

THE SCOPE AND BENEFITS OF LIFE-LONG LEARNING



POLICY BACKGROUNDER

November 2012

MacArthur
Foundation

The MacArthur Foundation Network on an Aging Society brings together scholars who are conducting a broad-based analysis of how to help the nation prepare for the challenges and opportunities posed by an aging society. Research focuses on how major societal institutions, including retirement, housing and labor markets, government and families, will have to change to support the emergence of a productive, equitable aging society. www.agingsocietynetwork.org

Network members

Director: John Rowe

Columbia University

Mailman School of Public Health

Toni Antonucci

Institute for Social Research

University of Michigan

Lisa Berkman

Harvard University

School of Public Health

Axel Boersch-Supan

Director, Munich Center for the

Economics of Aging

Max-Planck-Institute for Social Law
and Social Policy

Laura Carstensen

Stanford University, Center on

Longevity

Linda Fried

Dean, Mailman School of Public

Health, Columbia University

Frank Furstenberg

University of Pennsylvania,

Department of Sociology & Population
Studies Center

Dana P. Goldman

Director, Leonard D. Schaeffer Center

for Health Policy and Economics

University of Southern California

James Jackson

University of Michigan

Institute for Social Research

Martin Kohli

Visiting Scholar, Dept. of Demography

University of California, Berkeley

S. Jay Olshansky

University of Illinois at Chicago

School of Public Health

John Rother

President and CEO

National Coalition on Health Care

For supporting evidence and deeper background on the issues raised in this brief, see the accompanying Network on Aging in Society backgrounder, “The Scope and Benefits of Life-Long Learning.”

Policy briefs in this series include:

Supporting Informal Caregiving in an Aging Society

Ensuring Generational Cohesion in an Aging Society

Improving Health Care and Support for Older Americans

Promoting Productivity in an Aging Society

Promoting Lifelong Learning in an Aging Society

Issue backgrounders in this series include:

The Scope and Effects of Informal Caregiving

Intergenerational Cohesion and the Social Compact

Improving Health Care and Support for Older Americans

Productivity in an Aging Society

The Scope and Benefits of Life-Long Learning

The futurist Alice Toffler once said, “in the future, illiteracy will not be defined by those who cannot read and write, but by those who cannot learn and relearn.” That future is now. The rapidly changing world today today demands that individuals continually renew and update their knowledge and understanding.

Education is valuable: it not only enhances life chances and opens worlds, but it is tied with better health, longer life, and a more secure life. Much policy focuses, rightly, on ensuring that children are given the equal opportunities to succeed in school. The focus of programs such as Head Start and high-quality preschool are built on the clear evidence that the early years of a child’s life, from birth to age 8, are critical to later success in school.¹ Success in school, in turn, is associated with less risk for poverty, more stable employment, and higher incomes.² It is also associated with greater civic participation—especially voting—and a more engaged citizenry.³

Education is also associated with better health and longevity. Since 2000, the gulf in longevity has widened between those with the least and most education in America. In other words, despite our advances in health care and life expectancy, not all longevity boats have risen equally, and some are actually sinking. As a result, relative to the average American, those with the least education are still living in a longevity time warp: 1972 for white men; 1964 for white women; 1962 for black women; and 1954 for black men.⁴

Despite its importance, education is fleeting for far too many and is stacked largely at the beginning of life.

As the world becomes an increasingly global market, the importance of education is only heightened. Wages have been declining for those with only a high school degree since the 1970s, causing a growing gap in earnings between those with a high school degree and those with a four-year college degree. As Steven Greenhouse reports in *The Big Squeeze*, one economist found that for men with just a high school degree, nearly 90 percent of new jobs paid less than \$25,000 a year. The earnings gap has climbed to 74 percent from 40 percent in 1979.⁵ A lack of education also raises the odds that a worker will experience greater and more destabilizing job swings.⁶ Increasingly, employees understand that they have their jobs for only as long as they have the right skills for them.⁷

Yet despite its importance, education is fleeting for far too many and is stacked largely at the beginning of life. On average, 25 percent of teens drop out of high school, and in some inner-city schools, the dropout rate tips toward 40 percent. Likewise, only about 56 percent of those who start in a four-year college have graduated six years later. Community colleges have even higher dropout rates.⁸

Given these changing circumstances and demands, we need avenues to connect and reconnect with learning opportunities throughout life and create solid paths for life-long learning. On the front end of our education careers, it is imperative we do a better job of keeping children and young people in school and engaged in learning. In the middle years, it is imperative we create more opportunities for workers to retrain, and at the back end of our careers and lives, it is equally imperative to make space for education and continued engagement.

This Backgrounder provides the evidence for the proposals we make in the accompanying policy brief, “Policies to Promote Lifelong Education.” We focus here on mid-life and later learning. We begin with a brief look at why we stack all of our education in the early years and largely abandon the support of continued learning after age 25. We then examine the supply and demand sides of lifelong learning, detailing the reasons for the growing demand for continued education, including globalization, a changing workforce, rapid technological advances, and the continued healthy aging of society, as well as the incentives or lack of them for older Americans to continue their educations, both formally and informally. We conclude with a review of the potential for tapping into existing resources to expand opportunities for lifelong learning, including community-based sites such as libraries and YMCA, and other options.

We need avenues to connect and reconnect with learning opportunities throughout life.

Why We Front-Load Education: A Brief History of U.S. Education

Currently, the majority of our formal education is completed by age 25. One reason for this abbreviated span—despite the flux of modern jobs and the lengthening of our lives—is found in the original purpose of education. Most education historians will agree that in addition to instilling the proverbial “Three Rs” of reading, writing, and arithmetic, education in modern society is a form of social inculcation; it infuses in children a society’s key philosophies, prepares them for the structure of a later work life, and “socializes” them to the expectations of the society in which they live. It is the foundation for a good citizen, a good worker, or a good human being, and creating a strong foundation must begin early, when children are “formative.”⁹

When compulsory education was coming into view, our lives were quite short, another reason for compressing education in the early years of life. The average life expectancy in 1900 was 46 for men and 40 for women. Completing a high school degree by age 16, or later 18, was sensible in that one’s work life often ended in one’s 40 or 50s due to death or disability. Yet today, our lives are both longer and more complicated. We have more job instability and mobility, and technology continues to advance rapidly, reshaping the landscape for health care, information technology, and more. But we still front-load education at the beginning of the life course. It is time to rethink this process and more fully embrace lifelong learning.

An Abbreviated History of the “Life-Long Learning Movement”

“Life-long learning” is not a new idea. Basil Yeaxlee, who worked at the Young Men’s Christian Association (YMCA) in England, spoke of the need for lifelong learning as early as the 1920s. The idea that learning should be life-long is in many ways a natural extension of both longer life and expanding opportunities. The age at which education ends has gradually increased from primary school to high school, and more recently post-secondary education. But until recently, rarely did a call for education or learning extend beyond one’s 20s. However, beginning in the 1970s, the call for lifelong learning began to make its way forward in the policy arena in Europe.¹⁰

One of the more influential proponents of lifelong learning, Edgar Faure, considered lifelong learning critical to the “fulfillment of man.” He envisioned learning across the ages, both formal and informal opportunities and through such concerns as environmental education, health education, and cultural education.¹¹ As the years passed, lifelong education would increasingly be valued in the race to stay competitive in a global economy.

Jacque Delors in Great Britain wrote a heralded white paper on the connection between lifelong learning and economic competitiveness.¹² Indeed, an entire year—1996—was devoted to “the European Year of Lifelong Learning.” Other countries were jumping on board as well, driven largely by three forces: globalization, rapid pace of technological change, and an aging workforce.

Lifelong learning in the United States would also first emerge in the 1970s. The Mondale Lifelong Learning Act of 1975 sought to amend the Higher Education Act of 1965 to include lifelong learning. However, it did not pass. Although interest in lifelong learning waned in the 1980s, it revived in the early 1990s, both in Europe and the United States, bolstered by the rapid shift toward a “knowledge” economy, and the tight employment situation. The 1990s were a time of rapid growth and nearly full employment, and corporations fought to attract the best talent. Offering opportunities for continued learning and skill development was one incentive. This focus also ushered in a shift in framing lifelong learning as an opportunity for personal edification to the development of “human capital” in the form of skills and education.

The idea that learning should be life-long is in many ways a natural extension of both longer life and expanding opportunities.

Growing Demand for Lifelong Learning

There are several reasons to call for greater avenues for lifelong learning, including an aging population, globalization, and rapid technological change. A key reason for a call for lifelong learning is the changed and changing workforce. Globalization demands continual retraining and retooling. As global competition shifts and sorts the job market, many of the jobs that require little education but still pay relatively well, such as manufacturing—so-called “middle tier” jobs—have moved overseas. This hollowing out of the middle has left, as some argue, a barbell economy with high-

paying jobs and low-paying jobs, but fewer middle-tier jobs.¹³ Those with the least education are relegated to the low-paying jobs while those with greater education—and particularly advanced degrees—are reaping the benefits of the higher-paying work.¹⁴ In a Catch-22, there is also evidence that in the current economy, workers with high skills are increasingly matched to high-skilled, well-paid jobs and those with least skills and education are matched to low-skilled, low paying jobs.¹⁵

The types of jobs –and the skills required-- are changing rapidly as well, requiring more and continual updating of skills. Robotics, for example, are increasingly replacing workers on the factory floor, doing the repetitive and sometimes intricate tasks at a much faster pace and more accurately. A worker in manufacturing today now is more likely to spend the morning programming a computer to cut a die-cast in the afternoon than repetitively bolting a car door to a frame. As a result, the worker must use more math and more computer skills than imagined even ten years ago on machines that were not even imagined.

The types of jobs –and the skills required--are changing rapidly as well, requiring more and continual updating of skills.

The pace of change and heightened competition demand constant adaptation. Jobs for everyone, not just those with the least education, are increasingly less secure. Job tenure has declined significantly since 1970. In 2006, fewer than 40 percent of American males between ages 35 and 64 had been with their current employer for at least ten years. In 1973, about one-half had that long of a tenure.¹⁶ Here again, those with the least education are at higher risk of job loss or change.

In addition, the rapid speed of our technological advancements and the sheer amount of information we have at our fingertips thanks to the Internet and digital media mean that individuals must filter, manage, and manipulate information at record rates and in new ways. And the speed and need to stay abreast of change rarely pauses. New forms of literacy are emerging as digital media shifts the landscape of how we consume information. Learning to identify valid information online and to effectively and safely participate in social media are but two of the new “digital literacies” that have emerged. More will surely follow. Online worlds are not the only rapidly changing forms of information. Health care and consumer education are also rapidly changing. Remaining informed of health and health care decisions will become increasingly important as society ages. Ongoing opportunities to stay abreast of changes and advances will be integral.

All this will require changes in curricula, theories of education and learning, and adaptation to different students.

Finally, as individuals live longer and as retirement savings are increasingly inadequate, older Americans will likely continue to work longer, perhaps in different jobs or different fields entirely. When the mean retirement age was set at 65 in 1935, with the implementation of Social Security, the average life expectancy was 61 years. Today it is over 80 years for those with a college degree. Retraining, learning new skills, learning to work in new ways and with all ages will necessarily become a lifelong pursuit.

As the Network has described in other briefs and backgrounders in this series, many older workers prefer to or must stay in the workforce (see, e.g., the brief, “Productivity in an Aging Society”). However, they often prefer a less stressful, or different job than the ones they had been doing. According to a June 2008 “Encore Career Survey” by Civic Ventures, between 6 and 9 percent (or 5.3 to 8.4 million) of adults aged 44 to 70 are working in an encore career. The most common careers are in education (30 percent), health care (23 percent), government (16 percent), other nonprofit organizations (13 percent), and for-profit businesses that serve a public good (9 percent).¹⁷

Likewise, evidence from the Health and Retirement Study, a representative biannual survey of those over age 50, suggests that gradual retirement may now be the norm in the United States. According to that study, 60 percent of both men and women who had left full-time employment after age 50 by

Gradual retirement will now be the norm in the United States.

2008 had moved to a “bridge” job, more than half of which were part-time.¹⁸ Many of these jobs are new or the skill set is different, which will require continued retraining and learning. More supports in community colleges, for example, for older workers may be needed or more on-the-job training opportunities might be warranted.

CVS Pharmacy offers a model for this kind of program. CVS partners with local agencies to find candidates aged 55-95 (they employ four 93-year-olds currently). Once selected, participants go through the CVS “SucceSS Development” program, a four to six-week training program during which they are paired with a mentor. The training process is customized to the individual to ensure he or she finds a meaningful job with a career path. Many mature workers interested in working for CVS have a medical background, and the program has been able to transition them into pharmacy technicians, for example.

As more older Americans continue to work, the workforce will be increasingly intergenerational. Working in teams across generations will require new skills and new educational approaches—again prompting the need for lifelong learning.

Finally, our life expectancy has expanded dramatically. The last century has seen nothing less than a longevity revolution. Medical advances on the front and back ends of life have doubled the average lifespan during the twentieth century-century, with a tenfold increase in the number of Americans over age 65. Couple these advances with a demographic bulge that began with the post-war baby boom and continues with the Millennial generation, and the result is an aging population.

All of these trends mean that education should not be a one-time shot obtained in our early years and forgotten. Specifically noting the inadequacy of front-loading education, a European study in 1994 held that: “Preparation for life in tomorrow’s world cannot be satisfied by a once-and-for-all acquisition of knowledge and know-how...All measures must therefore necessarily be based on the concept of developing, generalizing, and systemizing lifelong learning and continuing training.”¹⁹

What Do Older Americans Think of Lifelong Learning Opportunities?

Although the need for lifelong learning is clear, today only about 4 percent of those over age 50 continue their formal education in some form. Many more are pursuing learning in noncredit courses or informal learning, of course. Of the 17 million students served by credit-dispensing higher education, only 3.8 percent were 50 years or older in 2005, while 61 percent were under the age of 25.²⁰ Half of college-going adults who are 50 or older are enrolled in community colleges.²¹

A study in Britain found that continued education was on the decline in the early 1990s among older Britons. A survey found that the reasons for this decline were varied, but included the older individuals not viewing education as relevant to their lives, feeling that they were too old to learn, and the lack of realization of what “learning” included--they were learning from life around them but were not considering that “learning.”

Among those older adults who do pursue continued formal learning, focus groups uncovered three primary motivators: a desire to learn, to connect, and to work.²² Many, the study finds, are seeking education opportunities for the stimulation and to expand their interests. Others are seeking opportunities to connect with others and avoid social isolation. Increasingly, older Americans are tuning up their skills or learning new skills for a future job change. The comments also revealed that the drive to learn for older adults is not a one-shot desire, nor do they particularly want to pursue a linear route through the education system. They are less interested, for example, in accumulating credits and climbing an educational ladder than pursuing interests.

Their wide-ranging interests are revealed in a national survey of higher education institutions across various sectors. The top five programs enrolling older adult students were fine arts/humanities (58 percent of institutions identified this as most popular). Humanities are likely enhancing that “fulfillment of man” aspiration that Faure noted back in the 1970s. Next most popular, and perhaps the changing job market and second careers after retirement, were business management and entrepreneurship (49 percent of institutions said these were most popular among older students). Human services and counseling (29 percent), teacher education (26 percent), and health services (21 percent) followed.²³

Yet perhaps reflecting the mismatch in what older student want and what higher education offers, a survey finds that higher education institutions identified the following programs and services they offer to older students, including computer training (67 percent); career transition (48 percent); English as a Second Language (39 percent); and GED /basic skills (36 percent).²⁴

Despite the growing number of older Americans, they are still underserved in lifelong learning opportunities. Many have never been to college themselves, others see colleges filled with young people and feel intimidated. Many older adults are fearful of failure and exposing themselves to imagined ridicule. As noted, they are also not looking to climb an education ladder.

Therefore, as the American Council of Education argues, to improve the demand for continued learning, higher education must demystify the process, particularly if they are to reach those who have only a high school education. Higher education must also rethink how they organize their courses for this age group. Linear credit-based programs may not be the most effective in drawing older students back to school. Courses could instead be delivered in “chunks” so older adults can update skills for new careers or existing jobs.²⁵ As we note in the accompanying policy brief, we should also look beyond institutions of higher education to tap existing (and familiar) resources, including community centers, YMCAs, libraries, and others. Taking courses in familiar, nonacademic settings may help alleviate any anxiety or hesitation and encourage more Americans to pursue lifelong learning.

Among those older adults who do pursue continued formal learning, focus groups uncovered three primary motivators: a desire to learn, to connect, and to work.

More broadly, school earlier in life does not anticipate or help students prepare for lifelong learning. What is ultimately needed, argues Harvard sociologist Sarah Lawrence-Lightfoot in her book, *The Third Chapter*, is a new kind of pedagogy that anticipates life-long learning and takes a longer view of the capacities needed to be creative and productive at later stages. One suggestion, she believes, is to start early and invite older adults into school classrooms to serve as tutors, as mentors, as “provocateurs,” and as listeners and learners.²⁶ She also promotes more intergenerational learning, both in the community and at work. Older adults bring wisdom, patience, and an ability to take a long view to a task, while young adults can add their comfort with new ideas, technological skills, and their youthful ambition. One model for this kind of mentoring and intergenerational cooperation is Experience Corps, which places older volunteers in public elementary schools in roles designed to meet schools’ needs and increase the social, physical, and cognitive activity of the volunteers.²⁷

Further, colleges and universities must examine and update how they perceive older students.²⁸ We must recast education as more than simply a reward of later life, like swimming or going on a vacation, but a necessary process to stay abreast of change, remain informed about life, health, politics, and technological advances, and more.

Pathways to Lifelong Learning

We focus in this brief on education in later years (age 40 onward), but it goes without saying that a sound educational foundation is key to lifelong learning. Educational success doesn’t simply materialize at age 6 or 7. Success in school begins at birth with investments in health, family stability, high-quality child care and preschool, and other investments. As Nobel economist James Heckman has argued, “Investments in early childhood development from birth to age 5 can improve cognitive and character skills and the health of disadvantaged children.The rates of return on

these investments are higher than stock market returns, even in normal times.” As he told Congress, every dollar invested in young children (under age 5) returns up to \$300 over a child’s lifetime through better outcomes in education, health, sociability, economic productivity, and reduced crime.²⁹

As more older Americans continue to work, the workforce will be increasingly intergenerational. Working in teams across generations will require new skills and new educational approaches.

Children who come to school ready to learn are more likely to have an easier path and greater engagement in school, and through that success, more secure and better-paying jobs and adult lives. Yet far too many children are getting lost along the way. In 2008, the United States ranked at 21 among 28 countries in its secondary school (high school) graduation rates. It ranks 16th in “tertiary” graduation rates (college, post-secondary training and certificates).³⁰ Far too many never make it to high school graduation, particularly young male African Americans and Latinos. Although how to measure the dropout

rate is debated, many place the high school graduation rate at about 75 percent.³¹ Interventions to lower the dropout rate have shown mixed success.³²

Among those who do graduate high school, most aspire to a college degree.³³ Yet unfortunately, many will not meet that goal. Approximately 44 percent of those who enroll in a four-year college program drop out within six years. Among those who begin in a community college, more than half do not complete a degree and do not enroll elsewhere.³⁴

Clearly, we as a nation must do better in engaging our youth in school, preparing them for higher education, and seeding a lifelong connection to continued learning.

Midlife Training: Too Few Continue to Update Their Skills

One reason the current model of education front-loads learning at the beginning of our life, and our work life, is because many believe that “you can’t teach an old dog new tricks.” However, this is simply not true. Strong evidence indicates that learning ability does not always decline with age.³⁵ As Laura Carstensen, director of the Stanford Center on Aging, has written, while our working memory might decline (the ability to hold multiple pieces of information in mind while you act on them), procedural memory (the ability to remember how to do things) is little affected, nor is the ability to learn or problem-solve. On the other hand, vocabulary and cultural acumen tend to increase well into old age. As Carstensen writes,

Tim Salthouse, a cognitive psychologist ..., believes that accumulated knowledge is the key to explaining why people continue to function well in life despite declines in working memory. Older people may be slower on the uptake, but in many instances their knowledge about

similar situations, experiences, and topics allows them to outperform their younger counterparts.³⁶

In the workforce, evidence also points to the value of retraining for older workers. In the mid-2000s, private-sector employers invested approximately \$50–\$60 billion annually to train their workers.³⁷ The federal or state government subsidizes only a small portion of this investment. A 2007 study of employer-based customized training, for example, found that states subsidized the training of about 1 million individuals at a cost of \$571 million.³⁸ This had declined from a peak of \$721 million in 2000. A W. E. Upjohn survey found similar results.³⁹

Retraining in mid-career can boost earnings. In “Can You Teach an Old Dog New Tricks,” Daniel Sullivan and colleagues found that one academic year of community college schooling can increase long-term earnings by about 7% for older (age 35+) male displaced workers and by about 10% for older females.⁴⁰ Retraining is even more effective in certain high-demand fields, such as health care. However, the returns are lowered, but still positive, after accounting for the costs in lost wages while attending college instead of working.

Many believe that “you can’t teach an old dog new tricks.” However, this is simply not true.

To keep up with the changing pace and structure of society, it is critical to create a more robust system with opportunities to engage in lifelong education. This is not simply creating more opportunities for retired folks to take a class on the history of the Middle East or a cooking class, although those are important. It is a call to create a better system of skill-building opportunities so more older Americans can remain employed, engaged, and the nation can continue to tap their full potential.

Continued opportunities to learn and grow not only improve one’s competitiveness in a global market, but it enhances social inclusion, personal fulfillment, and even, indirectly, health.⁴¹ A first step is to leverage existing educational resources, such as community colleges and on-the-job training programs, YMCAs, community centers, and others.

Leveraging Existing Resources

Community Colleges

Community colleges are the workhorses of our higher education system. In 2008, they educated 46 percent of all undergraduates in the United States. At age 29, the average student is older than most college-goers, and is far more likely to have children at home, have lower incomes, and be black or Latino. Their needs are different from the “traditional” student who is moving directly from high school to higher education. The typical community college goer needs more flexible schedules to be

able to juggle school, work, and family. They need other supports as well, as they are often lower-performing students and have not sat behind a desk for several years in many cases. The high dropout rates, as noted above, are one indication of their vulnerability.⁴²

What few know is that currently, older adults are more likely to be served by community colleges than are students under the age of 25. While only 33 percent of students under the age of 25 attend community colleges, half of the college-going adults aged 50 and older do so.⁴³ These older students need slightly different supports.

A clear pathway from school to new jobs is often an effective motivator for all students. Along this line, “stackable credentials,” which allow community college goers to accumulate and link together credentials that qualify them for particular occupations and to advance to higher occupations, have shown some promise.⁴⁴ Stackable credits may be particularly helpful for older students who, as noted above, are often less enamored with the traditional linear accumulation of credits along the academic ladder. Often, the set of stacked credentials is aligned with the local labor market demands, a further incentive for many.

Linear, credit-based programs may not be the most effective in drawing older students back to school.

Having well-trained workers is also a benefit to employers. Therefore, community colleges are increasingly working directly with local employers to tailor curriculums to the types of skills the local employers need. Cleveland's Cuyahoga Community College, for example, offers job-skill development programs in the manufacturing of medical devices or pharmaceutical drugs. The area is home to a cluster of bioscience businesses, and the college works closely to match the types of skills needed with the curriculum. Macomb Community College in Warren, Michigan, partners with CVS/Pharmacy stores to provide on-the-job experience as part of Macomb's pharmacy-technician certification. In northern Wisconsin, HyPro joined with other manufacturing businesses to develop a curriculum at Nicolet Community College. HyPro even provided instructors and developed a job pipeline directly from the college to the shop floor.

Online Opportunities

The lost wages incurred when stopping work to attend school often dissuades many from upgrading their skills until they are laid off or “displaced” from their job. The training is in classrooms during the day or in the evening—schedules that often tax an individual trying to balance work and family. Therefore, more flexible learning opportunities should be supported. Online courses and new digital media tools are pointing the way to expanded opportunities to stay connected to learning beyond a traditional classroom.

Many working community college students, for example, take their courses online. They must post their weekly assignments by a certain date, but beyond that they can read and prepare on their own time schedule. They can ask the professor questions online, and take part in discussion groups, all online as well. More broadly, Coursera, for example, is putting the courses of leading universities online for anyone to access. Apple offers its own online university, as does Edx, a joint partnership between Harvard and MIT to offer online courses and lectures.

These courses allow anyone—not just those retraining for a new job or advancement—to expand their learning and curiosity about the world. For older Americans, the ability to connect to such a rich source of learning no matter where they are in the United States is an amazing opportunity. Another option, Peer-to-Peer University, is a more organic, individually driven, “open source” learning opportunity. The experiment combines open course material from multiple institutions and develops participant networks. A “course organizer” leads the discussion but learners are working together with others. If a question arises, they ask one another.

Another new system of learning opportunities and credentialing is in development, called Badges for Lifelong Learning.⁴⁵ Spearheaded by the Mozilla and MacArthur Foundations, with support from the Department of Education, NASA, the Department of Commerce, and several others are working to create an online credentialing system that recognizes self-directed learning beyond the classroom. Individuals could conceivably pursue skills that employers find valuable and earn a badge that is vetted by an authorizing body. The project is in its early stages, but holds great potential for creating a recognized credential for online and offline learning.

However, while open course material on the Internet may be free, getting it there is not. By 2010, the William and Flora Hewlett Foundation, the principal financial backer of the open educational movement, had spent more than \$110 million since 2002, with more than \$14 million going to M.I.T. Relying largely on money from Hewlett, Yale had spent \$30,000 to \$40,000 for each course it put online by 2010. This includes the cost of the videographer, generating a transcript and providing “quality assurance.”⁴⁶

For older Americans, the ability to connect to such a rich source of online learning no matter where they are in the U.S. is an amazing opportunity

To make these opportunities truly accessible to all Americans, investments in broadband are needed, particularly in the underserved rural areas. According to the FCC’s Eighth Broadband Progress Report, of the 19 million Americans who live where fixed broadband is unavailable, 14.5 million live in rural areas.⁴⁷ Although other factors such as an older population, are driving some of the disparities in use, rural areas lag behind urban areas in at-home internet use and access to fast internet connections. According to December 2011 data from the National Broadband Map, 99.7 percent of the population in urban areas have access to available broadband speeds of at least 3 Mbps (download)/768 kbps (upload), as opposed to 84.0 percent of the population in rural areas. The United States is also losing ground to the world in internet access. In 2011, according to the

Organization for Economic Cooperation and Development (OECD), the United States ranked 15th among OECD nations in broadband access per 100 inhabitants. This is down from 4th place in 2001.

Workforce Training: Missed Opportunities?

Several state and federal programs support continued education for job retraining. The Workforce Investment Act at the U.S. Department of Labor provides funding to states and local workforce investment boards for job training and other employment services. Their success has been modest in training workers for the skills needed in the local workforce, with evidence of small wage increases for minimal cost.⁴⁸ A key drawback for many is the fragmented set of services. “One-stop shops”

were tried in the early 2000s but have not been consistently implemented and quotas in job placement programs have often led to placing the easiest to place in jobs while ignoring the harder to place.⁴⁹ Federal funding for the program has also waned.

These missed opportunities to retrain can cost the nation in lost productivity and families in lost wage potential.

These missed opportunities to retrain can cost the nation in lost productivity and families in lost wage potential. As Kevin Hollenbeck of the W.E. Upjohn Institute puts it,

[L]iterally tens of millions of individuals who might be characterized as holding frontline or production jobs are generally not even expected to participate in training or work-related education. Anecdotal observation and analyses of training programs in one state suggest that we as a nation may be foregoing substantial economic and productivity growth by these low expectations and underinvestments in training.⁵⁰

He argues for a greater public and private-sector roles in spurring this needed on-the-job training. “[S]erious, careful planning needs to be invested in the problem of how to deliver substantially more training to frontline/production workers in the United States. This planning activity would seem to be a legitimate activity for the federal government (i.e., U.S. Department of Labor) to tackle, but it is also a topic that foundations may wish to and be able to fund.”

He advocates, for example, for the federal government to match state Unemployment Insurance-based training funds by using its Federal Unemployment Tax Act (FUTA) tax receipts, or imposing a small surcharge on the tax, to fund incumbent worker training. Government could develop business tax credits to reinvest in skill development (especially for blue-collar workers) and connect the training more directly to work, or government could provide a tax credit for businesses that partner directly with community colleges. Encore.org, for example, provides fellowships, which companies often purchase to retrain their employees. This model could be expanded.

Tim Sullivan also sees the importance of improved workforce training. Sullivan, a former CEO is now Wisconsin Governor Scott Walker's special consultant for business and workforce development.

In that capacity he is recommending coordinating workforce development efforts at the state level, including better coordination among the key workforce development organizations both public and private.

Wisconsin spends \$403 million per year on workforce training, \$371 million of which is federal funds, but it is spread between nine different agencies. The state is not unusual, and Sullivan sees this lack of coordination as a major impediment to success. Some states, like Ohio, have already begun the process. Sullivan also advocates for better coordination between the labor needs in states' economic development regions and college and university curricula. Doing so effectively, he argues, will require improved "real-time" data and labor market information. Sullivan wants to devote more state funding to job training, which state workforce development departments can then fund competitively to economic development regions in states. He also wants to establish career plans for all students that align with the recommendations of the Council of College and Workforce Readiness and to establish stackable credits (see above).⁵¹

Wisconsin spends \$403 million per year on workforce training, \$371 million of which is federal funds, but it is spread between nine different agencies.

In a positive trend for older adults, the AACC Plus 50 Initiative, begun in 2008 with 13 colleges, not only encourages students to attain certificates and degrees to enhance their employability, but it also emphasizes prior learning and experience credit for older students. In early 2012, AACC announced plans to expand Plus 50 to reach 10,000 additional older students at 100 community colleges who will participate in job training and work to complete degrees or certificates in health care, education, or social service occupations. Another novel program is the U.S. Department of Labor's Aging Worker Initiative (AWI), which is piloting several programs, including in community colleges. The program is designed to improve the public workforce system's ability to serve older workers. Pilot sites are using dedicated career navigators, offering short-term training for high-demand industries, providing computer training and internships, and developing interactive websites.

Tapping Nontraditional Sources for Lifelong Learning

As the accompanying policy brief outlines, we are proposing that to expand lifelong learning opportunities, public and private efforts tap existing resources in the community. Below is a cursory look at some of these options.

Community and Senior Centers

There are currently over 11,000 senior centers serving approximately one million American senior citizens every day.⁵² As established focal points within communities across the nation, senior centers provide an existing network with great potential to promote lifelong learning opportunities. As noted above, some learners who are older are intimidated or dissuaded by the formal academic environment, from testing to professors. Opportunities to learn in more familiar, less academic settings might inspire more adults to continue advancing their knowledge and talents.

To maintain operations, senior centers leverage resources from a variety of sources including federal, state, and local governments; public and private grants; businesses; contributions and donations; and volunteer hours. Senior centers face competition from other assisted living or retirement facility programs, interfaith community organizations, and park and recreation programs. Offering lifelong learning programs could provide senior centers an opportunity to differentiate themselves from these competitors, and potentially secure additional funding. Already, many senior centers are adding more varied fitness programs and Internet courses to better meet the needs of the current senior population.

The federal government not only should increase funding for senior and community centers, but it should also encourage more partnerships between the centers and other private and public groups in order to expand outreach. Lifelong learning initiatives would help sustain senior centers, as much as the centers would help disseminate lifelong learning opportunities.

Libraries

Seven out of ten Americans report using public libraries, making them a crucial component for adult education. The Library Services and Technology Act (LSTA), signed in 1996, provides the majority of federal library funds necessary for libraries to serve their communities. Most programs funded through this Act currently focus on increasing adult education in literacy.⁵³ More support should be provided for a wider range of programs and learning opportunities.

Congress should appropriate a specific amount of the LSTA fund for innovative education opportunities at public libraries. President Obama's FY 2013 budget request to Congress asks for level funding of the LSTA at the FY 2012 level of \$184.7 million.⁵⁴ Dedicating a specific amount to these lifelong learning initiatives at public libraries will ensure that libraries receive the resources needed to develop and provide a broad range of opportunities.

Health Care Settings

Health care is among the fastest-growing industries in the U.S. economy.⁵⁵ Training for two-thirds of new health care workers occurs in community colleges,⁵⁶ but the health care setting itself could be used in greater capacity to offer lifelong learning opportunities for workers. As medical technology

and practice develop, continuing education will be critical to maintaining an efficient, effective workforce in health care. Hospitals, clinics, and private practices are underused venues for providing relevant, specialized training. Health care centers could also be the setting for opportunities for the general public to stay abreast of health care advances, healthy living initiatives, and health care expense management.

YMCAs

The Youth Men’s Christian Association has as its mission to ensure that “everyone, regardless of age, income, or background, has the opportunities to learn, grow, and thrive.”

With a presence or partnership in over 10,000 neighborhoods across the United States, the YMCA network provides an effective infrastructure through which lifelong learning opportunities could be offered. Federal grants to support lifelong learning through the YMCA programs could make available opportunities for adult students who lack both basic skills and the resources to attain them independently.

Health care centers could also be the setting for opportunities for the general public to stay abreast of health care advances, healthy living initiatives, and health care expense management.

Former Teachers

Another untapped resource is retired teachers. There are currently hundreds of thousands of retired teachers in America. The National Retired Teachers Association, now an arm of AARP's Educator Community is America's foremost network of 50+ adults and organizations with a passion and affinity for education and learning. Members of NRTA are dedicated to continuous educational opportunity, advocacy, and service as a means of safeguarding the economic security, work opportunities, and future well-being of all generations. Tapping this membership to build the community-based learning opportunities is an excellent place to begin. Doing so both provides more learning opportunities to Americans, but it also engages the former teachers themselves in stimulating work.

Cooperation Networks

The federal government should encourage cooperation networks that centralize the resources available for lifelong learning. Just as organizations such as Teach for America or the YMCA have formed a strong national network of centers and programs, a similar structure for lifelong learning would help distribute opportunities for people across all ages and communities.

Conclusion

Despite its importance to health, income, and well-being, education is fleeting for far too many. It is also stacked largely at the beginning of life with fewer opportunities to continue learning throughout the life course. Several factors have combined to increase the importance of lifelong learning, including longer and healthier lives, a shifting and highly competitive job force, and rapidly changing technology and advancements.

Given these changing circumstances and demands, we need avenues to connect and reconnect with school throughout life and create solid paths for life-long learning. In the first one-third of our education careers, we must do a better job of keeping children in school and engaged in learning. In our mid-years, we must create more opportunities for workers to retrain. During the final one-third of the lifespan, we must make more space for education in a variety of forms, both in and out of the classroom.

Endnotes

¹ Nobel laureate James Heckman has written extensively about this topic. For a sampling of his work, see the website, The Heckman Equation, www.heckmanequation.org

² See, e.g., Greg Duncan and Richard Murnane, *Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances* (New York and Chicago: Russell Sage Foundation and the Spencer Foundation, 2012).

³ The gap in voter turnout by education is consistently 15-20 percentage points. Center For Information and Research on Civic Learning and Engagement (CIRCLE), "Youth Voting." (Tufts University, 2012). <http://www.civicyouth.org/quick-facts/youth-voting/>

⁴ Jay Olshansky et al., "Differences in Life Expectancy Due to Race and Educational Differences Are Widening, and Many May Not Catch Up, *Health Affairs*, vol. 31, no. 8 (August 2012):1803-13.

⁵ Richard Freeman, *America Works: The Exceptional U.S. Labor Market* (New York: Russell Sage Foundation, 2007); Stephen Rose, "the Myth of the Middle-Class Job Loss." *Wall Street Journal*, October 24, 2007.

⁶ Steven Greenhouse, *The Big Squeeze: Tough Times for the American Worker* (New York: Anchor Books, 2008).

⁷ James O'Toole and Edward Lawler, *The New American Workplace* (New York: Palgrave Macmillan, 2006).

⁸ Harvard Graduate School of Education, "Pathways to Prosperity" (2011) shows that just 56 percent of college students complete four-year degrees within six years. Only 29 percent of those who start two-year degrees finish them within three years.

⁹ J. Mulhern, *A History of Education: A Social Interpretation*, 2nd ed. (1959).

¹⁰ The following information is from John Field, *Life Long Learning and the New Educational Order* (Staffordshire, England, Trentham Books, 2006).

¹¹ Edgar Faure, *Learning to Be* (Paris: UNESCO, 1972).

¹² Commission of the European Communities, *Competitiveness, Employment, Growth* (Luxembourg: Office for Official Publications, 1994). Cited in Field, *Life Long Learning and the New Educational Order*.

¹³ David Autor, professor of economics at MIT, has argued in various publications and venues for this polarization of the labor force. See, e.g., Center for American Progress, "The Future of American Jobs: Special Presentation." (Washington, DC: Center for American Progress, April 30, 2010). Other economists contest this portrayal, however. Georgetown labor economist Harry Holzer, for example, argues for a depleted but still viable middle tier of jobs, including high-skilled manufacturing and increasingly in health care. Personal communication, September 2011.

¹⁴ The wage premium has expanded steadily over the past 30 years largely because of sharp wage losses among those with the least education (just a high school degree or less). Median earnings for males aged 25-34 with a high school degree or less declined from \$38,011 in 1970 to \$23,000 in 2008. Women's earnings remained relatively flat at \$16,500 in 1970 to \$17,000 in 2008. The increase for women is attributed largely to the rise in their labor force participation during this span. Meanwhile, the median earnings for those with a college degree (four-year) rose sharply beginning in 1995, from \$40,000 to \$55,000 for males, and from \$35,000 to \$44,000 for females. (Sheldon Danziger, Department of Economics, University of Michigan, personal communication.) However, since 2010, the wage premium has stalled. Some argue that the high cost of college is eating into this wage premium. However, that does not appear to be the case, yet. Economists estimate that even after accounting for tuition, room and board, and the lost wages that would have accrued while the student was attending college, the boost to wages over one's lifetime is roughly \$300,000, or three times the cost of attending. Moreover, a bachelor's degree will pay for itself in ten years. See Lisa Barrow and Cecilia Rouse, "Does College Still Pay?" *The Economist's Voices* (2005).

¹⁵ Harry Holzer et al., *Where Have All the Good Jobs Gone?* (New York: Russell Sage Foundation, 2011).

- ¹⁶ Richard Settersten and Barbara Ray, *Not Quite Adults: Why 20-Somethings Are Choosing a Slower Path to Adulthood and Why It's Good for Everyone* (New York: Bantam, 2010).
- ¹⁷ American Council on Education (ACE), "Mapping New Directions: Higher Education for Older Adults," (New York: ACE, 2008). <http://www.lifelonglearningaccounts.org/pdf/MapDirections.pdf>
- ¹⁸ J.F. Quinn, K. E. Cahill, and M.D. Giandrea, *Early Retirement: The Dawn of a New Era?* (New York: TIAA-CREF Institute, 2011).
- ¹⁹ *Ibid.*, pp. 16 and 136.
- ²⁰ U.S. Department of Education, 2005
- ²¹ ACE, "Mapping New Directions."
- ²² *Ibid.*
- ²³ *Ibid.*
- ²⁴ *Ibid.*
- ²⁵ *Ibid.*
- ²⁶ Sarah Lawrence-Lightfoot, *The Third Chapter: Passion, Risk, and Adventure in the 25 Years after 50*, (New York: Farrar, Straus, and Giroux, 2009), and www.uknow.gse.harvard.edu/learning/LD323.html,
- ²⁷ Kevin Frick et al., "The Costs of Experience Corps in Public Schools," *Educational Gerontology*, vol. 38, no. 8 (August 2012): 552-562; Erwin Tan et al., "Marketing Public Health through Older Adult Volunteering: Experience Corps as a Social Marketing Intervention," *American Journal of Public Health* (February 18, 2010). See also J. Kotre, *Outliving the Self* (Dearborn, MI: Norton Press, 1996).
- ²⁸ ACE, "Mapping New Directions."
- ²⁹ James Heckman, testimony before the Joint Select Committee on Deficit Reduction, Washington, DC, September 21, 2011. He also finds a rate of return of 7-10 percent per year.
- ³⁰ OECD, *Education at a Glance, 2011* (New York: OECD, 2011).
- ³¹ James Heckman and Paul Lafontaine, "The American High School Graduation Rate: Trends and Levels." Discussion paper. (Bonn, Germany: Institute for the Study of Labor, 2007). Some evidence suggests that steady supports and counseling as well as identifying at-risk youth early helps. See James Kemple and Cecilia Rouse, "America's High Schools: Introducing the Issue" *The Future of Children*, vol. 19 (2009): 3-15. Others have looked to more structural changes, breaking up large public high schools into smaller schools, for example, or creating charter schools. Still others have looked more broadly, arguing that success in school is not an isolated affair. Geoffrey Canada's Harlem Children's Zone is the best example.
- ³² Some evidence suggests that steady supports and counseling as well as identifying at-risk youth early helps. See James Kemple and Cecilia Rouse, "America's High Schools: Introducing the Issue" *The Future of Children*, vol. 19 (2009): 3-15. Others have looked to more structural changes, breaking up large public high schools into smaller schools, for example, or creating charter schools. Still others have looked more broadly, arguing that success in school is not an isolated affair. Geoffrey Canada's Harlem Children's Zone is the best example. Another strong example is Career Academies, which when implemented well have a solid track record of success. See James J. Kemple with Cynthia J. Willner, "Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood" (New York: MDRC, June 2008). In a rigorous evaluation, those in career academies outperformed their peers not in Career Academies on several indicators eight years after leaving school. They earned more, their jobs were more secure, and they were also more likely to continue with some form of postsecondary education. Young men—often most at risk for becoming disconnected—did particularly well. Other programs, such as Tech-Prep have had positive results in raising high school graduation rates as well. See Harry Holzer, *Where Are All the Good Jobs Going?* (New York: Russell Sage Foundation, 2011).

³³ A recent MetLife study found that 75 percent of middle and high school students plan on going to college, compared with just 57 percent in 1988 and 67 percent in 1997. See MetLife, "2010 MetLife Survey of the American Teacher: Preparing Students for Colleges and Careers (New York: MetLife, 2010).

³⁴ Harvard Graduate School of Education, "Pathways to Prosperity"; For community college dropout rates, see Thomas Brock, "Young Adults and Higher Education: Barriers and Breakthroughs to Success," *The Future of Children*, vol. 20 (Spring 2010): 109-58.

³⁵ Center for the Study of Aging and Human Development, "Age and its Effects on Learning" (Durham, NC: Duke University, 2012). www.duke.edu/~kem2/cps1/Massari.htm.

³⁶ Laura Carstensen, *A Long Bright Future: Happiness, Health, and Financial Security in an Age of Increased Longevity* (New York: Public Affairs, 2009).

³⁷ Kevin Hollenbeck "Is There a Role for Public Support of Incumbent Worker On-the-Job Training?" Working Paper No. 08-138. (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2008).

³⁸ As reported in Hollenbeck, ""Is There a Role for Public Support?"

³⁹ Ibid.

⁴⁰ Louis Jacobson, Robert J. LaLonde, and Daniel Sullivan, "The Impact of Community College Retraining on Older Displaced Workers: Should We Teach Old Dogs New Tricks?" *International Labor Relations Review*, vol. 58 (2005). The study was based on workers in Washington State in the 1990s. The sample contained more than 65,000 workers who lost jobs during the first half of the 1990s, filed a valid claim for unemployment insurance, and remained consistently attached to Washington State's work force throughout the 14-year period studied.

⁴¹ Center for Community College Policy, "State Funding for Community Colleges" (Denver, CO: Center for Community College Policy, November 2000). http://facc.org/research/FTEspending_bystate.pdf.

⁴² Some of these supports include academic help (many students returning to college must take "remedial" classes to catch up), social supports, child care, and more. We have good emerging evidence of successful interventions that can help the more vulnerable students graduate. These successful interventions include modest stipends tied to grades and supports for students juggling work, kids, and school See Michael J. Weiss et al., "The Effects of Learning Communities for Students in Developmental Education: A Synthesis of Findings from Six Community Colleges" (New York: MDRC, 2012); See also, Colleen Sommo et al., "Commencement Day: Six-Year Effects of a Freshman Learning Community Program at Kingsborough Community College" (New York: MDRC, 2012); and Brock, ""Young Adults and Higher Education."

⁴³ ACE, "Mapping New Directions."

⁴⁴ Harry Holzer and Demetra S. Nightingale, "Strong Students, Strong Workers: Models for Student Success through Workforce Development and Community College Partnerships" (Center for American Progress, June 2009). http://www.americanprogress.org/wp-content/uploads/issues/2009/12/pdf/strong_students.pdf

⁴⁵ For more information see <http://hastac.org/groups/badges-lifelong-learning>

⁴⁶ Katie Hafner, "An Open Mind," Education Life blog, *New York Times*, April 16, 2010. http://www.nytimes.com/2010/04/18/education/edlife/18open-t.html?ref=edlife&pagewanted=all&_r=0

⁴⁷ Lennard G. Kruger and Angela Gilroy, "Broadband Internet Access and the Digital Divide: Federal Assistance Programs." (Washington, DC: Congressional Research Service, September 7, 2012).

⁴⁸ Carolyn Heinrich et al., "New Estimates of Public Employment and Training Programs' Net Impacts." IZA discussion paper 4569 (Bonn: Institute for the Study of Labor, November 2009).

⁴⁹ Burt Barnow and Jeffrey Smith, "Performance Management of U.S. Job Training Programs." In *Job Training Policy in the United States*, edited by Christopher O'Leary et al. (Kalamazoo, MI: W.E. Upjohn Institute, 2004).

⁵⁰ Hollenbeck, ""Is There a Role for Public Support?" p. 19.

⁵¹ Tim Sullivan, “The Road Ahead” (Madison, WI: prepared for Governor Scott Walker, 2012).
www.doa.state.wi.us/documents/TheRoadAhead.pdf

⁵² See National Council on Aging, “Senior Centers: Fact Sheet” (Washington, DC: National Council on Aging, 2012).
www.ncoa.org/press-room/fact-sheets/senior-centers-fact-sheet.html.

⁵³ American Library Association, “Federal Funding.” (Washington, DC: ALA, 2012).
www.ala.org/advocacy/libfunding/fed.

⁵⁴ American Library Association, “Library Facts and Figures” (Washington, DC: ALA, 2012).
www.ala.org/offices/sites/ala.org.offices/files/content/wo/woissues/washfunding/FactsandFigures.pdf.

⁵⁵ U.S. Department of Labor, “High Growth Industry Profile: Health Care” (Washington, DC: DOL, 2012)
www.doleta.gov/brg/indprof/healthcare_profile.cfm.

⁵⁶ American Association of Community Colleges, “National Profile of Community Colleges: Trends and Statistics,” 3d ed. (Washington, DC: AACC, 2000).