

Career Pathways in Disparate Industry Sectors to Serve Underserved Populations

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Abstract

Since beginning his first term in office in January 2009, President Obama has called on community colleges to be a primary driver of college completion and workforce development. Career pathways are chief among the Obama administration's recommended approaches to address the middle-skills gap that some economists believe plagues the economy and fuels the nation's jobless recovery. High on President Obama's wish list is occupational training in industry sectors considered essential to the economy, including sectors such as health care and information technology. In this paper, I review various career pathway initiatives that have provided a backdrop for new federal policy that is positioning community colleges to train, credential, and employ adult learners and help to address the nation's economic woes. The paper considers the balancing act that community colleges are playing to fill the middle skill gap and improve the economy while still acting as primary gateway to college for America's diverse citizenry.

Introduction

Barak Obama assumed the office of President of the United States in January 2009 under the worst economic circumstances the nation had faced since the Great Depression. The need to turn around an economy that was demonstrating massive job loss was immediate and profound. From the beginning, President Obama made a strong commitment to education and workforce training as a means of economic recovery. His orientation to human capital was evident in his focus on a globally competitive public education system, from P-K to higher education, as well as workforce development for adults who need to return to the work after experiencing unemployment.

Passed in February 2009, the American Recovery and Reinvestment Act (ARRA) amended the Trade Act of 1974 to authorize the Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program. Soon thereafter, on March 30, 2010, President Obama signed the Health Care and Education Reconciliation Act that provided \$2 Billion over four years (2011-2014) for TAACCCT. Unprecedented in the commitment of federal funds to community colleges, President Obama described TAACCCT as a “down payment” on his proposed \$12 Billion American Graduation Initiative (AGI) that called for 5 Million more community college degrees and certificates by 2020. While hosting the first-ever *Community College Summit* in October 2010, President Obama made a clear linkage between community colleges and the economy when he noted that community colleges are “one of the keys to the future of our country. We are in a global competition to lead in the growth industries of the 21st century. And that leadership depends on a well-educated, highly skilled workforce” (The White House, 2011, p. 11).

President Obama professed that the U.S. crisis in unemployment and college degree attainment could be addressed by widening access to college while simultaneously increasing degree completion and workforce development. In repeated remarks the President observed a solution to the nation’s economic woes required an increased focus on training adults who lack the requisite skills to find employment and enter the middle class. In fact, training for and filling middle-skill jobs has been a priority for the nation for some time, according to Carnevale, Smith and Strohl (2010) who predicted that by 2018 the U.S. labor force would fall short by 3 million of the 22 million new postsecondary degrees needed to fill middle-skill jobs. Carnevale et al. suggested that, if more citizens were prepared for middle-skill jobs, the U.S. economy would be strengthened and grow.

Whereas this perspective on middle-skill jobs is pervasive in the press as well as the academic literature, it runs counter to some research on the U.S. and other industrialized economies that show middle-skill jobs are actually declining. Numerous economists have observed that the U.S. economic recovery from recession has occurred while unemployment has remained high, creating a “jobless recovery” (see, for example, Coibion, Gorodnichenko, & Koustas, 2013, p.). One theory suggests that the jobless recovery is a result of a skills mismatch between workers who need jobs but do not have the skills to fill jobs in sectors that need employees, such as health care. Whereas this theory has face validity, an alternative explanation is “job polarization”, which suggests

the nation's jobless recovery has not occurred because middle-skill jobs have not been as robust as jobs at either end of the occupational continuum (i.e., non-routine, low-skill jobs and high-skill professional jobs). Economists who advocate for this theory suggest the nation has been losing middle-skill jobs (see, for example, Autor, 2010). His theory suggests that middle-skill jobs susceptible to technological automation and off-shoring have been declining for the past two decades, with the Great Recession further exacerbating middle-skill job loss. As a result, workers who seek middle-skill jobs are unable to secure them simply because the jobs don't exist. The bottomline to this position is that, while postsecondary education and workforce development may be needed overall, it is not the cure for the nation's nagging economy, which is rooted fundamentally in missing middle-skill jobs.

What this argument also suggests is that federal policy that spotlights community colleges may have placed them in a very difficult, if not a no-win, position. If the jobless recovery is indeed due to the loss of middle-skill jobs, then the President's relatively short-term workforce development strategy is problematic, at best. With a federal program such as TAACCCT wherein college completion and employment are the key indicators of performance and impact, community colleges may be at risk of failing to meet their goals when, in reality, the possibility of succeeding has always been slim. No matter how well community colleges implement career pathways, these programs may not be successful at putting American's back to work if the jobs that their students are training for don't exist. The next section examines the programmatic approaches that community colleges are taking to educate Americans citizens for employment.

The Career Pathways Solution

Indeed, the federal government endorsed career pathways as a workforce solution only recently, drawing lessons from the output of career pathway models funded by private foundations that have spotlighted community colleges as the centerpiece of the career pathway reform. To this end, the Bill & Melinda Gates Foundation, the Joyce Foundation, Lumina Foundation for Education, and others have advocated for community colleges to be the nation's primary provider of workforce training for low-skilled adults to secure middle-skill jobs. Four foundation-funded initiatives that have gotten a lot of attention are described herein: Breaking Through (BT), Shifting Gears (SG), Accelerating Opportunity (AO), and the Alliance for Quality Career Pathways (AQCP).

Breaking Through

Breaking Through (BT) facilitates the development of local community college programming that integrates academic instruction (pre-college or college level) with technical curricula and leads to credentials and employment (Jobs for the Future, n.d.). A primary goal of BT is to prepare adults who have limited or no postsecondary-level skills¹ to enroll in programs that align curriculum, instruction and support services with employment. Administered by Jobs for the Future (JFF), in association with the National

¹ The term "low-skilled adults" is used widely in policy and is therefore used for the sake of promote clarity; however, the author does not endorse this term and acknowledges that it can be seen as casting a deficit perspective on the student groups discussed in this chapter.

Council for Workforce Education (NCWE), BT also promotes institutional policies intended to improve outcomes and promulgate information about the role community colleges can play in reforming state policy. Following initial support from Charles Stewart Mott Foundation, a number of prominent foundations signed on to support BT and fund career pathway programming across the nation. (Table 1 summarizes BT and three other foundation-supported initiatives discussed in this chapter.)

The origins of BT are in descriptive research conducted a decade ago by Liebowitz and Combes-Taylor (2004) who identified four “high leverage” strategies to support workforce preparation for low-skilled adults. The four strategies are: a) the integration of institutional structures and systems, b) the acceleration of the pace of learning, c) observable labor market payoffs, and d) comprehensive support services. *Integrated institutional structures and systems* emphasize linkages between disconnected programs such as Adult Basic Education (ABE); English as a Second Language (ESL); workforce training, often non-credit; developmental education, also often non-credit; and postsecondary CTE. *Accelerating the pace of learning* emphasizes intensive time in instruction to help students master foundational knowledge and skills and enroll in college-level coursework more quickly than traditional multi-level developmental education courses allow. *Labor market payoffs* follow from student participation in CTE along with other curriculum and instruction that accommodates their working schedules. Last, *comprehensive student support services* help adults navigate work, home and school to complete college and secure credentials for employment. At the conclusion of Liebowitz and Combes-Taylor’s study, they observe that these practices offer promise but are untested, which prompted that BT’s focus on experimentation and cross-site learning through a network of community colleges located throughout the U.S.

Bragg and Barnett (2007, 2008) evaluated BT from 2006-2010, and they concluded varying levels of the four “high leverage” strategies were manifest in two models. The first is a bridge course or program wherein adult learners who lack foundational skills are prepared to enter postsecondary courses through contextualized, workforce-oriented instruction (often non-credit), and the second is a “career pathway” approach that focuses on learners’ comprehensive education and employment needs, beginning at either the pre-college or college level and proceeding through postsecondary education to employment, including the option for students to enter, exit and re-enter college to accommodate changing life and work circumstances. Though baccalaureate-level education was not excluded from the BT model, it was not the focus despite the focus on pathways that allow for students to enter and re-enter the education pipeline.

Over time, enrollment of adult learners grew in six community colleges labeled “leadership colleges”, which was the primary focus of evaluation conducted by Bragg and Barnett. Fairly consistently across the BT colleges, the evaluation results showed that, whereas low income, low academic proficiency, and minority adults were served, BT did not attract large numbers of adults without high school diplomas. Instead, BT served adults who had finished high school but still lacked competence in math, reading and writing that was needed to enter and succeed in college. Despite their being high school diploma recipients, adults recruited to BT needed substantial doses of ABE, Adult

Secondary Education (ASE), ESL, and/or non-credit remedial course work to enter college and enroll in courses that lead to credentials and employment.

Though outcomes were scarce for BT programming, the evaluation showed the retention rates of students as being higher than rates for students in similar courses offered prior to BT (Bragg & Barnett, 2008). Subsequent studies of two community colleges that stood out as leaders among the BT leadership colleges demonstrated this finding, showing substantial proportions of students progressing from pre-college to college-level course work (Barnett, 2010; Bragg, 2010; Bragg, Baker, & Puryear, 2010). Unfortunately, the evaluation stopped short of tracking students to college completion and employment, but despite this serious shortcoming, JFF, NCWE and other supporters were successful in securing additional funding from private foundations to continue experimenting with workforce development programming for low-skilled adults. Specifically, an outgrowth of BT is Accelerating Opportunity (AO), which articulates a target population of non-high school graduates and GED participants.

Table 1. Foundation-Supported Initiatives for Adults

Initiative	Funders	Components	States & Colleges
<p>Breaking Through (BT)</p> <p>Intermediaries affiliated with BT: JFF & National Council on Workforce Education (NCWE)</p>	<ul style="list-style-type: none"> • Charles Stewart Mott Foundation (initial funder) • GlaxoSmithKline Foundation • Bill & Melinda Ford Foundation • Gates Foundation • Walmart Foundation 	<ul style="list-style-type: none"> • Accelerated learning • Comprehensive supports • Labor market payoffs • Aligning programs for low-skill adults 	<p>41 colleges in 22 states: AR, CA, CO, FL, KY, MA, ME, MI, MN, MT, NC, ND, NM, NY, NV, OH, OK, OR, PA, TX, VA, and WA²</p>
<p>Shifting Gears (SG)</p> <p>Intermediaries affiliated with SG: CLASP</p>	<ul style="list-style-type: none"> • Joyce Foundation 	<ul style="list-style-type: none"> • Policy change to leverage improvements in systems and institutional practice • Data utilization to measure and foster improvements in policy and practice • Stakeholder engagement to generate ideas and buy-in to improve systems and institutional change • Strategic communications to cultivate stakeholder support for systems and institutional change 	<p>Six states: IL, IN, MI, MN, OH, and WI</p>
<p>Accelerating Opportunity (AO)</p> <p>Intermediaries affiliated with AO: JFF, NCWE,</p>	<ul style="list-style-type: none"> • Bill & Melinda Gates Foundation • Joyce Foundation • Open Society Foundations 	<ul style="list-style-type: none"> • Explicit articulation of two or more educational pathways that being with ABE or ESL and continue to a 1-year certificate and beyond 	<p>Seven states: GA, IL, KS, KY, LA, MS, and NC</p>

² Source: <http://www.jff.org/projects/current/workforce/breaking-through/20>

Initiative	Funders	Components	States & Colleges
Washington State Board of Community and Technical Colleges, National College Transition Network	<ul style="list-style-type: none"> • Kellogg Foundation • Kresge Foundation • University of Phoenix Foundation 	<ul style="list-style-type: none"> • Strong labor market demand • Acceleration strategies, including contextualized learning and hybrid course designs • Dual enrollment strategies, including I-BEST or I-BEST-like approaches • Comprehensive academic and social student services • Achievement of marketable, stackable, credit-bearing certificates and degrees, with explicit goal of by-passing developmental education • Awarding of some college-level professional-technical credits • Partnerships with Workforce Investment Boards and/or employers 	
Alliance for Quality Career Pathways	<ul style="list-style-type: none"> • Joyce Foundation • James Irvine Foundation 	<ul style="list-style-type: none"> • Participant-focused approaches to instruction and occupational training • Appropriate and meaningful assessment of participants' skills and needs • Supportive services and career navigation assistance for participants in the pathways, including early and ongoing career awareness and exploration and intensive support services for high-need populations • Direct connections to employment that include quality work experiences and employment services 	Ten states: AR, CA, IL, KY, MA, MI, OR, VA, WA and WI

Accelerating Opportunity

Building on BT and the I-BEST model³ supported by the Washington State Board of Community and Technical Colleges (SBCTC), Accelerating Opportunity (AO) seeks to assist adults to matriculate to postsecondary education and employment. Similar to BT, AO has multiple foundation sponsors (Bill & Melinda Gates, Joyce, etc.) that have

³The Integrated Basic Education and Skills Training (I-BEST), developed by the Washington State Board of Community and Technical Colleges (SBCTC) emphasizes the integration of English as a Second Language (ESL) and ABE with CTE, called professional-technical education (PTE) in the Northwest region of the US. I-BEST seeks to increase low-skill students' academic and technical-skills achievement by enabling them to understand the relevance of basic skills education when it is linked to and taught in the context of CTE (Jenkins, Zeidenberg, & Kienzl, 2009).

amassed a total of \$18.5 Million to support local community college program development, state policy alignment, and technical assistance for implementation. Similar to BT, JFF provides AO leaders, with NCWE acting as a partner, along with the National College Transition Network (NCTN) that provides professional development and technical assistance.

Four states (Illinois, Kansas, Kentucky, and North Carolina) were funded to begin AO in 2011, with Georgia, Louisiana, and Mississippi following soon thereafter. These states committed to helping adults secure skills and credentials to succeed in living-wage jobs by changing the way ABE is delivered by community colleges. Specifically, “The initiative is designed to develop and scale up integrated college and career pathway designs that result in more ABE students completing credentials valued in the labor market; and promote state- and institution-level policies that support the implementation and scale-up of these designs” (JFF, n.d.). AO emphasizes changes in adult education delivery; data use for continuous improvement and policy change, including financial strategies; and sustainability and scale up. Documentation associated with AO also specified that, “at least 25 percent of each college’s target population will have: earned at least one marketable, stackable, credit-bearing credential or be in the process of doing so; attained at least one term’s worth of college-level credits (12 credit hours for a semester system; 15 for a quarter system); and be prepared to enter additional college-level programs without the need for developmental education” (JFF, 2009, n.d.). To scale, states are encouraged to engage other community college and policy leaders and communicate broadly about lessons learned about and through AO.

AO contracted with the Urban Institute to act as a third-party evaluator (see Anderson, Eyster, Lerman, Conway, Montes, & Clymer, n.d.). Though relatively young compared to BT, the AO evaluation has revealed mixed results that parallel BT. Whereas most of the states engaged in strategic efforts to recruit adult learners without high school diplomas, the preponderance of AO participants already had high school diplomas but lacked competencies needed to move to the college level, with many enrolled in ABE or ASE. In a finding similar to BT, these results do not deny the potential of AO to help adults who are not college-ready to prepare for college-level instruction, but they do suggest a mismatch in recruitment of the stated target group of ABE learners relative to the students who are being enrolled. To its credit, the students who actually participate in AO do appear to be a long way from employment in middle-skill jobs.

According to the Urban Institute evaluators, most elements of the AO model were evident in the participating states that were visited to examine their implementation strategies on the ground. However, some strategies such as team teaching were underutilized due to the high cost of instruction that is associated with the true I-BEST team-teaching model. Also, comprehensive student supports offered through AO were not especially different or enhanced from other student services offered by the participating community colleges. It is worth noting, however that two states that had experience with bridge and career pathways were farther along in implementing student services sensitive to the needs of low-skilled adults than other states. The evaluation report noted that changes of the magnitude of AO do not happen quickly and that states having more time and experience

emerged as having progressed farther with their implementation of AO than states with limited or no experience.

Shifting Gears

Shifting Gears (SG) was launched about the same time as BT with over \$8 Million in grants awarded by the Joyce Foundation. Taking a regional approach, from 2006 to 2011 six states were incentivized to engage in state policy initiatives seeking to increase the number of low-skilled, low-income Midwestern adults to obtain college-level occupational credentials with value in the labor market (The Joyce Foundation, 2013). The initiative was founded on the premise that postsecondary education that leads to industry-valued credentials leads to living-wage (middle class) employment. SG also provided technical assistance to help the six Midwestern states to accelerate state policy reform, calling attention to the fiscal and human resources necessary to improve the educational access and opportunity for low-skill workers in the Midwest region of the U.S.

The four core strategies associated with SG, according to its third-party evaluators (Price & Roberts, 2009) are: 1) policy change to leverage improvements in systems and institutional practice; 2) data utilization to measure and foster improvements in policy and practice; 3) stakeholder engagement to generate ideas and buy-in to improve systems and institutional change; and 4) strategic communications to cultivate stakeholder support for systems and institutional change. Similar to BT, bridge programs and career pathways are employed with SG, with bridge programs emphasizing initial entry into the postsecondary education pipeline through ABE and ESL programs. The notion of career pathways associated with SG enables students to earn industry-recognized credentials as they progress from one level of education to the next and at critical milestones in their progress toward a college credential (Foster, Strawn & Duke-Benfield, 2011), thus introducing the notion of stackable credentials. Foster et al. who are associated with CLASP, an organization that provided technical assistance to SG, theorized that students' career options and earning potential would become clearer if they could navigate college, secure credentials, and enter employment.

Evaluators of SG concluded that four of the six states made substantive progress with implementation of policy and program innovations by reaching “over 4,000 low-skilled workers” (p. 2) by 2011 (Price & Roberts, 2012; Roberts & Price, 2013). Their evaluation did not provide a definition of “low-skilled workers” but profiles of students included in the report focused on adults who did not complete high school and who were unemployed or working in low paying jobs, along with dislocated or unemployed high school graduates without postsecondary education.

Consistent with the goals of SG to influence state policy, the evaluators praised progress made in the four states to: 1) enhance system alignment and collaboration among adult, workforce, and community college and technical education; 2) gain buy-in from senior state leadership; 3) prompt the adoption of state administrative rules and regulations, and in some cases legislation supporting program implementation; and 4) engage with practitioners to build champions for change. Recommendations in the final report focused

on scaling innovations; addressing cultural change among institutional, faculty and front-line leaders; expanding capacity to use data to inform state policy; and reallocating financial resources to SG-type programming (Roberts & Price, 2012).

Alliance for Quality Career Pathways

The youngest of the foundation-supported initiatives is the Alliance for Quality Career Pathways (AQCP) led by the Center for Law and Social Policy (CLASP) (see <http://www.clasp.org/issues/postsecondary/pages/aqcp-framework-version-1-0>). This project attempts to tackle persistent state policy issues with career pathways, especially improving evaluation and data utilization. Through engagement with state policy leaders in 10 states, AQCP attempts to learn from previous career pathways initiatives such as BT and SG to create a comprehensive framework for implementation and evaluation. Authors of the emerging ACQP framework address quality issues that appear to keep career pathways from meeting the needs of adults who have limited postsecondary education and work experience. To this end, ACQP suggests career pathways should lead to postsecondary education and marketable credentials that prepare adults to enter living-wage employment that, in turn, strengthens local and state economies.

Because of the newness of AQCP, the definitions offered by CLASP are not firm because the democratic process that engages the participating states and experts is still unfolding. However, it is evident that many of the core features of career pathways mentioned by other initiatives persist in AQCP, such as the focus on sequential curriculum that extends from non-credit to credit, the focus on stackable credentials, the intentionality of placing students/graduates in employment, and so forth, with the added clarification that career pathways exist on multiple levels: individual, program, and system. ACQP calls upon practitioners to distinguish the theoretical (albeit aspirational) notion of career pathways from career pathway programs and career pathway systems.

Specifically, *career pathways* refer to connecting progressive levels of basic skills and postsecondary education, training, and supportive services to optimize the progress that students make to college credentialing and employment. *Career pathway programs* are comprised of: 1) participant-focused approaches to instruction and occupational training; 2) appropriate and meaningful assessment of participants' skills and needs; 3) supportive services and career navigation assistance for participants (including early and ongoing career awareness and exploration and intensive support services for high-need populations); and 4) direct connections to employment that include quality work experiences and employment services. *Career pathway systems* focus on partnerships between local, regional or state agencies and employers to build, scale, and sustain career pathway programs. A state career pathway system is built and maintained by a partnership of state-level agencies, organizations, and employers/industries that provides leadership, supportive and aligned policies and resources to create demand-driven career pathway systems and promote quality, scale, and sustainability.

According to ACQP, a feedback loop should be developed between the state career pathway system and local/regional partnerships so that each is learning from the other in a mutually reinforcing way. Federal agencies should be part of this feedback loop when

they play a role in state and local policy. Ultimately, the ACQP framework suggests both state career pathway systems and the local/regional level should articulate a shared vision and strategy, engage industry sectors and employers, align policies and measures, use data for continuous improvement, and build capacity among partners to fully implement the concept. In so doing, ACQP attempts to address lingering system-level challenges that prior career pathway initiatives have faced in failing to secure long-term funding and support at the state and regional levels. Addressing the role (or potential role) for the federal government in career pathways is discussed in the next section.

The Federal Role in Career Pathways

As career pathways emerged and evolved over the last decade, federal agencies took notice and eventually entered into the conversation. Particularly noteworthy is the support shown for career pathways by President Obama's Administration. In April 2012, the Department of Labor's Employment and Training Administration; the Department of Education's Office of Vocational and Adult Education; and the Department of Health and Human Services' Administration for Children and Families signed a joint letter supporting career pathways and offering the first federal definition, stating career pathways are:

[A] series of connected education and training strategies and support services that enable individuals to secure industry relevant certification and obtain employment within an occupational area and advance to higher levels of future education and employment in that area. (p. 1)

One could argue (and I do) that this milestone became possible because prior efforts prompted by private foundations and states provided the seed funding for experimentation that was needed to launch a federal investment in career pathways. Whereas the 2006 reauthorization of federal legislation on career and technical education (CTE) endorsed the notion of career pathways and programs of study that link secondary and postsecondary curricula (see, for example, Taylor, Kirby, Bragg, Oertle, Jankowski, & Khan, 2009), this framework differs substantially from career pathways developed through BT, SG and others. From the federal CTE perspective, career pathways and programs of study help mostly K-12 students pursue a wide range of college and career goals, beginning with career exploration, and eventually matriculating into college for career preparation. Programs of study leading to associate degrees are encouraged by the federal CTE policy, and baccalaureate degrees, including Applied Baccalaureate (AB) degrees (Bragg & Ruud, 2011), are also mentioned as a desirable outcome, which is not the case for BT, AO, SG or ACQP.

More specifically, in 2011, OVAE formed the 3-year Technical Work Group (TWG) initiative on *Designing Instruction for Career Pathways* (see: <http://lincs.ed.gov/publications/html/acp-newsletters/vol1issue1.html>) to acknowledge and support career pathway curriculum and instruction. This TWG was comprised of national, state and local experts who grappled with definitions of career pathways and helped OVAE to identify and screen curriculum resources suitable for dissemination nationally. The primary focus was adult education providers and community colleges,

with a nod to K-12 education. U.S. Department of Labor staff were invited to attend the TWG meetings (virtual and in person) and be part of deliberations but by and large, the focus was not on Workforce Investment Boards (WIBs) and workforce providers.

Following on the heels of this TWG, OVAE⁴ launched a new initiative called *Technical Assistance for States Developing Career Pathways Systems*, which is 3-year project to provide technical assistance to state and local programs to integrate adult education into career pathway systems by building on lessons learned from earlier federal and state investments, including those mentioned earlier in this paper (personal communications with Chrys Lamardo, December 12, 2013). Though early because the group has just formed, this initiative seems to be fairly closely aligned to the state policy implementation and evaluation framework emerging from ACQP.

Taking a different approach, the U.S. DOL's Education Training Assistance (ETA) division developed the *Career Pathways Toolkit* (Kozumplik, Nyborg, Garcia, Cantu, & Larsen, 2011) to support state and local implementation of career pathway programs, with particular attention paid to the roles of workforce boards and employer partnerships. In this effort, ETA framed its interest in career pathways as a means of offering workforce training that addresses growing disparities among workers who have different levels of postsecondary education and the labor market, hinting strongly at the "skills mismatch" view of the economy. Linking its goals directly to President Obama's workforce development and college completion agenda and the population of citizens that the U.S. DOL has served historically, the ETA noted that

because the lowest-skilled American workers are not increasing their educational attainment at nearly the same rate as their higher-skilled counterparts, the United States can no longer claim to be a global leader in distributing the benefits of education across the workforce most equally. The Obama Administration has committed to regaining that status by 2020, setting the goal of having every American complete *at least one year of postsecondary education...* [italics added by author]

In 2010 and 2011, we have seen these priorities reflected in federal initiatives sponsored by the U.S. Department of Labor, including the *Career Pathways Initiative*, the *Workforce Innovations Grants*, and the *Trade Adjustment Assistance Community College and Career Training* grants program (TAACCCT). With new guidance outlined in pending WIA [Workforce Investment Act] reauthorization, once the legislation passes, career pathways may well become the model according to which states and tribal communities approach the design and operations of their education and training systems in the coming decades." (Kozumplik et al., 2011, p. 9)

Thus, from the perspective of ETA, career pathways are expected to become a major

⁴ Recently, the Office of Vocational and Adult Education in the United States Department of Education changed its name to the Office of Career and Technical and Adult Education (OCTAE); however, because this paper includes policy that was passed mostly when OVAE was active, this paper uses OVAE to refer to this federal unit.

supplier of workforce training to move low-skilled workers into employment and eventually training that may lead to middle-skill jobs. This vision of career pathways is associated with advancing the U.S. on various global metrics, including global economic competitiveness. Here again, community colleges are seen as a primary instrument of workforce development through postsecondary education and training for low-skilled adults.

Trade Adjustment Act Community College Career Training Act

Over the past three years, President Obama's administration has invested nearly \$1.5 billion in the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program that charges community colleges with creating career pathways that link postsecondary CTE to workforce development in order to move low-skilled adults into employment that will stimulate the economy (U.S. DOL, ETA, 2011). Using TAACCCT as the vehicle for career pathways, the Obama administration has presumably positioned community colleges as a premier workforce provider nationally (Congressional Budget Office, 2011).

Through 3- or 4-year grants, TAACCCT incentivizes U.S. postsecondary institutions to help adults acquire the skills, degrees, and credentials needed for employment. The goals of TAACCCT require community colleges develop through either new or modified curricula in "high skill, high wage" industry sectors that can prepare Trade Adjustment Act (TAA)⁵-eligible workers, unemployed and displaced workers, veterans, and others for postsecondary education to complete credentials, including certificates and degrees, and middle-skill jobs. Within the context of TAACCCT, career pathways are an important strategy for grantees to adopt, with awards going to single institutions or consortia involving multiple community colleges and other partners, including universities, workforce agencies and employers.

TAACCCT provides community colleges and other eligible institutions of higher education with funds to expand and improve their capacity to deliver career training and education programs that can be completed in two years or less, with the Round Two and Three TAACCCT solicitations including articulation and transfer agreements with universities that provide baccalaureate degrees. Unique in its mention of baccalaureates relative to career pathways, TAACCCT seems to be giving a nod to other types of colleges and universities that want to pursue federal funding through TAACCCT and address criticisms that the career pathways pay little attention to matriculation of students beyond entry into postsecondary education. This point is important because, while TAACCCT target audience is unemployed, TAA-eligible workers, veterans and others who struggle returning to employment, the audience is not necessarily low-skilled academically. TAACCCT participants who have some college or college degrees may need instruction that begins and extends beyond the lower-rung of the educational ladder that many career pathway programs have been designed to serve.

⁵ The federal Trade Adjustment Act (TAA) provides dollars to support education and training of workers who have lost their jobs and been adversely impacted by industries moving their businesses and employees outside of the United States.

Initial analysis of the TAACCCT grants conducted by the Office of Community College Research and Leadership (OCCRL) suggested over half of the community colleges in the U.S. have received TAACCCT funding, but only modest funding has gone to other types of colleges and universities. The industry sectors with the largest investment of TAACCCT funding are healthcare, Information Technology (IT), and manufacturing, with sectors such as energy and transportation receiving less but still considerable support. Further, several TAACCCT consortia have focused on Science, Technology, Engineering and Mathematics (STEM) as a vehicle for addressing a cluster of industries that require trained workers in science, mathematics and related subjects for a wide range of emerging technical and professional jobs (Bragg et al., 2014).⁶

Analysis of TAACCCT

This section provides analysis and observations about the emergence of TAACCCT grants relative to the foundational work on career pathways supported by private foundations. The section draws upon the literature as well as the experiences of the author in leading two large-scale TAACCCT grants. Whereas these preliminary findings are somewhat speculative, due to the newness of the TAACCCT grants, they provide a basis from which future research can focus attention. Were hard data available for this analysis, it would have been used. However, the complexity of the grants relative to the capacity of grantees and third-party evaluators to secure data at this time precludes in-depth quantitative or qualitative analysis of program and student outcomes. These forms of analysis are forthcoming, to be sure, but they are not available now. Instead, I offer my own observations about how the TAACCCT grantees are implementing career pathways, the effect they may have on program participants, and the ways they may change the landscape of postsecondary education and workforce development, particularly when it comes to community colleges.

First, there are very strong parallels between the program approaches implemented by TAACCCT grantees and the career pathway models supported by the foundations. This is not happenstance as the grantees were required to reference “evidence-based” models and strategies in their proposals. As a consequence, BT, SG, AO, and others are cited liberally in TAACCCT proposals. However, due to the role of the federal government and its support for other federally funded programming such as CTE and dislocated worker training (through the Workforce Investment Act), the career pathways associated with TAACCCT also reference linkages to CTE and WIA-funded programming (as U.S. DOL is the sponsoring agency). For example, some consortia state the goals of their TAACCCT grants include to reform CTE and strengthen relationships between community colleges and Workforce Investment Boards (WIBs). Successful TAACCCT grant proposals also mention “evidence-based” strategies, including student support services, career and advising, and job placement, similar to the key components of

⁶ The Transformative Change Initiative (TCI) is led by OCCRL and The Collaboratory, and this multi-foundation funded-initiative is dedicated to researching and supporting innovations funded through TAACCCT. As part of this work, researchers at OCCRL have analyzed Round One, Round Two and Round Three TAACCCT proposals (winning and losing) to identify patterns of funding, target audiences, career pathway program implementation plans, and intended outcomes. In part, this section utilizes these results to inform the discussion of TAACCCT and community colleges.

models such as BT and AO. With regard to the implementation of career pathways, two models often cited by TAACCCT grantees as having “rigorous evidence” and therefore the focus of TAACCCT are bridge programs and stackable credentials. As a result, there is evidence to suggest TAACCCT does represent a major federal push to endorse, proliferate and even sustain career pathways across the U.S. in a major way, using the community college as the primary vehicle for implementation and sustainability.

With respect to career pathways, less information is available nationally, but two large-scale evaluations conducted by OCCRL provide some insights into program implementation in the healthcare and IT sectors. Looking first at healthcare, total of 87 career pathway/programs of study are being implemented under the healthcare TAACCCT grant. Half of these programs existed prior to the grant, suggesting TAACCCT-grant funds are being used for curriculum modification or for the integration of new technology, or some other change to existing practice. Whereas the healthcare consortium is offering a range of credentials fundable under TAACCCT, the associate degree is the most prevalent credential associated with this consortium, followed by 10-29 credit-hour certificates; then 29 or more credit-hour certificates; and finally short-term certificates that are either non-credit or 10 credit hours or less. These results suggest, while some of the focus of this TAACCCT grant is on entry-level programming, the preponderance is on programs that require substantial college-level course-taking, including associate degrees and certificates of 1-year or more. In this respect, the programs offered under the TAACCCT healthcare consortium are quite different from the career pathways offered under BT, SG and other foundation-funded reforms.

Looking at the IT consortium, the emphasis of programming is again varied by length and credential type, but the focus on certifications of less than 1-year duration is more prevalent in the IT consortium than the healthcare consortium. This finding may reflect changes the occupational structure of the IT sector that have contributed to a proliferation of industry-sponsored certifications. In this regard, initial evidence supports that students secure multiple certifications in as part of enrollment in IT career pathways, but the notion of progressive stackable credentialing is yet to emerge clearly in the data. Rather, what seems to be emerging from the data are patterns of students securing multiple industry-sponsored certificates or students who have previously secured academic degrees now acquiring short-term certifications to specialize in IT and enhance their chances of employment (personal communications with Heather Fox, February 10, 2014). Whether these patterns will persist is unknown as limited time has passed to conduct the longitudinal analysis that is necessary to follow students through their programs of study to secure credentials and obtain employment. In any case, these preliminary results are reflective of the earlier observation from the healthcare consortium data that suggest students participating in TAACCCT are not necessarily using these programs to enter into employment but to secure middle-skill employment. The critical question that needs to be addressed through the third-party evaluation is whether these programs will lead to these types of jobs.

Moving to the issue of evaluation results pertaining to TAACCCT, some evidence has suggested college retention rates are higher than traditional instruction (see, for example, Bragg & Barnett, 2008, 2010), but little research has been done to track students through

the full career pathway programs to determine college completion and credentialing is occurring and determine the effects on employment. Most of the evaluations of career pathway models have focused on initial outcomes associated with bridging to college and college-level retention because the focus on entry into college has been the primary focus of students participating in the programs. Some analysis has been done of the I-BEST model that suggests students who complete credentials of about 1-year are more likely to secure family-living wage employment than those who don't complete, but these studies need to be replicated on other models. were awarded minimal funds and limited in timeframe in which the evaluations took place. Only now, as the first round of TAACCCT grantees reaches the conclusion of the funding period, it will be possible to know how adults have benefited from the career pathways supported by federal TAACCCT funds. Research and evaluation is needed to determine whether career pathways are improving student performance, including student retention, completion, credentialing, and employment.

The proposals submitted by both winning consortia indicated the target populations for their career pathways would be TAA-eligible (required by law) and unemployed, underemployed and otherwise “low-skilled” adults who seek programs of study to obtain employment.

Will Obama’s Agenda Make a Difference?

Support for career pathways from various private and public funders has culminated in endorsement from the highest level of the US government. Themes that resonate through the vision of career pathways articulated by President Obama’s administration include preparing adults for postsecondary education and workforce training, industry-recognized certificates and college degrees, and employment in family living-wage jobs. Whereas the endorsement of career pathways by the Obama Administration is important, whether these models and approaches are a good investment still needs to be determined. Limited evidence exists to suggest career pathway initiatives help low-skilled adults advance to middle-skill status, and no results yet speak to specific results for TAACCCT-targeted adult learners, such as TAA-eligible, unemployed, or veterans. There is also incomplete information on whether the hardest to reach adults, including those who lack high school credentials, long-term unemployed, immigrants, and others, are participating in ways advocated by President Obama. In fact, the President’s 2014 State of the Union address suggests the long-term unemployed are still having great difficulty finding their way back into gainful employment, which continues to be a drag on the nation’s economic recovery.

More research is needed to examine federal policies that seek to link community colleges to economic recovery, with more analysis forthcoming from OCCRL and other research groups engaged in third-party evaluation of TAACCCT. These studies may offer insights to understanding the viability of community colleges and career pathways as instruments of workforce development and social mobility for adult learners heretofore underserved by U.S. postsecondary education.

References

- Alssid, J., Goldberg, M., & Klerk, S. (2010, November). Building a higher skilled workforce: Results and implications from the Bridgeconnect national survey. New York: Workforce Strategy Center. Retrieved from http://www.workforcestrategy.org/images/pdfs/publications/bridge_connect_report_2010-11.pdf
- Anderson, T., Eyster, L., Lerman, R., Conway, M., Montes, M., & Clymer, C. (n.d.). *Implementation findings from first year of Accelerating Opportunity, Part II*. Washington DC: Urban Institute. Retrieved from <https://www.google.com/search?q=Accelerating+Opportunity%2C+Urban+Institute&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a>
- Aronson, P. (2008). Breaking barriers or locked out? Class-based perceptions and experiences of postsecondary education. In J. T. Mortimer (Ed.), *Social class and transitions to adulthood. New Directions for Child and Adolescent Development, 119*, 41–54.
- Autor, D. (2010). The polarization of job opportunities in the U.S. labor market: Implications for employment and earnings. Washington, DC: Center for American Progress.
- Barnett, E. (2010, December). *Portland Community College: Breaking Through report-scaling up*. Unpublished report for Jobs for the Future. Retrieved from <http://www.jff.org/sites/default/files/PCC%20Scaling%20up%20report%202010%20final.pdf>
- Bragg, D. (2010, December). *Scaling up FastStart@CCD*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from http://www.jff.org/sites/default/files/CCD_Scale-up_2011.1.5_final%5B1%5D.pdf.
- Bragg, D., & Barnett, E. (2007, March). *Promising breakthroughs: Year one evaluation results of "Breaking Through"*. Unpublished report for Jobs for the Future and the National Council for Workforce Education.
- Bragg, D., Harmon, T., Kirby, C., & Kim, S. (2009). *Initial results of Illinois' Shifting Gears Pilot Demonstration Evaluation*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from http://occrll.illinois.edu/files/Projects/shifting_gears/Report/SG_Eval_Report%20PRINT.pdf
- Bragg, D., & Baker, E., & Puryear, M. (2010, December). *2010 follow-up of Community College of Denver FastStart program*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

Retrieved from http://www.jff.org/sites/default/files/FastStart_Final_12-1.11.10.pdf

- Bragg, D., Dresser, L., & Smith, W. (2012). Leveraging workforce development and postsecondary education for low-skill, low-income workers: Lessons from the Shifting Gears Initiative. *New Directions for Community Colleges, No. 157*, pp. 53-66.
- Bragg, D. D., Kirby, C., Witt, M.A., Richie, D., Mix, S., Feldbaum, M, Liu, S., & Mason, M. (2014, February). *Transformative change initiative*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.
- Carnevale, A.P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: The Georgetown University Center on Education and the Workforce. Retrieved from <http://cew.georgetown.edu/jobs2018/>.
- CLASP. (2012, January). *Working better together: How states are using cross-system approach to improve outcomes for lower-skilled adults in the Shifting Gears initiative*. Washington, D.C.: Author.
- CLASP. (2013, September). *Alliance for quality career pathways beta framework: Executive summary*. Washington DC: Author. Retrieved from <http://www.clasp.org/documents/Exec-Sum-of-AQCP-Beta-Final-091613-1.pdf>
- Foster, M., & Strawn, J., & Duke-Benfield, A. E. (2011, March). *Beyond basic skills: State strategies to connect low-skilled students to an employer-valued postsecondary education*. Washington, DC: CLASP, Center for Postsecondary Education and Employment Success. Retrieved from <http://www.clasp.org/admin/site/publications/files/Beyond-Basic-Skills-March-2011.pdf>.
- Hess, S., Livings-Eassa, L., & Green, K. (2012). Legislation and policies: Levers to drive change. In Center for Occupational Research and Development (CORD) and National Association of State Directors of Career and Technical Education (NASDCTEc), *The career pathways effect: Linking education and economic prosperity*, pp. 73-106. Waco, TX: CORD.
- Jenkins, D. (2006). *Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy* (http://www.workforcestrategy.org/images/pdfs/publications/WSC_pathways8.17.06.pdf).
- Jenkins, D., Zeidenberg, M., & Kienzl, G. S. (2009). *Educational outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a multivariate analysis* (CCRC Working Paper No.16). New York, NY: Columbia University, Teachers

College, Community College Research Center.

- Jobs for the Future. See: <http://jff.org/projects/current/education/accelerating-opportunity/1251>
- Jobs for the Future. (n.d.) *Breaking Through: Helping low-skilled adults enter and succeed in college and careers*. Boston, MA: Author. Retrieved from http://www.jff.org/sites/default/files/BT_description_one_pager_010411.pdf
- Jobs for the Future. (n.d.). *Accelerating Opportunity*. Retrieved from <http://www.jff.org/media/news-releases/2012/accelerating-opportunity-initiative-help/1462>
- Joyce Foundation. (2013, January). *Shifting Gears: Evaluation synopsis*. Chicago, IL: Author. Retrieved from <http://www.joycefdn.org/assets/1/7/ShiftingGearsEvaluationSynopsis.pdf>.
- Kozumplik, R., Nyborg, A., Garcia, D., Cantu, L., & Larsen, C. (2011, September). *Career pathways toolkit: Six key elements of success*. Washington, D.C.: Social Policy Research Associates.
- Office of Vocational and Adult Education. (2011, August). *Promoting college and career readiness: Bridge programs for low-skill adults*. Washington, DC: Author. Retrieved from <http://www2.ed.gov/about/offices/list/ovae/pi/cclo/brief-1-bridge-programs.pdf>.
- Price, D., & Roberts, B. (2009). *Educating adult workers: The Shifting Gears approach to systems change*. Chicago: The Joyce Foundation. Retrieved from http://www.shifting-gears.org/images/PDF/ProjectResources2/sg_systems_approach.pdf
- Price, D., & Roberts, B. (2009). *The Shifting Gears approach to systems change*. Chicago, IL: The Joyce Foundation. Retrieved from http://www.shifting-gears.org/images/PDF/ProjectResources2/sg_systems_approach.pdf
- Roberts, B., & Price, D. (2012, December). *Strengthening state systems for adult learners: An evaluation of the first five years of Shifting Gears*. Chicago, IL: The Joyce Foundation. Retrieved from http://www.joycefdn.org/assets/1/7/SG_Strengthening_State_Systems_Report_-_final.pdf
- The White House. (2011, June). The White House summit on community colleges: Summit report. Retrieved from http://www.whitehouse.gov/sites/default/files/uploads/community_college_summit_report.pdf
- Zeidenberg, M., Cho, S., & Jenkins, D. (2010). *Washington state's Integrated Basic Education and Skills Training Program (I-BEST): New evidence of effectiveness*.

CCRC Working Paper No. 20. New York: Community College Research Center,
Teachers College, Columbia University.