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WORKING PAPER

Building the American Workforce

Thomas Hilliard
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Introduction

There has never been greater urgency for expanding and improving U.S. workforce training programs. Even before the onset of the Great Recession, an alarming number of Americans lacked the skills and education credentials needed to compete for decent-paying jobs in an economy transformed by globalization and accelerating technological change. In the Great Recession's wake, new jobs capable of supporting a family will increasingly require more than a high school diploma.

Journalists and policymakers have focused predominantly on the quantity and quality of jobs being created in the U.S. economy. They should also pay attention to the difficulty of training people to qualify for those jobs. Employers claim they cannot find job candidates with appropriate vocational training, work-related soft skills, or aptitude in reading, writing, and math. Such skills have always been expected in the high-skill occupations reserved for holders of bachelor's and advanced degrees. But to an unprecedented extent, employers now need and expect applicants with "middle skills" qualifications—a level of education and training beyond a high school diploma, but less than a bachelor's degree. The supply of middle-skilled jobseekers lags behind.

Policymakers can narrow this skills gap and prepare the workforce of tomorrow by overhauling the national workforce-development system. Workforce providers do not serve enough of the disadvantaged, low-skilled population that needs services and would provide a high-yield return on investment. They are also not adequately engaging with employers to ensure their workforce services are the ones that employers genuinely need, too often emphasizing inadequate short-term services over better longer-term training toward market-recognized credentials. Finally, the workforce field has grown increasingly fragmented as major programs harden within silos and goals are set without regard for any larger vision.

Employers and disadvantaged workers desperately need a high-functioning workforce system. Now is the right time to build it. The most important changes cost little, but prepare the ground to spend taxpayer dollars much more effectively. The federal government should begin by: establishing a broad and integrative vision across workforce, postsecondary, adult education, and social-services programs; developing performance measures that align across multiple systems; and rewarding providers for helping disadvantaged clients hit milestones toward self-sufficiency. This integrated system should be supported by data warehouses at the federal or state level to connect educational and workforce services with data on employment outcomes. The overhauled system should be funded at a level large enough to bolster regional labor markets.

With a common vision and a careful division of responsibility between all the stakeholders in building human capital, the United States could secure its long-term competitiveness and prosperity in a dynamic global economy.

Labor Market Transforms, Workforce Stays Behind

When news broke in the fall of 2012 that New York City's poverty rate rose to nearly 21 percent, the highest point in more than a decade, a spokesperson for Mayor Michael Bloomberg pointed to a surprising culprit: the growing skills gap. "These poverty numbers reflect a national challenge: the U.S. economy has shifted and too many people are getting left behind without the skills they need to compete and succeed."

Indeed, the combination of globalization and technological advances has transformed the economy in recent years. One result is that the skills demanded by employers in virtually every industry have risen dramatically. But the skills of the country's workforce have lagged behind.

GLOBAL LABOR MARKET MOVING FAST

Once upon a time, breakthroughs in technology disrupted the established order. Today, technological change is the established order. The accelerating pace of discovery and application shapes the kinds of jobs Americans can do, and raises the qualifications needed to obtain and keep those jobs. Tasks that can be reduced to a set of rules will be shifted to the least expensive workplace setting. By coding the task, an employer can shift it to a computer (e.g., tax preparation), a robot (e.g., warehouse order fulfillment and battery production), or overseas (e.g., smartphone production and customer service).

The effect of the technological revolution has been profound. Where legal secretaries once typed up and laboriously formatted court briefs, specialized software conducts those tasks automatically, enabling law firms to shrink their administrative staffing. Where travelers once purchased airplane tickets from travel agents and airline personnel, they now go online. Shoes once made on a cobbler's bench and later manufactured on an assembly line are now produced, distributed, and increasingly sold without ever being held by a human hand.

At the same time, the globalization of the U.S. economy has opened up the U.S. labor market to international competition, especially in the tradable goods and services sector. Companies have greater capacity than ever before to move their worksites to locations with the lowest labor costs, and to build complex equipment by linking supply chains from multiple countries. Competitive pressure on employers to reduce labor costs and develop flexible production processes has grown more intense.

Still, many occupations, particularly in the nontradable service sector, cannot be outsourced abroad or replaced by technology. An actual person needs to perform high-touch tasks like sweeping floors, caring for disabled seniors, or making burritos. But such occupations have few entry requirements. The supply of workers who apply for them greatly exceeds the demand, resulting in low wages and unstable working conditions.

Occupations that employers reward with higher wages and benefits require skills in thinking and communicating that cannot be reduced to a code. These include occupations like auto mechanics who once learned how to fix cars by watching other mechanics fix them. Today, computerized diagnostic systems locate a car's problems, but the mechanic must be able to identify which diagnostic tests to

use and how to interpret the findings. A salesperson must explain why one microprocessor design works better than another, and take a customized order requiring informed and probing questions.

The twin forces of globalization and technology have eliminated whole occupations whose tasks can be carried out more cheaply by computers or foreign workers. Between 1980 and 2010, employment doubled in high-skill occupations that require expert thinking and complex communications, such as engineers, managers, and scientists. Meanwhile, occupations vulnerable to automation or outsourcing, such as administrative support, rose only slightly.¹

Manufacturing was hit hardest. Over the past half-century, hundreds of American factories closed, and the remaining plants survived through automation. After World War II, manufacturing accounted for 25 percent of all U.S. employment, but by 2009 the share had fallen to 11 percent. The decline accelerated after 1980. In that year, machine operators accounted for 10 percent of the U.S. workforce; by 2010, they accounted for only 4 percent.²

As flexibility and adaptability have become essential to competitive companies, they have transferred the risks associated with a volatile consumer market to their workforce. The result has been soaring growth of the contingent workforce—workers whose job tenure is temporary, and who in most cases are employed by a staffing firm rather than the employer using their services. In 1999, employers used an estimated 990,000 contingent workers nationwide. By 2007, the number of contingent workers had grown to three million. The Bureau of Labor Statistics estimates that by 2018 the contingent workforce will expand to six million.³ These contingent workers are not, for the most part, choosing a more flexible work life, but simply taking employment where they can find it.

KNOWLEDGE ECONOMY AND MIDDLE-SKILLS GAP

The workers who have weathered the storm the best have postsecondary degrees. Over the past decade, adults with some college or an associate's degree have consistently earned about 20 percent more than adults with only a high school diploma, while adults with a bachelor's degree earned roughly twice as much.⁴ Since the 2007–2009 recession, the number of jobs requiring a high school diploma or less has fallen by 10 percent, while jobs requiring some college or an associate's degree held steady, and the number of jobs requiring a bachelor's degree or better rose by 5 percent.

But although economic success depends on postsecondary education, that education need not take the form of a traditional four-year bachelor's degree. Workers can receive an income boost from completing an apprenticeship or on-the-job training program, as well as earning a vocational certificate, industry certification, or associate's degree. More than twenty-nine million jobs requiring middle-skill education or training pay more than \$35,000 annually.⁵ One in four workers with licenses and certificates earns more than the average employee with a bachelor's degree, as do three in ten workers with an associate's degree.⁶ Some certificates are even more rewarding than bachelor's degrees for people who work in their field of study. An adult with an aviation certificate, for example, can earn \$65,000, and some computer/IT certificates offer \$70,000 in annual earnings.

Jobs in this middle-skill segment of the American labor market are projected to grow more rapidly than lower-skill jobs over the next decade. About 38 percent of the labor market, or forty-five million adults, held middle-skill jobs in 2010. The Bureau of Labor Statistics forecasts that occupations requiring a postsecondary credential will grow about five percentage points faster than those that do not.⁷ Middle-skill postsecondary employment is expected to rise by 17.5 percent from 2010 to 2020—about the same rate as high-skill employment (see Table 1). Meanwhile, middle-skill employment requiring apprenticeships and job training is expected to grow by about 13.4 percent, which is faster than low-skilled job growth.

Table 1. Employment and Total Job Openings (in thousands), by Education Category (2010–2020)

Education Level	2010	2020	# Change	% Change
High Skill (BA & above)	28,567	33,531	4,964	17.4
Middle Skill (Postsecondary)	15,330	18,013	2,683	17.5
Middle Skill (Non-Postsecondary)	30,007	34,025	4,018	13.4
Low Skill (HS diploma, less than HS)	69,164	77,968	8,804	12.7
Total	143,068	163,537	20,469	14.3

Source: U.S. Bureau of Labor Statistics. “Middle Skill (Postsecondary)” includes enrollment at any postsecondary institution, as well as credentials obtained below the baccalaureate level. “Middle Skill (Non-Postsecondary)” includes apprenticeships and long-term on-the-job training.

Yet employers are struggling to fill middle-skill jobs with qualified candidates, despite the weak economy inherited from the recent recession.⁸ Employers report again and again that they face a chronic gap in the skills needed for job openings compared to those possessed by job applicants. In 2010, at a time when the nation’s unemployment rate was still well over 8 percent and millions of Americans had been jobless for more than a year, more than half of American employers reported difficulty filling positions because of a lack of suitable skills.⁹ In another national survey, more than half of employers (53 percent) said their company faces a major challenge in recruiting non-managerial employees with the needed skills, training, and education.¹⁰ Two-thirds of manufacturing firms, according to a Manufacturing Institute survey, have either a moderate or severe shortage of qualified workers; almost half of the surveyed companies reported a severe shortage of production workers, which remains an important occupation for middle-skilled adults.¹¹

The middle-skills gap damages job creation and economic mobility. Employers are less likely to create good jobs with long-term advancement potential if the productivity of their workers does not cover their higher wages. A recent McKinsey study found that 86 percent of U.S. employers surveyed would pay more for a job candidate with the right training and hands-on experience—more than any of the other eight countries surveyed.¹² In the absence of those skilled candidates, employers will compete on the basis of lower costs, a path that leads to outsourcing and widespread use of part-time and temporary workers.

Disadvantaged and displaced adults are the ones hit hardest by the middle-skills gap.¹³ Disadvantaged adults often live in high-poverty or distressed areas, and struggle with chronic unemployment, fewer job opportunities, and low pay. These adults may have been poorly served by the formal education system, and in many cases dropped out of high school or graduated with poor literacy and numeracy skills.

Displaced adults have lost their jobs, in most cases because of the labor-market trends described above. Many have worked for a single employer for more than ten years, and their current skills set may not be suited to a change in industry or occupation. Even as unemployment in the general population shrinks, the number of long-term unemployed continues to grow. The population of long-term unemployed adults as a share of all unemployed adults is now higher than at any point since the Great Depression. Almost four out of ten jobseekers have been looking for work for at least six months. Some economists argue that many of these adults remain unemployed because they lack the qualifications required for new job openings.¹⁴ But the problem is not simply an overall lack of skills, since many of the long-term jobless actually possess higher skills than competitors who are quickly rehired, but the decay of their skills and the lack of direct contact with employers.

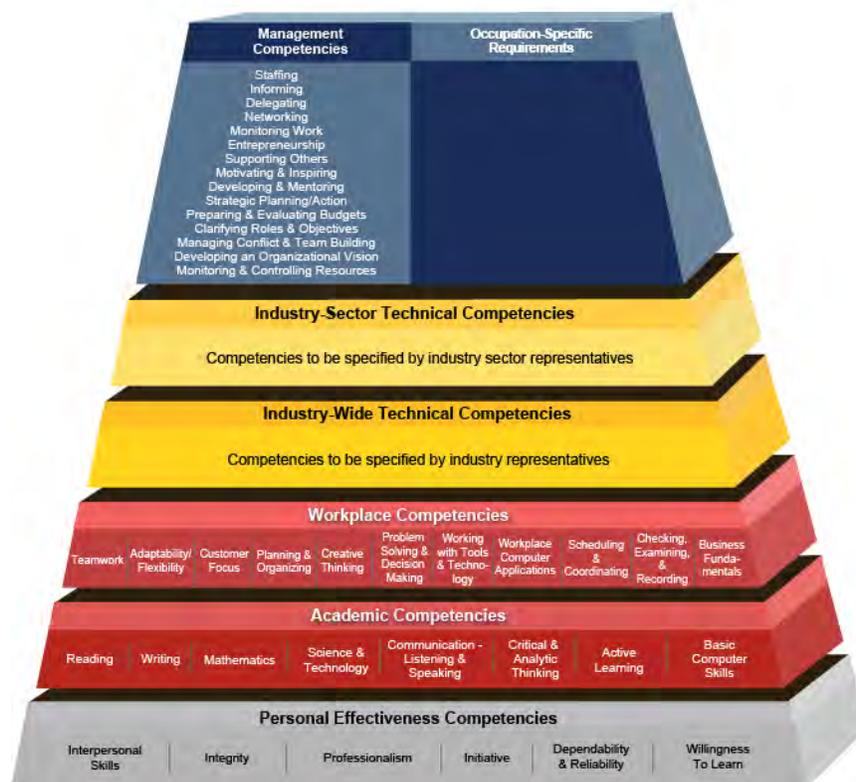
These disadvantaged and displaced workers need something different from the traditional post-secondary experience: four years on a college campus, ivied walls, and grassy quads. They need education that moves more quickly and engages directly with employers. This is where middle-skill attainment and the workforce system intersect.

TRAINING THE WORKFORCE

The middle-skills gap refers not to one specific kind of skill set, but several that are interrelated. Hiring managers want a broad and varied spectrum of skills, which they do not always clearly articulate to jobseekers. These skills start with vocational skills specific to the occupation or sector, include basic literacy, numeracy, computer familiarity, and soft skills like punctuality and interpersonal communication, and extend to high-end workplace skills like problem-solving, team management, and creative thinking.

One useful way of visualizing the dilemma faced by employers and jobseekers is the competency pyramid, a model devised by the U.S. Department of Labor's Employment and Training Administration (see Figure 1). The model is available for twenty-one separate industries, and the pyramid for each industry is designed by industry leaders, not government officials. The competency pyramid depicts skills needed by all or most jobseekers at the base, moving up to industry-wide vocational skills and then skills needed in specific sectors of the industry, finally reaching management competencies at the summit.

Figure 1. Competency Pyramid (Generic)



Source: U.S. Department of Labor, Employment and Training Administration.

Looking at the bottom half of the pyramid reveals why so many adults never achieve stable careers. The first layer consists of personal competencies such as dependability, integrity, and willingness to learn. The second, academic competencies, comprises the basic skills taught in school (e.g., reading, math, computer proficiency, and communications). The third layer pertains to higher-order soft skills, including teamwork, planning and organizing, working with technology, and creative thinking. The subject of most traditional workforce policy, technical competencies, only emerges in the fourth layer.

The skills deficits in those first three layers are enormously frustrating to U.S. employers. According to the 2003 National Assessment of Adult Literacy, 14 percent of American adults read at “below basic” literacy level, and another 29 percent read and write at only a basic prose level.¹⁵ This shortfall in the basic tasks of reading, writing, and carrying out simple arithmetic may be the largest factor holding back disadvantaged youth and adults. For example, a survey of human resource professionals conducted by the Society for Human Resource Management found that young people entering the labor market lacked important skills possessed by older workers preparing to retire: most notably, writing in English (51 percent) and professionalism/work ethic (52 percent).¹⁶

Disadvantaged jobseekers may not know how to scale the base of the competency pyramid and reach the point where they can obtain the technical competencies and credentials that put them on a solid career track. Displaced jobseekers, on the other hand, have developed skills appropriate to their old workplace that may be unsuited for a new career—not only vocationally, but also in terms of basic and soft skills. For example, workers laid off from manufacturing who enter healthcare must navigate a different work culture, with an ethic of teamwork and customer service at odds with the traditional factory floor.

The informational deficit that employers face in this environment has damaging consequences for the labor market. Hiring managers seek middle-skill candidates with specific occupational or professional credentials, which are easily signaled (although not necessarily up to date). But other skills, such as literacy, computer proficiency, work ethic, and collaborative spirit are more difficult to identify, even in a job interview. In the absence of widely accepted credentials, applicants have every incentive to claim relevant basic, personal, and workplace skills, since their viability as prospective employees depends on it. Employers have responded with a variety of counterproductive workarounds: using software programs that screen out candidates because of formatting mistakes in their resumes, hiring applicants with bachelor’s degrees even when the job does not require it, poaching employees from other companies rather than hiring unemployed adults, or filling positions with temporary workers who can be easily dropped at the first sign of inadequacy. Developing workforce strategies to train adults effectively for open positions and demonstrate their value to employers would be a far more effective alternative.

The workforce development field can assist jobseekers in navigating their way up the competency pyramid, and assist employers by reducing guesswork in the hiring process and fostering long-term employment relationships. In the twenty-first century economy, there are few win-win opportunities. But workforce development, done properly, is one of them.

What Ails Workforce Development and How to Cure It

For Americans who seek preparation for the middle-skill workforce, the following institutions offer assistance in connecting with employers and climbing the career ladder:

- *One-stop career centers* were established and funded through the 1998 Workforce Investment Act (WIA) in every local labor market in the United States. One-stop centers provide a wide variety of services to jobseekers, including job matching, career navigation, resume preparation, and eligibility for training vouchers.
- *Community and technical colleges* provide instruction toward an associate's degree, prepare students for transfer to four-year colleges to earn a bachelor's degree, provide training toward industry-recognized certificates, and, in fourteen states, oversee all or some of the adult education system.
- *School districts* manage workforce-oriented career and technical education programs at local high schools and, in the majority of states, oversee adult education services.
- *Community-based organizations* provide a wide array of services to meet the needs of their local communities, including job training, adult literacy, soft skills development, and sectoral programs that merge multiple services under one roof.
- Beyond these providers, there are still others: proprietary colleges, apprenticeship programs, and workplace training sponsored directly by employers.

Despite their accomplishments, workforce providers in the United States struggle to have an impact. The patchwork assemblage of services available in most regions does not gel into a coherent system that effectively meets the needs of local residents and employers. At the local level, workforce providers find themselves spending the majority of their operating budget just to keep the lights on, preparing clients for new occupations without enough information on job availability, serving experienced adults who could probably find a job without assistance, and trying to clarify a confusing tangle of service options to jobseekers.

Most of the developed world does a better job at preparing their workforces with middle-skill degrees. The United States is second only to the Netherlands in the share of its population with bachelor's degrees. But for middle-skill degrees, the United States ranks poorly, at sixteenth.¹⁷ The United States has the highest college dropout rate in the world, but again, the problem is concentrated in the area of middle-skill degrees. Only 28 percent of students who enroll in middle-skill degree programs graduate on time.

Although more money spent does not necessarily imply higher quality, other developed countries devote far more available resources to their workforce-development systems than the United States. In 2010, the average developed nation spent about 0.7 percent of GDP on active labor market policies, while the United States spent only 0.1 percent of GDP. This differential has remained stable over time.¹⁸

The Organization for Economic Cooperation and Development (OECD), which collects data on active labor market policies that are “geared toward enhancing the employment and long-run earnings prospects of unemployed workers and those with low skill levels,” has found striking differences between the United States and other OECD nations.¹⁹ Germany's elaborate vocational training system receives frequent attention. Researchers have found that most west European countries, as well

as Canada and Australia, have employment and training systems that are more “comprehensive and stable” than the United States.²⁰ Germany and the northern European countries, in particular, have integrated apprenticeships into the fabric of their workforce systems, building broad employer-labor agreements that provide clear career paths to young adults, with the systematic training and mentoring needed to accomplish them.

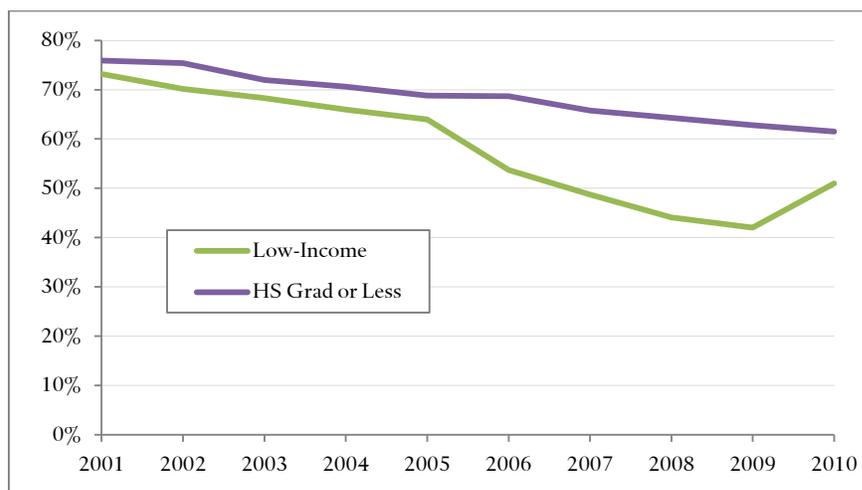
Workforce services in the United States fall short along several dimensions. Many providers are not serving the disadvantaged who would benefit the most, while those who do serve the disadvantaged may be financially penalized. Engagement with employers, the most essential component for effectively targeting services, remains inconsistent and too often at a level that provides only modest benefit either to employers or the unemployed. The main funding streams from the federal government are disbursed without any broader vision, siloed by conflicting outcome measures and performance standards, as well as state and local implementation that mirrors fragmentation at the federal level. Workforce-development professionals struggle to reform their profession within the context of steadily dropping public investment, which throttles the capacity for flexibility and innovation.

There is a vital need for the federal government to overhaul workforce and welfare legislation passed during the late 1990s, develop overarching principles for organizing its human capital investments, and strengthen its investment in effective workforce strategies. Reshaping and strengthening the federal role in workforce development is the most essential precondition to building an effective and coherent human capital system.

INEFFECTIVE TARGETING OF THE DISADVANTAGED

Workforce programs have drifted apart in the populations they serve, with some focusing on the most disadvantaged and others cherry-picking clients who are easier to help. The 1998 Workforce Investment Act abandoned the poverty-reduction focus that characterized previous workforce programs in favor of universal access to all applicants, reflecting arguments that a broader mission would make workforce programs more attractive to employers. This strategy, whatever its merits, has resulted in a rebalancing of services away from low-income clients.²¹ In 2001, 73 percent of clients receiving WIA intensive or training services were low-income; by 2009, only 42 percent were.²² In 2001, 76 percent of clients had earned no more than a high school diploma; by 2010, that share had fallen to 62 percent. The median workforce client continues to be disadvantaged, but provider emphasis is clearly shifting away from the disadvantaged.

Chart 1: Share of WIA Program Participants Receiving Intensive Training Services, Low-Income or High School Graduate or Less



Source: WIASRD Program Data Books, Program Year 2001–2010.

Note: All years are “program years,” which extend from April to March of the following year.

According to interviews with service providers and workforce experts, the main forces driving WIA-funded Workforce Investment Boards away from the neediest clients include declining federal funding; the WIA performance measurement system, which pushes providers to continually place large numbers of clients in paid employment; and the demands of employers, who have become increasingly resistant to taking on workers likely to need additional training after hire.

Community colleges generally succeed in serving disadvantaged adults by taking all applicants at a low cost. But the notoriously low community college graduation rate suggests the disadvantaged are screened out in other ways. The majority of community colleges have yet to confront weaknesses in developmental education, academic advising, high school alignment, and other supports that ensure students complete their studies. As noted earlier, a large proportion of adults lack the foundational and workplace competencies employers expect. Community colleges play a crucial role in serving those less-prepared adults, but they could do a better job.

The migration of services toward job-ready or college-ready clients reduces the value of the most visible service providers. In addition, these providers are less likely to coordinate services with other workforce-related programs that continue to serve disadvantaged clients with serious barriers to employment or postsecondary completion.

EMPLOYER ENGAGEMENT REMAINS INADEQUATE

Few workforce providers in the United States are fully engaged in meeting the needs of employers and boosting their local labor market. This remains true despite the fact that the last major workforce reform focused primarily on making workforce providers more responsive to employers. The 1998 Workforce Investment Act (WIA) established regional Workforce Investment Boards with mandated employer representation, and required them to report the number of clients placed in jobs annually. The states and localities had to develop systems to track job placement and retention rates, which became the main yardsticks of effectiveness. States that fell short of their placement and retention goals would attract federal scrutiny and lose the opportunity to receive special incentive funding.

States and localities responded by holding their contractors accountable for the same measures, often with performance-based contracts.

Similarly, the 1996 Personal Responsibility and Work Opportunity Reform Act prioritized “rapid work attachment” and required states to keep a fixed percentage of welfare recipients in work activities, even if that meant mandating their participation in useless busywork. States who pushed their clients into jobs and off the welfare rolls would be financially rewarded, without tracking the clients into the workforce to see if the work experience provided had any lasting value.

In theory, all this attention to putting clients in jobs was supposed to serve the needs of employers. It does, but in an ephemeral way. From an employer’s perspective, filling positions through a one-stop career center or a community-based organization can improve the efficiency of a hiring process. But employers can make use of other services and technologies to perform the same function. The value of using a publicly funded job-matching service is primarily its low cost, but that must be weighed against the trade-offs—bureaucratic procedures, eligibility restrictions, and a large quantity of paperwork to fill out—all of which discourages smaller businesses from participating.

The more pressing concern employers express is getting applicants with the right mix of vocational, literacy, and workplace skills. Increasingly, employers resist training new employees themselves, yet they also lack strategies to signal their workforce needs and get them met in a systematic way. Applicants with the needed skills are hard to produce in a workforce system devoted to rapid job placement.

There is little evidence available that specifically pertains to the types of workforce services employers value, but one good proxy is to look at the earnings and employment gains achieved by various kinds of workforce services. A study by Washington State found that short-term training courses provided little in the way of an earnings boost. But students who took at least one year’s worth of courses and obtained a credential with value in the market reached the economic “tipping point,” obtaining an income boost ranging from \$1,700 to \$8,500 annually.²³ Investing small amounts in an unemployed adult yields a small return on investment. Investing generously with guidance from employers yields a much larger return.

Postsecondary training toward certificates, certifications, and associate’s degrees has a higher pay-off than short-term workforce interventions, yet the institutions that provide that training are not always as energetic and savvy about engaging with employers as they should be. In particular, community colleges often lack strong partnerships with employers to inform their course offerings and programs of study. They could gain valuable intelligence from real-time labor market information databases, but few community college leaders make use of these services, even in continuing education.

As employers increasingly emphasize skills and credentials, workforce providers continue to put far too much energy into connecting clients with the first available job. As a result, they often fail to hear and respond to the clear signals that employers are sending. Meanwhile, educational providers give employers a deeper level of service, but may not have close-enough relationships with employers to keep up with their needs.

INNOVATIONS THAT WORK

Where the United States excels is in creative employer-engagement programs at the local level, as well as external evaluation of those programs. The most promising strategies being tested include the following:

- *Sectoral partnerships between employers and providers.* A sector partnership focuses intensively on a specific industry in a regional labor market. Instead of trying to serve all employers in a region, sectoral workforce providers develop industry-specific expertise and durable relationships with employers in that sector. For example, Per Scholas in New York City trains young people to work as computer technicians for IT companies. Per Scholas offers a 15-week, 500-hour training program leading to an A+ certification, and includes support in workplace skills such as communication, time management, and interviewing. One study of three sector partnerships, including Per Scholas, found that participants earned 29 percent more than the control group over the next year, or about \$4,000 annually.²⁴
- *Career pathways.* A career pathway is a framework that alternates educational opportunities with employment in a connected and deliberate way.²⁵ In a high-functioning career-pathway system, workforce practitioners collaborate with employers and education providers to develop a road map that shows clients their next employment steps and what will be required to achieve them. A student interested in construction technology, for example, who enters Rogue Community College in Oregon might start by earning a certificate as a Computer Assisted Design (CAD) assistant, then find employment as a drafter assistant or CAD operator assistant, then return to college for an Architectural CAD certificate, obtain a higher-paid job as a CAD drafter or architectural assistant, return to college for an associate's degree in Construction Industry Management, and so on.²⁶ States that have implemented sophisticated career-pathways systems include Oregon, Washington State, Arkansas, Kentucky, and Wisconsin. The U.S. Departments of Labor, Education, and Health and Human Services collaborated on a 2012 joint letter announcing their commitment to promote the use of career-pathways approaches as a promising strategy to help adults acquire marketable skills and industry-recognized credentials.²⁷
- *Combining adult education with occupational training.* The traditional educational path goes through high school and focuses on improving both college enrollment rates and college readiness among high school graduates. But high school dropouts face much steeper odds. Even after obtaining a high school general equivalency degree (GED), they are extremely unlikely to obtain any postsecondary credential. Washington State providers found a way to even the odds for adult students by enabling them to participate in both occupational skills training and adult education services at the same time. Typically, a student enrolls in a class co-taught by occupational and adult education faculty; they collaborate on a curriculum (e.g., allied health) in which foundational skills are taught in the context of an occupation, and occupational vocabulary and concepts are embedded into foundational skills instruction.²⁸ Studies have found that students enrolled in the program, I-BEST, are more likely to graduate and earn more after graduation.

These local workforce programs are mostly young by the usual standards of labor market interventions, yet a growing body of research is finding them effective. Unfortunately, they represent islands of innovation in a status quo sea. The urgent need is to develop, test, and bring to scale these and other evidence-backed innovations around the country.

THE FEDERAL ROLE IN WORKFORCE DEVELOPMENT: WHY IT MATTERS AND WHY IT FALLS SHORT

The missing glue in the U.S. national human capital system is the federal government. Despite the remarkable innovations that have taken place in a few states and localities, those innovations will re-

main isolated and vulnerable to backsliding without a strong federal role. At its best, the federal government can support the development of best practices and spread them across state boundaries.

The federal role is especially important in the development of human capital. Unlike states and localities, the federal government can fund programs that cross jurisdictional lines and support populations that may be disfavored at the local level. For example, local governments are historically reluctant to provide workforce services to migrant workers who do not settle in the communities where they work. The federal government can also commission cutting-edge research to develop the evidence base for effective programs and then incorporate that research into the actual programs. Finally, the federal government can sustain innovative programs in a way that state and local governments find both fiscally and politically difficult.

The federal government's investments should align within a common vision to reach their maximum potential. That is far from the case today. In 2009, the U.S. Government Accountability Office found forty-seven different workforce programs spanning nine federal agencies, of which forty-four serve overlapping populations.²⁹ This influential report has prompted proposals to turn all federal workforce programs into block grants to the states, which would essentially eliminate the federal role in workforce development. A block-grant system would frustrate the essential role that the federal government should play: supporting best practices in employer engagement, targeting services to the disadvantaged, and identifying and spreading evidence-backed best practices.

As is, the federal role in the workforce shrinks year after year, nibbled away by budget cuts. Adjusted for inflation, WIA workforce funding dropped by 59 percent from 2000 to 2010, even as the number of unemployed Americans who could benefit from those services more than doubled. The stalemate over sequestration will cause an additional 2 percent cut in federal workforce funding in 2013, with more to come.

The impact of steadily deteriorating funding has been to force the workforce field into a reactive crouch. Providers find themselves spending most of their budgets on modestly useful services for which they are held accountable, notably job search and placement. Occupational training has become a residual use of funding, because required services absorb almost all of their budgets. In 2008, only 9 percent of the one million adults served by the federally funded workforce system obtained a credential of any kind.³⁰

Community colleges have done a better job of protecting their operating budgets, but they too are losing ground. The most important federal support for community colleges, the Pell grant, has lost much of its value relative to tuition over the past two decades. During the Obama administration, Pell grant funding has grown, partially reversing the ground lost in previous administrations. Unfortunately, Pell eligibility has also eroded for working adults. Congress reduced the number of semesters students can qualify for Pell, eliminated access to students in programs that integrate preparation for a high school equivalency with college enrollment, and revoked Pell grant availability in the summer semester only a year after launching it. These provisions may seem like the stuff of financial aid wonkery. But working adults have a much harder time getting and using financial aid, and without it many are forced to drop out of college.

A smarter strategy would see the reinvention of workforce development in the United States, enabling the federal government to fulfill a unifying national role while stepping out of the way of state and local governments as they develop innovative strategies tailored to their respective labor markets.

Unleashing the U.S. Workforce

Programs to develop human capital potential are potent engines of regional economic development. What saps their potential is that the parties involved—service providers, community leaders, agency officials, and employers—have not been given the tools or resources to keep up with the changing economy.

The majority of states and localities continue to oversee isolated programs that respond to conflicting performance outcomes. They are discouraged from innovating to meet the most urgent needs of the “dual customers” they serve: employers and individual clients. Too many one-stop centers engage with employers only as competitors to private staffing companies, and struggle to meet overwhelming demand for job-seeking assistance with few resources. Too many community colleges allow students to drift through remedial classes on an avoidable path toward dropout. Too many education programs ignore opportunities to connect their instruction to career and college readiness.

In some regions, however, new ways of educating, training, and connecting to middle-skill employers are taking shape. Regional innovators recognize that workforce development has become a hybrid field comprised of public agencies and private stakeholders, so they knock down organizational silos and explore new strategies to build collaborative relationships. Furthermore, they develop new strategies to enable employer demand to drive workforce investments. That means structuring a leading role for employers and taking advantage of real-time data on job postings in the labor market.

The U.S. workforce system should be transformed into a kind of informal partnership between the federal government and regional innovators. Federal agencies should align their program strategies and outcome measures, provide support and accountability for evidence-based innovation at the local and state level, and then encourage the spread of interventions that are shown to be effective.

Such a partnership is already quietly beginning in the form of the Trade Adjustment Assistance Act for Community College and Career Training grants (TAACCCT). This program, created in the same legislation that enacted the Affordable Care Act, directs grant funding to consortia of community colleges. Some consortia are in the same labor market or state, and some are connected by their sectoral focus. But the Department of Labor is supporting these colleges to try new and innovative strategies, collect evidence of their effectiveness, and share that information with other colleges—along with open-source curricula and other materials. As the program managers learn from the experience of each round of grantees, they overhaul the terms of the next round. Many of the best partnerships between community colleges, employers, and workforce providers may come out of the little-noticed TAACCCT initiative.

The main failures of the current U.S. human capital system—ineffective targeting of high-needs clients, weak employer engagement, and inadequate and compartmentalized funding—can be fixed. The following recommendations point the way.

To more effectively target high-needs clients

Ramp up support for adult education. Although workforce training investments should be driven by labor market data and direct employer input, a labor-surplus economy is bound to lead to some wast-

ed training dollars. One strategy to minimize such waste is to ramp up investment education and training that is general and portable across sectors. The best example of such an investment is adult education. Helping adults improve their literacy, numeracy, and English-language proficiency will prepare them for stable employment in almost any sector. However, adult education needs to be more closely connected to college and career readiness, and new investments should reflect that priority.

Reward providers for “milestone” services, not just job placement. Some clients are harder to serve than others. This simple reality is often obscured by the imperative workforce and educational providers feel to meet government-imposed performance standards. High school dropouts, foster youth, ex-convicts, adults with disabilities—these are just some of the clients whose needs are poorly met because they cannot be quickly and easily connected to jobs, careers, and college credentials. Since performance-based contracting is not going away anytime soon (and for good reason), the outcomes used ought to reflect the distance traveled by clients with barriers to employment. Factoring in milestone achievements that contribute to the final outcomes would reward providers who assist in preparing clients to achieve career goals. Those milestones might include successful completion of an internship, a workplace skills module, a high school equivalency, or a gateway course at a postsecondary institution. They should balance rigor and realism in recognizing the achievements of highly disadvantaged clients.

To strengthen employer engagement

Develop a national Learning Exchange database. The Georgetown Center for Education and the Workforce has proposed an ingenious strategy to connect high school and postsecondary programs with the labor market: the Learning and Earning Exchange.³¹ Several states have already created “data warehouses” that link high school and college enrollment data with the wage-earning data employers provide to unemployment insurance. The Learning and Earning Exchange would take this strategy further, by creating a national data warehouse that includes transcript data on certificates, employer-based training, industry-based certifications, apprenticeships, and associate’s degrees, and linking them to wages earned in the labor market. Such an innovation could transform the workforce field by providing both prospective students and institutions with hard information about which training strategies boost earnings most effectively, for whom, at what cost in time and money, and what the cost of dropping out might be. A shorter-term goal would be for states to develop administrative and wage-matching data warehouses and make them available for public policy research and analysis.

Fund competitive grants to explore most promising human capital models. The TAACCCT program has demonstrated the potential of boosting innovation through competitive grants to community colleges. There should be more competitive grant programs that bring together employers and all of the main participants in workforce development—one-stop centers, community-based organizations, colleges and universities, labor unions, and others—to shape new strategies for meeting human capital needs in local labor markets. These grants are highly cost-effective in driving systemic change, since a relatively small appropriation can have disproportionate effects in spreading innovative practices.

To rebuild and integrate federal human capital development programs and funding

Overhaul the Workforce Investment Act to become the core of a purposeful federal workforce system. The fragmented and outdated aspects of the federal workforce system will not be solved by rolling workforce programs into a large block grant. Instead, federal funding should support the development of best practices in every state. That means revising the Workforce Investment Act to reward and incentivize collaboration across service sectors. For example, Congress should empower the U.S. Department of Labor to develop a set of performance measures that span workforce development, postsecondary education, and adult education. One model can be found in Washington State, where policymakers have developed an “Integrated Performance Information” system that identifies momentum points to achieving productive careers and obtaining jobs that pay family-supporting wages.³²

Rework postsecondary education policy to meet the educational needs of the workforce. Postsecondary institutions need to become more responsive to adult students and employers. Adult-friendly provisions in Pell grants that were abolished should be restored: notably year-round eligibility, which enabled students to accelerate their education and graduate sooner; the “ability to benefit” test, which allowed students without a GED to enroll in college by proving their ability to benefit from college; and longer lifetime limits on completion. In addition, the federal government should consider developing a system of competitive grants to support innovations around student success and linkages with adult education, workforce development, and nontraditional financial aid.

Restore federal funding cuts to workforce development. As the American economy has grown and grown more complex, the skills gap has widened as funding to close that gap has dwindled. When Congress reauthorizes WIA, it should substantially boost support for the nation’s workforce-development system. The political environment in Washington, DC, strongly tilts against new funding. Still, the U.S. government is supposed to support strong claims rather than strong interests, and the imperative to provide skilled workers for the U.S. knowledge economy should be a strong claim. New funding should be structured to incentivize states to build out statewide sectoral initiatives, career pathway models, and integrated education and training programs, as well as other strategies to connect disadvantaged adults to career and postsecondary success.

Conclusion

The United States cannot afford to let the system for building and retraining U.S. human capital wither away. It is too vital to the nation's competitiveness and to the future of disadvantaged communities around the country.

It is telling that both candidates for the presidency in 2012 strongly supported expanding and integrating the nation's workforce-development system, despite the willingness of the political parties they represented to disinvest in that system over the past decade. The emerging knowledge economy is pitiless toward individuals who lack the education and the skills to contribute to employers in their local labor market, and equally pitiless toward employers who cannot find the skilled workforce to grow and sustain their businesses.

Ensuring continued prosperity into the next generation requires placing a high priority on strengthening human capital. That means creatively restructuring the funding and governance of workforce delivery systems. But workforce training can no longer exist as a domain apart from primary and secondary education, postsecondary education, social services, and economic development. The most effective strategies will be collaborative, with the federal government playing a powerful coordinating role.

About the Author

Thomas Hilliard is the senior fellow in Workforce Development Policy at the Center for an Urban Future. He has analyzed several critically important aspects of workforce policy for the Center, including the economic value of community college completion, barriers to foster youth success in the workforce, and declining support for English-language instruction. His reports have appeared in local and national media outlets, including the *New York Times*, *Wall Street Journal*, *New York Daily News*, CNN, WNYC, and NY1. He previously served as senior policy associate at the Albany-based Schuyler Center for Analysis and Advocacy, where he launched an initiative to expand postsecondary opportunities for low-income adults. Hilliard has also served as director of health policy to New York City public advocate Mark Green and assistant director of medicine at Gouverneur Healthcare Services, a freestanding clinic on the Lower East Side.

Endnotes

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1. Jaison Abel and Richard Deitz, "Job Polarization and Rising Inequality in the Nation and the New York-Northern New Jersey Region," *Current Issues in Economics and Finance*, vol. 18, no. 7, Federal Reserve Bank of New York, October 1, 2012, http://www.newyorkfed.org/research/current_issues/ci18-7.pdf.
 2. Ibid.
 3. "The Rise and Risks of the Contingent Workforce," presentation, Emergent, June 2011, <http://emergentdotcom.blogspot.com/2011/06/rise-and-risks-of-contingent-workforce.html>. Estimate based on Bureau of Labor Statistics data.
 4. Anthony Carnevale et al., "The College Advantage: Weathering the Economic Storm," Georgetown Public Policy Institute and Georgetown Center on Education and the Workforce, 2012, <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/CollegeAdvantage.ExecutiveSummary.081412.pdf>
 5. Anthony Carnevale et al., "Career and Technical Education: Five Ways That Pay Along the Way to the B.A.," Georgetown Public Policy Institute and Georgetown Center on Education and the Workforce, September 2012, http://www.insidehighered.com/sites/default/server_files/files/CTE_FiveWays_FullReport_Embargoed.pdf.
 6. Anthony Carnevale et al., "Help Wanted: Projections of Jobs and Education Requirements Through 2018," Georgetown Center on Education and the Workforce, June 2010, <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/FullReport.pdf>.
 7. C. Brett Lockard and Michael Wolf, "Occupational Employment Projections to 2020," *Monthly Labor Review*, January 2012, <http://www.bls.gov/opub/mlr/2012/01/art5full.pdf>.
 8. Jason Faberman and Bhashkar Mazumder, "Is There a Skills Mismatch in the Labor Market?" *Chicago Fed Letter*, July 2012, http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2012/cfljuly2012_300.pdf; also, see Jesse Rothstein, "The Labor Market Four Years Into the Crisis: Assessing Structural Explanations," NBER working paper no. 17966, March 2012, <http://www.nber.org/papers/w17966.pdf>.
 9. Catherine Rampell, "The Case of the Missing Skills," *New York Times*, May 21, 2012, <http://economix.blogs.nytimes.com/2012/05/21/the-case-of-the-missing-skills/>.
 10. John Bridgeland et al., "Across the Great Divide: Perspectives of CEOs and College Presidents on America's Higher Education and Skills Gap," Civic Enterprises and Corporate Voices for Working Families, March 2011, <http://www.corporatevoices.org/system/files/Across%20the%20Divide%20Final%20Report.pdf>. The survey was conducted by Peter D. Hart Research Associates.
 11. Tom Morrison et al., "Boiling Point: The Skills Gap in Manufacturing," Deloitte and the Manufacturing Institute, 2012, <http://www.themanufacturinginstitute.org/-/media/A07730B2A798437D98501E798C2E13AA.ashx>.
 12. Mona Mourshed et al., "Education to Employment: Designing a System that Works," McKinsey Center for Government, 2012, http://dl.njit.edu/mnj/Education-to-Employment_FINAL.pdf.
 13. Michael Greenstone and Adam Looney, "Building America's Job Skills with Effective Workforce Programs: A Training Strategy to Raise Wages and Increase Work Opportunities," Brookings Institution, November 2011, http://www.brookings.edu/-/media/research/files/papers/2011/11/training%20greenstone%20looney/11_training_greenstone_looney.pdf.
 14. Elisabeth Jacobs, "Creating a Virtuous Circle: Workforce Development Policy as a Tool for Improving the Prospects of America's Unemployed Workers," Brookings Institution, February 2013, http://www.brookings.edu/-/media/research/files/papers/2013/02/13%20workforce%20training%20jacobs/creating%20a%20virtuous%20circle%20_jacobs021313.pdf. See also Rand Ghayed and William Dickens, "What can we Learn by Disaggregating the Unemployment-Vacancy Relationship?" Federal Reserve Bank of Boston Policy Brief no. 12-3, 2012, <http://www.bostonfed.org/economic/ppb/2012/ppb123.pdf>.
 15. Mark Kutner et al., "A First Look at the Literacy of America's Adults in the 21st Century," U.S. Department of Education, National Center for Educational Statistics, December 2005, http://nces.ed.gov/naal/pdf/2006470_1.pdf.
 16. Christina Lee, "SHRM Survey Findings: SHRM-AARP Strategic Workforce Planning," Society for Human Resource Planning, April 9, 2012, <http://www.shrm.org/research/surveyfindings/articles/pages/strategicworkforceplanning.aspx>.
 17. Carnevale et al., "Career and Technical Education," 2012.
 18. "Developed" nation refers to members of the OECD. Data compiled from Office of Economic Development by the author. See "Employment and Labor Markets: Key Tables from OECD," http://www.oecd-ilibrary.org/employment/employment-and-labour-markets-key-tables-from-oecd_20752342.

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19. Lori Kletzer and William Koch, "International Experience with Job Training: Lessons for the United States," in Christopher O'Leary et al., eds., *Job Training Policy in the United States* (Kalamazoo, MI: W.E. Upjohn Institute, 2005).
 20. Ibid.
 21. Neil Ridley, "Workforce Investment Act: Strengthening Priority of Service for Low-Income Adults through WIA Reauthorization," Center for Law and Social Policy, June 2010, <http://www.clasp.org/admin/site/publications/files/WIAServices.pdf>.
 22. In 2010, the low-income share rose briefly to 51 percent as a result of stimulus funding.
 23. David Prince and Davis Jenkins, "Building Pathways to Success for Low-skill Adult Students: Lessons for Community College Policy and Practice from a Statewide Longitudinal tracking Study," Community College Research Center, Teachers College, Columbia University, 2005, http://www.sbctc.ctc.edu/docs/education/ford_bridges/bldg_pathways_to_success_for_low-skilled_adult_stdts.pdf.
 24. Sheila Maguire et al., "Tuning In to Local Labor Markets: Findings from the Sectoral Employment Impact Study," Public/Private Ventures, 2010, <http://www2.oaklandnet.com/oakca/groups/ceda/documents/report/dowd021455.pdf>. The three sector partnerships are Per Scholas, New York City; Jewish Vocational Service, Boston; and Wisconsin Regional Training Partnership, Milwaukee.
 25. Researchers and the U.S. Department of Labor define the career pathways framework more formally as "a series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment in that sector." See Davis Jenkins, "Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy," Workforce Strategy Center, August 2006, http://www.workforcestrategy.org/images/pdfs/publications/WSC_pathways8.17.06.pdf.
 26. "Construction Technology Map," Rogue Community College website, accessed April 5, 2013, <http://www.roguecc.edu/Programs/CareerPathways/roadmap.asp?map=CONST>. Note that credits earned toward certificates also count toward associate degrees.
 27. Brenda Dann-Messier et al., public letter, U.S. Department of Education, U.S. Department of Labor, U.S. Department of Health and Human Services, April 4, 2012.
 28. Brenda Dann-Messier, "Use of Funds Provided Under the Adult Education And Family Literacy Act (AEFLA) for Integrated Education and Training," Program Memorandum, U.S. Department of Education, Office of Vocational and Adult Education, June 8, 2010, <http://www2.ed.gov/about/offices/list/ovae/pi/AdultEd/aepla-funds-for-iet.pdf>.
 29. Andrew Sherrill, "Employment and Training Programs: Opportunities Exist for Improving Efficiency," Testimony before the Subcommittee on Labor Health and Human Services, Education and Related Agencies, Committee on Appropriations, U.S. House of Representatives, U.S. General Accounting Office, April 7, 2011, <http://www.gao.gov/assets/130/125959.html>.
 30. Jane Oates, Training and Employment Guidance Letter No. 15-10, U.S. Department of Labor, Employment and Training Administration, December 15, 2010, <http://wdr.doleta.gov/directives/attach/TEGL15-10acc.pdf>.
 31. Carnevale et al., "Career and Technical Education," 2012.
 32. Bryan Wilson, "Integrated Performance Information for Workforce Development: A Blueprint for States," Washington State Workforce Training and Education Board, February 2005, <http://www.wtb.wa.gov/Documents/IPI.pdf>. See also Evelyn Ganzglass, "New Directions for Workforce Education and Training Policy Require a New Approach to Performance Accountability," Center for Law and Social Policy, February 2010, http://www.clasp.org/admin/site/publications/files/Workforce_Investment_Act_Recommendations_for_Shared_Accountability_System.pdf, and Marcie Foster, "Refocusing Adult Education on Career and Postsecondary Success," Center for Law and Social Policy, April 2012, <http://www.eric.ed.gov/PDFS/ED538050.pdf>.