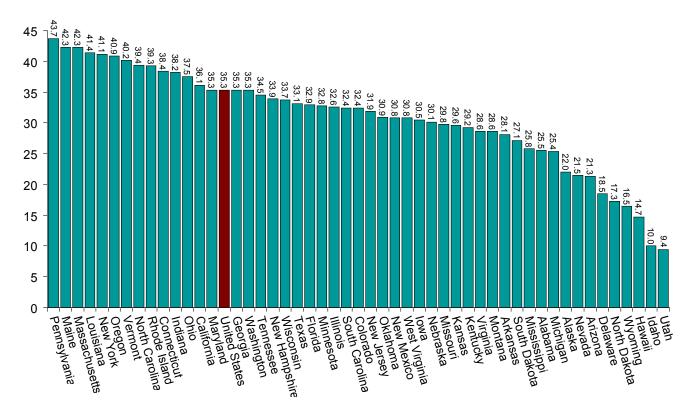
Figure 48. Public 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 45-64, 2005-06



Affordability State-by-State: Private Four-Year Colleges

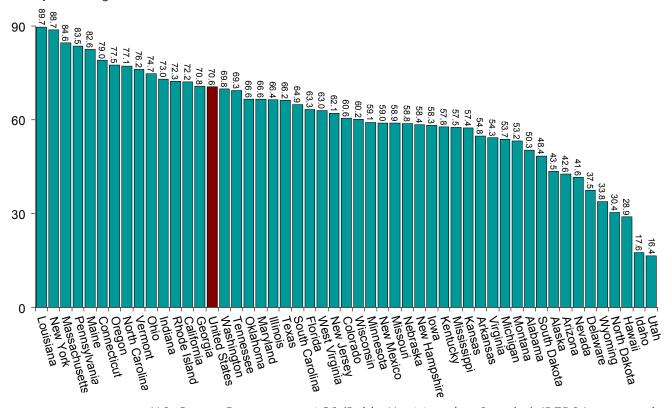
As should be expected, private four-year colleges are far less affordable for adult students based on sticker price. Here the percentage of annual income required for 25- to 44-year-old college-eligible families in the middle income quintile ranges from less than 15 percent in Hawaii, Idaho, and Utah to more than 40 percent in Oregon, New York, Louisiana, Massachusetts, Maine, and Pennsylvania. Respective extremes for the two poorest income quintiles are below 20 percent and more than 80 percent. Among the older college-eligible 45- to 64-year-old population, the percentage required is slightly less but the relative rank of the states is about the same. When looking at the percentage of income required, across all age groups and across the lower income groups, the states with the most affordable private four-year colleges are: Utah, Idaho, Hawaii, Wyoming, and North Dakota (Figures 49-52).

Figure 49. Private 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income— Adults Aged 25-44, 2005-06



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Institutional Characteristics Survey

Figure 50. Private 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 25-44, 2005-06



U.S. Census Bureau, 2006 ACS (Public Use Microdata Samples); IPEDS Institutional Characteristics Survey

Figure 51. Private 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income—Adults Aged 45-64, 2005-06

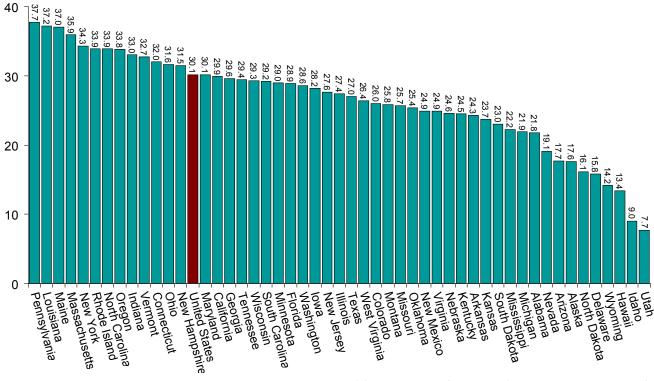
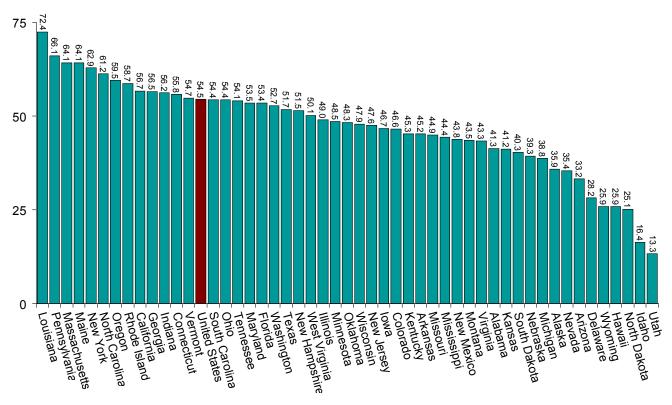
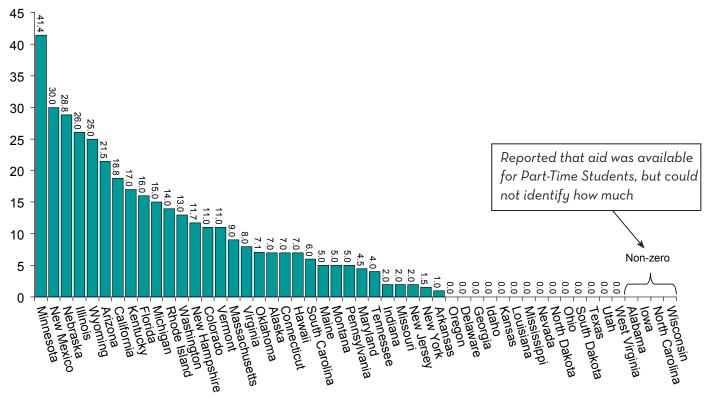


Figure 52. Private 4-Year Undergraduate Tuition and Fees as a Percent of Median Family Income of Poorest 40% of Adults Aged 45-64, 2005-06



Source: U.S. Census Bureau, 2006 ACS; NCES, IPEDS 2005-06 Institutional Characteristics files

Figure 53. Proportion of Need-Based Aid Distributed to Part-Time Students, 2004-05



Source: NCHEMS Student Financial Aid Survey

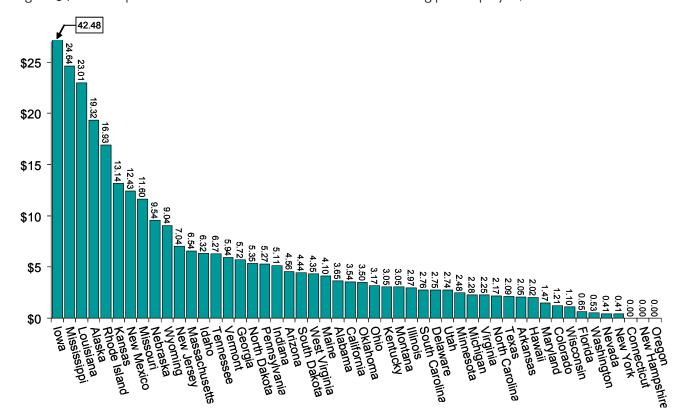


Figure 54. Total Expenditures on State-Financed Customized Training per Employee, 2006

Workforce Alliance, Interactive State Database http://steps.workforcealliance.org

Addressing Affordability

Public Sector Support for Adult Learning

Federal and state financial support for adult learning constitutes one avenue for addressing this challenge.

At the federal level, 37 percent of **Pell grant awards** in 2005-06 went to adults aged 26 and older (College Board 2007). Because many adults attend postsecondary institutions on a less-than-full-time basis, another way of looking at trends in financial aid is to examine the proportion of various sources of aid that support part-time students. Table 3 on page 56 shows how this breaks down nationally.

State financial aid policies can be another major lever for addressing affordability. More particularly, the extent to which state scholarship dollars can be used by students attending institutions on a part-time basis is a significant indicator of state commitment to helping adult learners succeed. Fourteen states do not provide any need-based aid to part-time students, and another seventeen states devote less than 10 percent of need-based aid funds to part-timers (Figure 53). But nine states devote between 10 percent and 20 percent of need-based aid to part-time students and six devote more than 20 percent of need-based aid funds to this purpose (Figure 53). It should be noted that in their 2002 report, Bosworth and Choitz found that half of all part-time undergraduate students in 1999–2000 attended school less than half time (i.e., less than 6 credit hours at a time). At the time of that study, only a fraction of states offered financial assistance to less-than-part-time students.

State-financed customized training is yet another avenue of support for adult learning. This is training assistance that states provide to business and industry, often as part of the state's business attraction and retention strategies.

Table 3. Sources of Financial Aid

	% Part-Time	Average Award
Pell Grants	20.3	\$1,953
Veterans Assistance	41.9	\$2,414
College Work Study	16.0	\$3,019
Loan	17.7	\$4,694
Employer Assistance	84.1	\$1,693
Scholarship or Tuition Reduction	17.4	\$1,765
Other Aid	24.5	\$1,812
All Aid	33.2	\$2,429

Source: U.S. Census Bureau, 2003; Survey of Income Program Participants (SIPP), 2001–2002

Over one million people were trained through these programs in 2006 for a cost of \$571 million (Duscha and Graves 2007). For comparison, the total of all state customized training budgets equaled 19 percent of the federal Workforce Investment Act allocations to states. More than half of all states spend five dollars or less per employee on customized training, while eight states spend ten dollars or more (Figure 54).

Fourteen states do not provide any need-based aid to part-time students, and another seventeen states devote less than 10 percent of need-based aid funds to part-timers

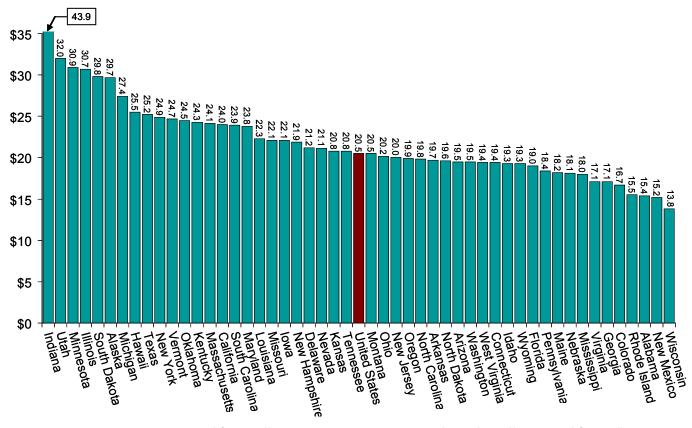
Data about **state support for noncredit activities** is also available for some states. For example, in 2003–04 the California community colleges received approximately \$3.9 billion in general fund apportionment for credit and noncredit programs and courses. Noncredit instruction received about \$1.9 million (5 percent) of general fund apportionments for noncredit adult education and \$3.3 million for apprenticeships (Boatright 2005).

There is some variation among states in their **support for adult education and family literacy** relative to the size of the adult population with less than a high school diploma. The lowest average level of expenditure is Wisconsin at about fourteen dollars per less-than-high-school adult, while the highest spending is over thirty dollars per adult in Illinois, Minnesota, Utah and Indiana (Figure 55). Funding of these programs per participant varies from below \$100 in Utah and Florida to more than \$500 in North Dakota (Figure 56).

Workforce Investment Act (WIA) funding for worker training also supports learning and ranges from below three dollars per working-age adult in lowa to nine dollars or more in Oregon, Wyoming, Alaska, Washington, and Louisiana (Figure 57). Similar variations across states are apparent for WIA dislocated-worker support relative to the working-age population (Figure 58). These variations are to some extent an indication of the type and level of investment each state makes in its disadvantaged and dislocated workers. These funding levels are also, to some extent, determined by the federal WIA allocation to each state, based on a federal funding formula.

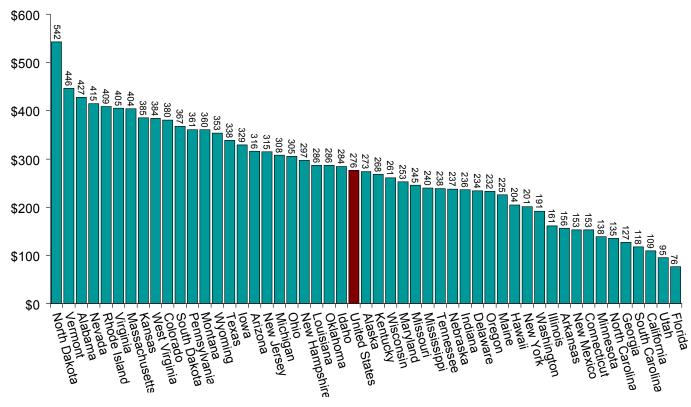
WIA spending per adult participant shows large variations across states, ranging from below \$1,000 in Montana, South Dakota, Maine, Mississippi, and Louisiana, to above \$5,000 in New Jersey, Virginia, Arkansas, and Vermont (Figure 59). Similar variations are apparent in per-participant spending on dislocated workers (Figure 60). Higher per-worker allocations may suggest policies that invest more heavily in longer-term training and skill development, while lower per-worker allocations may suggest policies focused on a quicker return to the workplace.

Figure 55. Adult Education and Family Literacy Funding—Adults Aged 18-64 with No High School Diploma, 2004



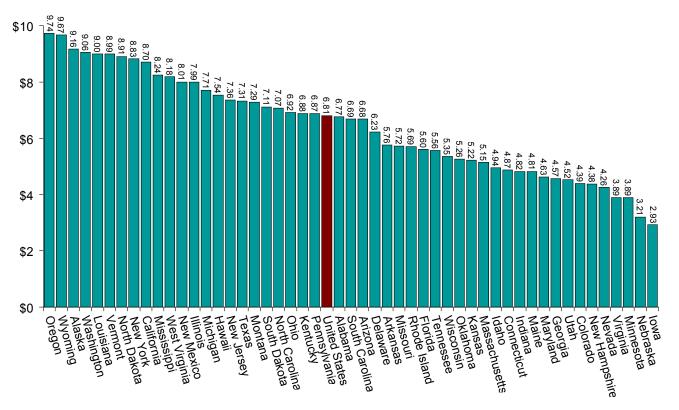
Workforce Alliance, Interactive State Database http://steps.workforcealliance.org

Figure 56. Adult Education and Literacy Funding per Participant, 2004



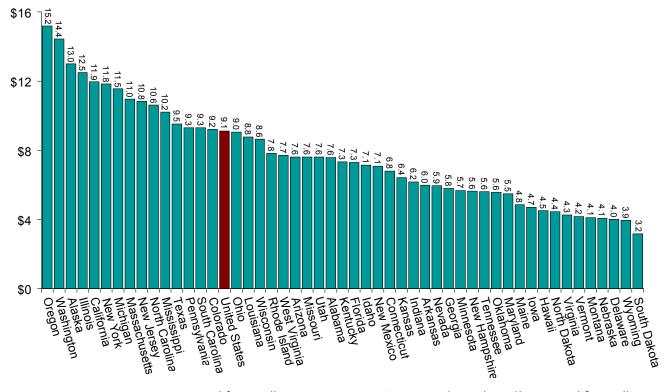
Workforce Alliance, Interactive State Database http://steps.workforcealliance.org

Figure 57. WIA Funding for Adults per Working-Age Adult Aged 18-64 with No College Degree, 2004



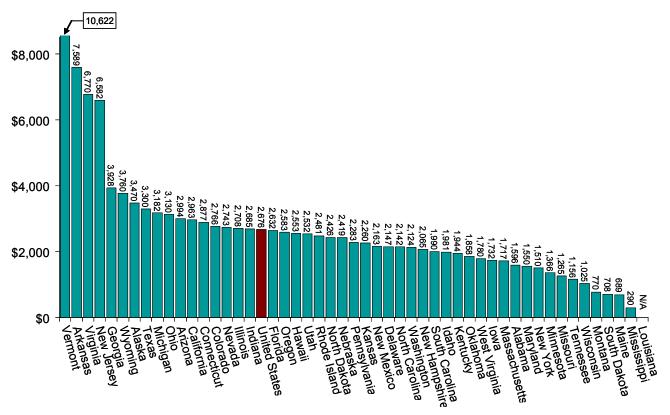
Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

Figure 58. WIA Funding for Dislocated Worker per Working-Age Adult Aged 18-64 with No College Degree, 2004



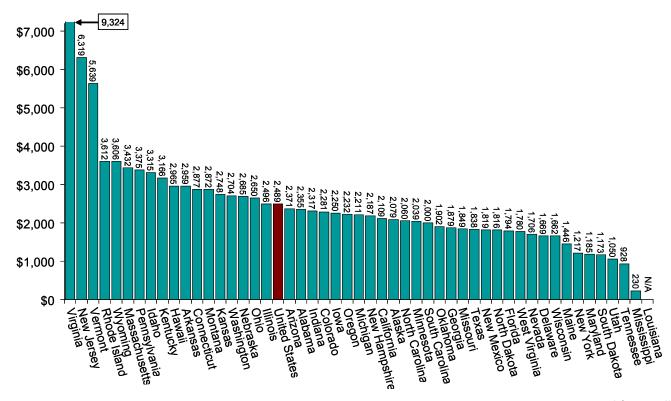
Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

Figure 59. WIA Spending on Adults per Participant, 2004



Workforce Alliance, Interactive State Database http://steps.workforcealliance.org/

Figure 60. WIA Spending on Dislocated Workers per Participant, 2004



Source: Workforce Alliance

Employer Support for Adult Learning

Employer support constitutes another main avenue for addressing affordability. According to the National Household Education Survey for 2005, 45 percent of those attending college or university degree or certificate programs part-time, and 54 percent of those attending vocational/technical diploma programs, had some form of support from their employer. In both cases, financial support tended to be disproportionately provided to workers aged 25 and older (Figures 61 and 62).

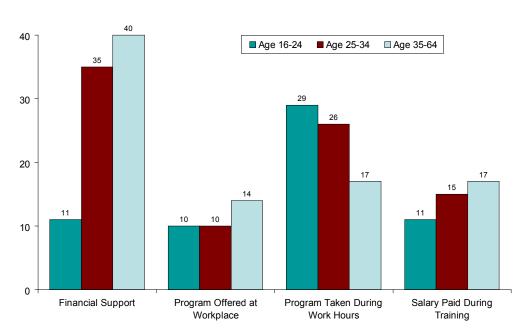


Figure 61. Types of Employer Support—Colleges and Universities (Percent)

Source: Adapted from Paulson and Boeke, 2006, p. 29

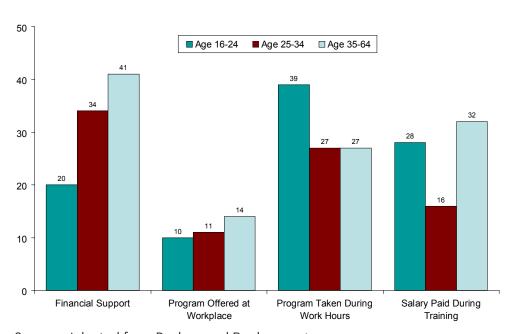


Figure 62. Types of Employer Support-Vocational/Technical Diploma Program (Percent)

Source: Adapted from Paulson and Boeke, 2006, p. 29

This survey also showed stronger support by employers for older workers attending work-related courses and training in the form of financial support, programs taken during work hours, and in salary paid during training (Figure 63).

Levels of employer support for employed workers also vary across types of learning activities and educational providers (NCES 2002). For example, employers support all of the costs of apprenticeship training but only provide partial support for other kinds of training (Figure 64). Similarly, their support for programming provided by business and industry is higher than their support for programming provided by colleges and universities (Figure 65).

Labor Union Support for Adult Learning

Although there are no systematic data at either the national or state level, a final source of financial support for adult learning is from labor unions. Some unions bargain for member benefits in the form of education as part of their contracts with employers. Others provide direct support for education or worker training, in addition to providing education themselves. For example, the 1.9-million-member Service Employees International Union and the AFL-CIO both have prominent scholarship programs, as well as incumbent-worker upgrading and retraining programs.

Other Innovations

Both states and employers can also address affordability through the use of individual learning accounts, such as Individual Training Accounts (ITAs), Career Advancement Accounts (CAAs), or Lifelong Learning Accounts (LiLAs). (See sidebar for more information on these account-based programs.)

Account-Based Models for Financing Adult Learning

Individual Training Accounts (ITAs). Used by the U.S. Department of Labor, ITAs are similar to vouchers. They are provided to individuals who need occupational-skills training to become gainfully employed or reemployed. These individuals have access to services such as assessment and advising, and they may use their ITAs to purchase training slots with eligible programs/providers (U.S. Department of Labor, www.doleta.gov).

Career Advancement Accounts (CAAs). As envisioned by the Bush Administration, CAAs are self-managed accounts of up to \$3,000, renewable for one year, for a total of \$6,000. They are available in demonstration projects to workers entering the workforce or transitioning between jobs, or incumbent workers in need of new skills to remain employed or move up the career ladder. The U.S. Department of Labor is currently piloting CAAs in 8 states (U.S. Department of Labor Press Release, October 26, 2006, http://www.dol.gov/opa/media/press/eta/eta20061877.htm).

Lifelong Learning Accounts (LiLAs). A LiLA is an employer-matched educational savings account used to finance workers' education and training similar to a 401K savings account. LiLAs are designed to be portable and flexible, with contributions from individual workers, employers, and other third-party sources such as states. Since 2001, LiLAs have been launched in several initiatives across the country including Illinois and Maine, as well as the Chicago, San Francisco, and Kansas City metropolitan areas (www.cael.org/lilas.htm).

Figure 63. Types of Employer Support–Work-Related Courses or Training (Percent)

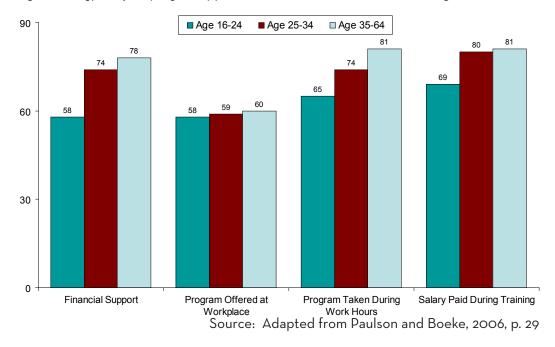
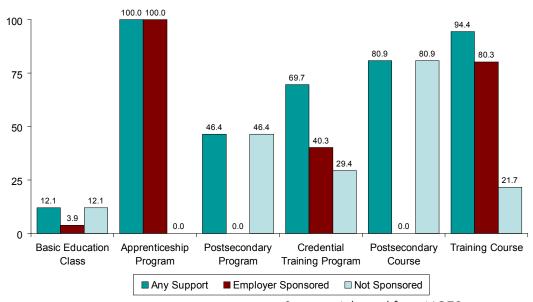


Figure 64. Percentage of Concurrently Employed Work-Related Education Participants Aged 25-64 Who Received Employer Support, 2000-01–By Type of Course

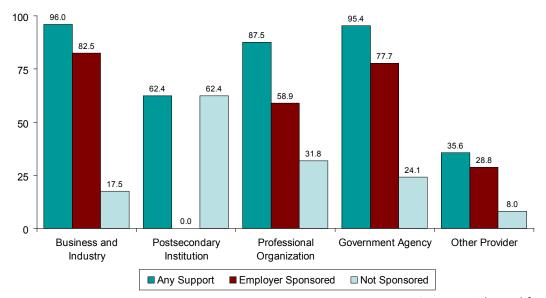


Source: Adapted from NCES 2002, p. 57

Accessibility and Availability

A second major barrier to adult participation is accessibility, and one indicator of this may be the extent to which postsecondary opportunities are delivered at a time and in a manner that allows adults to participate readily, given their many other commitments. One problem here is the competing priorities for limited time typical of adult learners. In a survey of more than 1300 students aged 40 and older at Portland Community College, for example, 90 percent of respondents in credit-bearing courses cited time constraints as the leading obstacle to achieving educational goals (quoted in ACE 2007. 18). Physical location is also a challenge because many adults must access learning opportunities in the communities in which they live and work. Some may be constrained by rural or suburban environments with few postsecondary options or

Figure 65. Percentage of Concurrently Employed Work-Related Education Participants Aged 25–64 Who Received Employer Support, 2000–01–By Provider



Source: Adapted from NCES 2002, p. 59

opportunities. Furthermore, adults may not have access to the transportation needed to attend postsecondary sites. For example, an AARP survey found that 25 percent of African Americans aged 50 or older frequently or occasionally missed opportunities because of lack of transportation (quoted in ACE 2007, 19). Adults are also challenged by family and work responsibilities, frequently needing child care if they are to attend classes.

Participating in distance education may allow older students to overcome some of the barriers they encounter in coordinating their work and school schedules or in obtaining the classes they want. NCES (2002) has reported that moderately or highly nontraditional students are more likely than either traditional or minimally nontraditional students to both participate in distance education and to be in programs available entirely through distance education. A sign of this success might be found in data recently reported by the Sloan Consortium (Sloan-C): In Fall 2006, nearly 20 percent of all U.S. higher education students were taking at least one online course (Allen and Seaman 2007).

Another route toward overcoming accessibility barriers is to provide services to adult learners designed to help them accommodate their education to their work and family responsibilities. For example, 55 percent of public four-year institutions whose enrollments consist mostly of adults reported offering child care (Cook and King 2005, 25). Fifteen percent of private not-for-profit institutions whose students are primarily adults reported offering child care, as did 54 percent of adult-serving public two-year colleges and 9 percent of adult-serving private for profit institutions. Similarly, student services tailored especially for adult students were available at student centers at 52 percent of majority-adult public four-year campuses, 64 percent of majority-adult private four-year campuses, 43 percent of majority-adult public two-year campuses, and 47 percent of majority-adult private for-profit institutions (27). Most adult-serving institutions also reported offering such services as bookstores, academic support, computer labs, counseling, course registration, financial aid, and bursar's services during evening hours or weekends.

Currently, there are no fifty-state indicators of accessibility, but many states have policies designed to address the barrier of access. For example, Kentucky's GoHigher Initiative has set a goal of 40 percent of GED completers transitioning to postsecondary learning, and Connecticut's College Transition Initiative funds partnerships between

adult education and postsecondary institutions to ensure better alignment between noncredit programs and postsecondary education and training (Duke and Ganzglass 2007). California's Extended Opportunity Programs and Services (EOPS) and the Cooperative Agencies Resources for Education (CARE) program provide funding for institutions to assist low-income and educationally disadvantaged students with supportive services (Mazzeo et al. 2006), and Alabama has designed a seamless credit transfer system between two- and four-year institutions through its Articulation and General Studies Program (CAEL and SREB 2007).

Aspiration

Lack of aspiration to seek out postsecondary education is a third barrier for adult students. Many were raised in families with little or no experience of learning beyond high school, so may find it an alien environment and be unaware of the potential benefits of participation. A similar number of people may simply not be aware of what programs exist and how to access them. This set of indicators attempts to assess the extent to which adults who lack postsecondary experience would like to seek such credentials and the specific barriers they see to doing so. A first topic here is the reasons reported by adults for participating in further education. Compared to young adults, those aged 25 to 34 and 35 to 64 who participate in college and university degree programs are less likely to report reasons for participation that are related to changing job or career, and more likely to report that they are doing so to receive a promotion or pay raise. In work-related courses or programs, younger adults are the ones more likely to report they are participating to receive a promotion or pay raise (Figures 66-68).

But adults also perceive significant barriers to participating in an experience that is seen as challenging and alien. According to a 2004 report by the Southern Regional Education Board, adults who performed poorly in high school are often fearful about returning to school to complete high school credentials, see no economic advantage to gaining additional education, believe that the cost of education is out of their reach, or believe that they cannot afford the time away from work or family to pursue their studies (Mingle and Birkes 2004). The report also identified low self-esteem as a major attitudinal barrier to adults returning to education. To help address this challenge, SREB has begun an Adult Learning Campaign among its member states to raise awareness about educational opportunities.

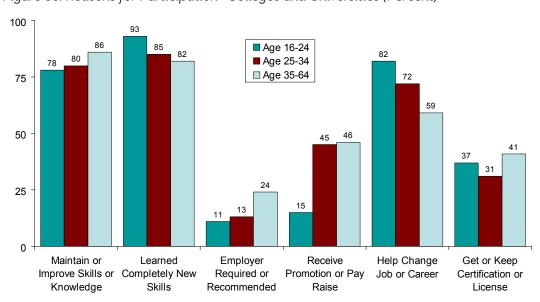
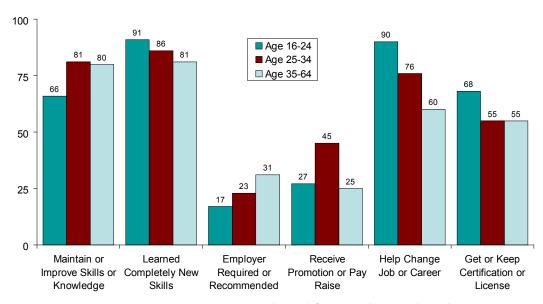


Figure 66. Reasons for Participation—Colleges and Universities (Percent)

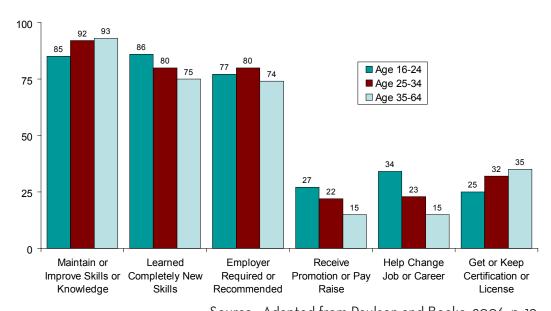
Source: Adapted from Paulson and Boeke, 2006, p. 19

Figure 67. Reasons for Participation—Vocational/Technical Diploma Program (Percent)



Source: Adapted from Paulson and Boeke, 2006, p. 19

Figure 68. Reasons for Participation—Work-Related Courses or Program (Percent)



Source: Adapted from Paulson and Boeke, 2006, p. 19

No fifty-state indicators are as yet available to calculate for aspiration, but many states have established initiatives to overcome such aspirational and attitudinal challenges among adults. For example, Maine offers a college transition program as part of its Compact for Higher Education to increase the college enrollment of adults with a GED or just a high school credential. Ten percent of GED holders are now entering college in Maine, although the proportion of these actually earning credentials is as yet unknown. The Compact is retaining a survey research firm to conduct an annual survey of adult learners in higher education. States like Kentucky and Oklahoma have launched large-scale awareness campaigns to help motivate adults to go back to school. In addition, the Oregon Longitudinal Study of Adult Learning (LSAL) is seeking information about the behavior of adult students in that state in order to identify barriers to attendance among adults and how these might be overcome. Among its findings is that adults who did not continue their education were no more likely than those who did to report negative experiences in high school (Reder and Strawn 2001).

The Data and The Gaps

In this report, we have relied on national and fifty-state data from several important data sets, the most useful of which are from the following data sources:

- U.S. Census Bureau's American Community Survey 2006
- The National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS)
- Other U.S. Department of Education data sets
- GED Testing Service

While the major purpose of this report is to present what is known about adult learning nationally and across the fifty states, a significant secondary purpose is to highlight what is not known. The nation faces significant gaps in available data about adult participation in many areas. Addressing these data gaps should be a priority for state and national policy over the next decade.

Tracking Meaningful Data

A first step in improving the data available is making sure that the data we currently collect are meaningful. For example:

- Are all adults really 25 or older? Using age as the proxy for defining an "adult" or "nontraditional" learner misses a large number of younger people who share many characteristics with adults and therefore have the same barriers (see sidebar on page 20 of this report). We are likely undercounting the number of learners for whom new policies and practices are needed to improve affordability, accessibility and success.
- Are there important sub-categories of "part-time learner"? Currently, the label "part-time learner" applies to anyone who is enrolled less than full time. However, this masks the fact that many part-time learners are taking one course at a time, while others are taking two or three. These are very different categories of enrollment, particularly when you recognize that anyone taking fewer than 6 credit hours does not qualify for most federal financial aid assistance or most state financial support.
- How can we measure the postsecondary success of adult learners? Tracking the enrollment of different groups of adult learners is a formidable challenge, to be sure. However, the situation becomes even more complex when one considers how to measure adult learning success. In postsecondary education, for example, institutions are encouraged to track measures such as "graduation rates" and "time to degree." The current graduation-rate measure focuses only on first-time, full-time students, which would not include the typical adult learner. "Time to degree" may also be a less useful measure for adults, since many come to postsecondary learning with at least one previous postsecondary experience and likely will persist even though they are taking courses in a very part-time pattern. It is important for postsecondary institutions, and the states that support them, to know if adults persist and complete certificate and degree programs at the same rate or different rates than their more traditional-aged students, and what barriers prevent this group from reaching their goals. A better measure of success for these students in reaching their learning goals would likely consider persistence patterns and a measure of how many adults actually reach their goal regardless of the time it takes to get there. "Efficiency" might be better measured by looking at total number of credits taken and other measures being considered for nontraditional students. In any case, agreed measures of success for this population which reflect the reality of their postsecondary experience need to be developed.

Instruction for Degree Credit

All postsecondary institutions that are eligible to participate in federal financial aid programs must report summary statistics to the National Center for Education Statistics (NCES) through IPEDS each fall or annually, depending upon the topic. These statistics primarily address credit-bearing enrollment in higher education—credits that count toward a degree. IPEDS enrollment reports are broken down by age categories, allowing a look at adult participation for both full-time and part-time students. But statistics on actual degrees granted are not broken down by age.

Noncredit Instruction

Responsibility for the delivery of ABE, GED, and ESL instruction is, in most states, spread across multiple agencies. This means, in part, that there is no single source for data about participation and success in these typical adult learning activities. States like Kentucky, Washington, and North Carolina are exceptions. Because most instruction in these programs is provided by public community colleges some consistent statistics are available. States could benefit from similarly centralizing responsibility for such programming under a single agency, or from constructing an alternate way to collect data on noncredit programs more consistently. Compounding the challenge created by dispersed responsibility is the fact that most postsecondary institutions do not do a good job of keeping records on noncredit activity (Van Noy et al. 2008). If they are collected at all, noncredit records are frequently held in a different database from their credit-bearing counterparts and there are few established data conventions or definitions governing noncredit activity to enforce consistency. A national effort to develop a consistent data structure for noncredit postsecondary educational activities, with age data, would go a long way toward documenting adult participation and success.

Employer Activity

A sizeable proportion of adult learning is connected directly with employment. One component is employer-provided training occurring both within and beyond the workplace. Such training comes in many forms and there is no standard way of documenting it. Nor is there a centralized database in which such activity is recorded. National sample surveys such as the National Household Education Survey (NHES) are the only window into participation in such activities. Employers also provide support for employees to participate in training and educational activities on their own, but there is a similar lack of documentation of employer support.

Third-Party Support

Other entities, including labor unions and community-based organizations, also support the costs associated with adult workers participating in postsecondary study. These are similarly undocumented, except through such sources as NHES.

Reporting on Publicly Funded Education and Training

This report has provided some state-level data on programs funded by the Workforce Investment Act but does not recommend drawing conclusions about state performance from these data. According to The Workforce Alliance, the data that are provided to the public are not collected in a consistent way across all states. States have different definitions of a "program participant," with some states counting anyone using any level of services, while other states count only those who use training services. Similarly, "program exit" means different things to different states. Ensuring consistency in data collection would help to make state-by-state comparisons on all WIA indicators more meaningful.

State Policies Affecting Adult Learners

Many state policies influence adult educational participation and success, ranging from financial aid policies to the organization and delivery of noncredit instruction in adult basic education, GED, or ESL. Statewide assessments of the impact of policies and procedures on adult learning would likely lead to enhanced data and documentation. Use of tools like the 2007 CAEL/SREB Adult Learning Policy Review Framework could help address this important gap in documentation (the framework is included in the companion policy guide to this report, downloadable at www.cael.org/adultlearninginfocus.htm). The process outlined in the framework will help states begin to develop inventories of state adult-learner policies that can then be compared with state adult-learning indicators.

State-Level Data Gaps

Greater federal, state, and organizational attention to filling gaps in the data will enhance further national understanding of adult learning and how it might be improved. More particularly, the following fifty-state indicators that cannot now be constructed would be of considerable benefit to state policymakers:

- o Degrees and certificates granted to adults
- Enrollments by adults in noncredit programs as a proportion of all adults in the population
- College-going rates of GED recipients
- Completions as a proportion of numbers enrolled in adult noncredit literacy programs
- ° Cost of attendance for students for ABE, ESL and other literacy programs as a proportion of income
- ° State support for noncredit programs related to vocational training and the proportion of vocational programming covered by state funding formulas
- Progression by level in basic literacy training (available in some states now)
- ° Participation of employed adults in work-related training by selected forms of employer support
- Percentage of employees participating in any form of postsecondary training receiving partial or full support from employers
- Expenditures by employers per employee on training
- Percentage of adults participating in distance education by type of program
- Union contributions to employee training as a percentage of the total cost of attendance
- Proportion of noncredit enrollees who subsequently enroll for credit in a postsecondary program
- Number and percentage of associate's and bachelor's programs at public colleges and universities offered in an evening, weekend, or accelerated format
- Number and percentage of associate's and bachelor's programs at public colleges and universities offered online
- Number and percentage of associate's and bachelor's programs at public universities offered in a hybrid (on-site and online) format

- ° Number and percentage of workplaces offering literacy, basic skills, or occupational training
- Percentage of population aged 25-44 without a postsecondary credential living more than 30 miles from an accredited postsecondary provider
- ° Proportion of federal and state aid directed at adults 25 years old and older

Some states can report these missing indicators now, and other states would be able to calculate these indicators using available data. Those states that can calculate such statistics using available data should begin doing so, and the remaining states should investigate what it would take to begin collecting the required data.

Adult Learning and Race/Ethnicity

For many of the above data needs, a breakdown of the data by race/ethnicity would also be useful for understanding specific needs and challenges. Current data on educational achievement of the general population point to large disparities among the different racial and ethnic groups. In particular, the achievement gaps between Whites and disadvantaged minorities (Hispanics, Blacks, and Native Americans) are significant. States need to develop strategies that will address and minimize these gaps.

Turning Data into State Policy Action

The data already available can be instrumental in focusing a state's attention on adult learning and workforce development. An important first step is to investigate the factors in your state that influence enrollment figures and educational attainment outcomes, such as the state's workforce demographics, local and state economies, state policies, and funding. Understanding what underlies the data can help state policymakers identify priorities for state action.

Table 4. State Policies on Noncredit Workforce Education

	State General Funds	Community College Role in Workforce Training Funds	Reporting Requirement	Data System	Definition of Non-credit Workforce	Transcripts
Alabama		Х	Х			
Alaska	X	Х	Х			Χ
Arizona	X				Х	
Arkansas		Х	Х		Х	
California	Х	Х	Х	Х	Х	
Colorado		Х	Х		Х	
Connecticut			Х		Х	Х
Delaware						
Florida	Х	Х	Х	Х	Х	
Georgia		Х	Х	Х		Х
Hawaii		Х	Х			
Idaho	Х	Х	Х		Х	
Illinois	Х	Х	Х	Х	Х	
Indiana		Х				
lowa	Х	Х	Х	Х	Х	
Kansas						
Kentucky	Х	Х	Х			
Louisiana						
Maine		Х			Х	
Maryland	Х	Х	Х		Х	
Massachusetts		Х	Х			
Michigan	Х	Х	Х	Х		
Minnesota	Х	Х	Х		Х	
Mississippi	Х	Х	Х			
Missouri		Х			Х	
Montana	Х		Х	Х		Х
Nebraska	Х	Х	Х		Х	

	State General Funds	Community College Role in Workforce Training Funds	Reporting Requirement	Data System	Definition of Non-credit Workforce	Transcripts
Nevada						
New Hampshire			Х	Х		
New Jersey	Х	Х	Х	Х	Х	
New Mexico	Х	Х	Х		Х	
New York		Х				
North Carolina	Х	X	X	Χ	Х	Χ
North Dakota	Х	Х	Х		Х	
Ohio		X	X	Χ	Х	
Oklahoma	Х	X	X			
Oregon	Х	X	X	Χ	Х	
Pennsylvania	Х		X		Х	Χ
Rhode Island						
South Carolina	Х	X	X		Х	
South Dakota	X	X	Х			
Tennessee		X			X	
Texas	Х		Χ		X	Χ
Utah	X		Χ	Χ	X	
Vermont						
Virginia	X		Χ		X	Χ
Washington		Х	Х	Χ		
West Virginia	Х	X	Х		Х	
Wisconsin	Х	X	Х		Х	Χ
Wyoming			Х			
TOTAL	28	35	38	14	27	9
Source: Adapte	d from Van Noy, J	acobs, Korey, Bai	ley & Hughes 200	08, Appendix B		

For example, states differ in the way they organize educational provision to adult students, in the data they collect about adult participation and success, and in the policies they establish to govern or promote adult learning. Very few states have a single agency responsible for basic-skills and literacy training operating through the state's community college system. Twenty-eight states support adult education (credit or noncredit) through state general-fund appropriations (Van Noy et al. 2008). Thirty-eight states have reporting requirements in place related to adult or noncredit educational provision, but only fourteen have state data systems in place that contain unit records on noncredit or literacy training, nine of which can produce transcripts. Twenty-seven states have established explicit definitions of what counts as "workforce education" in order to establish statewide goals for workforce training (Table 4).

To help states understand their own adult learning policy environment, CAEL and SREB have developed an Adult Learning Policy Review Framework (the framework is included in the companion policy guide to this report, downloadable at www.cael.org/adultlearninginfocus.htm). This framework consists of a comprehensive set of activities to learn more about the current policies in the state and whether those policies support or discourage the state's current and potential adult learners from attending college. Specific activities and needed information for developing state action plans include:

- ° A systematic inventory of education and workforce training programs aimed at adults
- Documented examples of "best practice" in serving adults
- ° Regular evaluations or reviews of the effectiveness of adult-focused programs
- Regular needs assessments for adult postsecondary learning
- Additional funding or finance mechanisms directed especially toward adult learners (e.g. state scholarships for part-time study, state support for workforce training programs, etc.)
- Marketing and consumer information initiatives intended to increase adult awareness about and participation in postsecondary learning
- Advisory or policymaking groups that represent stakeholder views for each organization or agency providing postsecondary learning opportunities for adults

Undertaking a systematic policy audit of these and related topics that affect adult learning will help policymakers in their efforts to change policies in order to encourage adult learners to enroll in and complete education programs.

Recommendations for State Policy on Adult Learning

The specific policy solutions states will want to consider touch the central issues around adult learning: affordability, accessibility, aspiration, and career and educational pathways. More details about these policy solutions are provided in the companion policy guide, State Policies to Bring Adult Learning into Focus.

A brief overview:

Affordability Solutions—The affordability issue is one that is often addressed by researchers and those making recommendations for improving access to higher education. Some recommendations include ensuring sufficient resources for part-time study, promoting and supporting new financing strategies such as Lifelong Learning Accounts (see www.cael.org/lilas.htm), and encouraging higher education institutions to offer flexible payment plans and other financial help to adult learners.

Accessibility Solutions—There are several ways to expand access to learning opportunities for adults and address specific barriers. Among other strategies, states can provide incentive funding to encourage institutions to improve their services and programs for adult learners; change reimbursement formulas for public institutions so that there are no disincentives to serving adult and other nontraditional learners; encourage better transfer processes between noncredit and for-credit learning; and create better pathways between two- and four-year institutions.

Aspiration Solutions—In the last three to five years, there have been a number of books and reports that have emphasized the importance of an educated workforce. However, this message has not fully reached every policymaker or the broader population. Those who speak about the educational system and the need for skilled workers are often still focused on traditional-aged students and the reform of the K-12 system, but pay little attention to the entire lifelong-learning continuum. States can potentially improve college-going rates of adults by raising awareness of the importance of a skilled workforce and the benefits of education for individuals' long-term employability and earnings.

Solutions Involving Career and Educational Pathways, Articulation and Credentialing—The connections between learning and work/careers are important, but the pathways that lead to new learning and work opportunities are often either difficult to uncover or simply do not exist. Given that institutionally provided degrees and credentials are currently the predominant way that education is measured and rewarded, states need to establish policies for how education providers outside traditional education pathways/programs can be articulated into existing degrees and credential programs. States need good inventories of existing providers and programs, as well as strategies to document and credential learning and learning equivalencies. In addition, career pathways, and their connections to learning pathways, also need to be identified, strengthened and sometimes even constructed. The more states can support the partnerships that help these pathways emerge, the stronger the connections between education and the workplace will grow. Finally, linked closely to both career and educational pathways are credentialing efforts that are focused on validating skills of workers in new ways. Some of these efforts involve establishing new credentials that validate basic skills needed for entry-level work, while others involve finding ways to evaluate and give college credit for college-level learning that takes place outside of a formal classroom environment. State policies that support these efforts are important for taking them to scale.

Conclusion

Postsecondary education is an important asset for individuals, for employers, for our state economies, and for our nation's future. However, the dominant metaphor of the traditional education pipeline largely ignores a major segment of the learners in our postsecondary education system today and provides little guidance for those outside the pipeline who may wish to enter. If we are to make real changes in our policies and our systems in order to reach the levels of educational attainment necessary for our future, we must expand the metaphor, and the data and relevant information, to include all of our learners. Young and older, traditional or nontraditional—all learners should count.

We must focus on what we know about adult and life-long learning in this country, and find ways to define and collect that which we don't know but which we suspect could help us reach our goals as states and as a nation. A key is to focus on addressing barriers to adult learning in this country, particularly the affordability of postsecondary learning and the accessibility of education for the "nontraditional" learner. The federal government has an important role to play, for example, in restructuring financial aid for adults and offering more assistance to the three-credit learner. Significant change, however, can best be driven by the states, who have much to gain from an educated citizenry. The more that state policymakers are aware of the need for a focus on adult learning, and how their state performs compared with other states and the best educated countries in the world, the greater the will to act.

Knowing where we are raises awareness. Knowing where we want to go provides motivation. Real change will come from state leaders who understand the need, see adult learning as an essential aspect of addressing the need, and act accordingly.

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