

# Stepping on the Gas: Community Colleges as Engines of Economic Mobility

Pamela Loprest and Cheryl Hyman February 2018 The ideas in this paper were shaped by discussions within the Partnership but do not necessarily represent the views of all members.

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#### ABOUT THE US PARTNERSHIP ON MOBILITY FROM POVERTY

With funding from the Bill & Melinda Gates Foundation, the Urban Institute is supporting the US Partnership on Mobility from Poverty. Led by chair David Ellwood and executive director Nisha Patel, the Partnership consists of 24 leading voices representing academia, practice, the faith community, philanthropy, and the private sector.

The Partnership's definition of mobility has three core principles: economic success, power and autonomy, and being valued in community. Our collective aspiration is that all people achieve a reasonable standard of living with the dignity that comes from having power over their lives and being engaged in and valued by their community.

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## **Executive Summary**

Everyone deserves a chance to get a good education, one that provides not only the skills critical to successfully navigating daily life but those necessary to find a good job. We live in a time when people can no longer rely on a high school diploma to secure a good job. Rather, postsecondary credentials (e.g., education beyond high school, including vocational and technical certificates, associate's degrees, and bachelor's degrees) are more important than ever for economic success. Those who complete a college degree have significantly higher earnings than those who stop at a high school diploma: 70 percent for a four-year degree and 20 percent for a two-year degree.<sup>1</sup> Those completing a nondegree certificate also have higher earnings than high school graduates on average (roughly \$6,000 annually), although estimated returns vary considerably depending on the field of study.<sup>2</sup> Among children whose parents are near the bottom of the income distribution, those who go to a two- or four-year college are nearly four times as likely to move to the top of the income distribution as those who do not go to college (16 percent versus 4 percent).<sup>3</sup>

Community colleges are an important avenue for people to meet the need for postsecondary credentials. These public institutions offer two-year degrees, vocational and technical certificates, and a pathway to transfer to a four-year institution. Because community colleges have mostly open-access admissions policies, serve a large proportion (41 percent) of all postsecondary students (especially low-income and underrepresented students) and charge low tuition (\$3,520 a year on average),<sup>4</sup> they have the potential to be engines of economic mobility.

As important as community colleges are, many students who attend these institutions are not achieving the educational outcomes necessary for mobility out of poverty. First, only some community college students complete a postsecondary credential; for example, only 22 percent of community college students who enrolled in 2012 finished within three years.<sup>5</sup> Second, the economic returns to completing a community college credential vary greatly. Studies show relatively high returns for some two-year degrees and certificates (such as those in nursing and allied health fields) but lower or no returns for others (such as those in education, child care, or fine arts).<sup>6</sup> To achieve economic mobility, community college students must earn degrees and certificates aligned to areas of high demand in the marketplace.

To improve academic and economic outcomes for community college students, we recommend comprehensive community college reform that leads to more students earning postsecondary credentials that improve economic opportunity. This reform needs to address all four of the following areas. First, community colleges should align program offerings with labor market demand, using input from employers and labor market information. Second, they should make basic skills education more targeted and accelerated, allowing students to improve without derailing progress toward completion. Third, community colleges should make it easier for students to combine work, caregiving, and education, with strategies such as block scheduling and child care assistance. And fourth, they should help students structure their programs of study effectively through innovations in advising and simplification of offerings into program pathways, ideally beginning with the end goal, a career, in mind.

Initiatives addressing each of these reform areas and some pilot programs addressing multiple areas have been implemented with some measured success. However, the positive impacts have not been enough to move the needle on overall community college outcomes, partly because successful programs target only one challenge, reach few students, or are not sustained beyond initial external grant funding. We support comprehensive reform that addresses each area and improves outcomes toward economic mobility for all students. Earning a postsecondary credential aligned with labor market demand can be an important step for students on the path to improved economic outcomes, career advancement, and a better quality of life.

#### Impact on Three Dimensions of Mobility

The Partnership's definition of mobility has three core principles: economic success, power and autonomy, and being valued in community.

**Investment:** By helping students overcome institutional and personal obstacles to completion and better aligning program offerings with labor market demands, we can improve the academic and labor market outcomes of community college students. The level of funding needed varies depending on the specific effort and size of the effort: education and peer support initiatives would be less expensive while intensive technical assistance would cost more. Investments to apply lessons to a single college or college system would likely be less costly than investments with a collection of colleges across a region or the nation. Investments from \$100,000 to the multimillions are needed. In several existing efforts focused on replicating and scaling evidenced-based lessons, multiple funding partners have come together, which allows the possibility of leveraging smaller investments. Working with colleges to more rigorously assess the outcome of comprehensive reform would also involve a range of costs, an evaluation likely could be carried out for less than \$500,000 per college.

#### Impact:

- Economic Success: We would expect to see more students complete certificates and community college degrees linked to the needs of area employers. That, in turn, will lead to increased employment and earnings for community college students.
- Power and Autonomy: Community college students will show higher levels of self-efficacy.
- Being Valued in Community: Students will have expanded social networks and have higher perceived standing in the community and society.

## The Problem: Not Enough Students Complete Credentials Linked to Economic Mobility

A postsecondary education is more important than ever for economic success. Adults who attend college, and especially those who attain a degree or vocational postsecondary certificate, have significantly higher earnings than those who do not.<sup>7</sup> In the United States, people earn postsecondary credentials from a variety of institutions. In addition to four-year or advanced degrees from private and public colleges and universities, individuals can earn two-year degrees or vocational and technical certifications (such as in welding, cosmetology, or phlebotomy) from public community colleges, for-profit institutions, community-based organizations, and work-based learning programs such as apprenticeships.

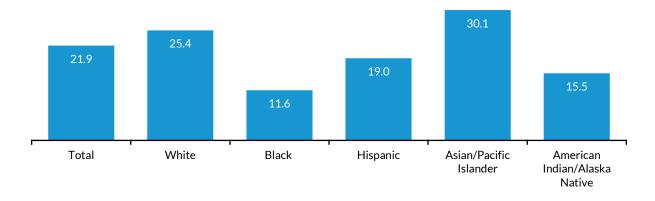
We focus in this paper on community colleges, public institutions that offer two-year degree and nondegree certificate programs as well as a pathway to transfer to four-year degree-granting institutions. Because community colleges have mostly open-access admissions policies, serve a large proportion of all postsecondary students (especially low-income and underrepresented students), and charge low tuition (\$3,520 a year on average),<sup>8</sup> they are a tool for facilitating mobility from poverty. How well community colleges execute their mission to provide accessible, low-cost postsecondary education influences the ability of their low-income and underrepresented students to achieve economic stability and mobility.

Community colleges serve underrepresented, low-income, and "nontraditional" college students—first generation and older students. They enroll 41 percent of all college undergraduates, 43 percent of all black college undergraduates, 52 percent of all Hispanic undergraduates, 56 percent of all Native American undergraduates, and 40 percent of all Asian/Pacific Islander undergraduates. Data suggest great economic need among these students. Almost one-third of community college students have family incomes less than 150 percent of the federal poverty level.<sup>9</sup> More than half (58 percent) receive financial aid. According to one study, in 2016, 51 percent of students were "housing insecure" (unable to pay their full housing or utility costs or had to move in with others because of financial problems), 14 percent were homeless, and 33 percent experienced food insecurity (they did not have reliable access to enough affordable food).<sup>10</sup> In addition, community colleges serve nontraditional college students. Their average age is 28, and 36 percent are the first generation in their family to enter college. Many community college students are working while going to school. Two-thirds of full-time community college students and almost three-quarters of part-time students are working. Seventeen percent of community college students are single parents.<sup>11</sup>

As important as community colleges are, many of their students are not achieving the educational outcomes necessary for mobility out of poverty. First, only a minority of community college students complete a postsecondary credential within three, or even six, years. For the 2012 cohort of degree/certificate seekers attending two-year public institutions, only 21.9 percent finished within three years of starting (figure 1).<sup>12</sup> Completion rates are lower for black students (11.6 percent), Hispanic students (19.0 percent), and Native American students (15.5 percent) than for white students (25.4 percent) and Asian/Pacific Islander students (30.1 percent). Completion rates increase when using a six-year time frame for completion, and when accounting for students who transfer and complete at other institutions, but even then, only 39.3 percent of the 2010 cohort completed postsecondary credentials.<sup>13</sup> Students who intend to use community college as a stepping stone to a four-year institution often find that credits do not transfer, requiring more time and money to complete a bachelor's degree. One study found that 42 percent of community college transfers were unable to bring over most (90 percent or more) of their community college credits when transferring to a four-year institution; 14 percent of transfer students had fewer than 10 percent of their credits accepted.<sup>14</sup>

#### FIGURE 1

Three-Year Completion Rates for Public Community Colleges, 2012 Entry-Year Cohort, by Race or Ethnicity



**Source:** National Center for Education Statistics, *Digest of Educational Statistics*, table 326.20 (Washington, DC: US Department of Education, 2015), https://nces.ed.gov/programs/digest/d16/tables/dt16\_326.20.asp.

Second, the economic returns to completing a community college credential vary greatly. Unfortunately, comprehensive data do not exist on employment and earnings for all community college students. However, we know that the economic returns to completing a degree or a certificate from community colleges differ enormously by field of study. Though evidence shows that receipt of a two-year degree or certificate increases employment and earnings on average, <sup>15</sup> studies of returns to different community college programs show relatively high returns for some two-year degrees and certificates (such as in nursing and allied health fields) but lower or no returns for others (such as in education, child care, or fine arts).<sup>16</sup> One study found that about 60 percent of certificates have an economic payoff of at least 10 percent higher earnings than the median high school graduate.<sup>17</sup> This means many, but not all, credentials lead to economic opportunity. In addition to completing their programs, to achieve mobility, community college students must earn degrees and certificates aligned to areas of high demand in the marketplace that lead to economic returns.

Let's harness the power of the market. America is nearing full employment, but big employers are having trouble finding skilled workers. Community colleges that are responsive to this market demand will be able to place their graduates in the high-quality jobs businesses around the country are struggling to fill.

-Joshua Bolten, Partnership member

While these outcomes are sobering, solutions must consider the context in which community colleges operate. The broad mission of community colleges—to inclusively serve their communities—poses inherent challenges to achieving improved outcomes. Open admissions policies prevent community colleges from screening students as more selective institutions do, so the population includes less academically prepared students. In addition, community colleges serve many students with multiple outside demands, including work and family, that leave less time to devote to school and may delay program completion. Reforms to improve outcomes must account for these challenges. The goal is for more community college students to experience the wage premium that is the promise of completing postsecondary education—for students (and society) to get a return on the investment of earning a postsecondary credential. If we can improve community college opportunities and outcomes, in conjunction with the improvements in job availability and quality discussed in other Partnership papers, we can substantially increase mobility from poverty.

## The Solution: Comprehensive Community College Reform to Support Economic Mobility

Community colleges face challenges in improving outcomes leading to economic mobility. Many community college students, including some returning to school after many years and some who are the first to attend college in their families, need help choosing which programs and classes lead to high-demand credentials that provide economic opportunity. In addition, many students need to boost basic academic skills before they can complete credentials. Many also need to combine work and caretaking with education, making full-time attendance and completion more difficult. Finally, as discussed above, it is important that community college programs align with labor market demand.

Efforts and initiatives to address each of these challenges have been implemented and evaluated, with some successes. However, the positive impacts have not been enough to move the needle on overall community college outcomes over the last decade. This is partly because many successful programs are small: they target one challenge, often reach only a few students, and are not always sustained beyond initial external grant funding.

Recognizing these limitations, we call for comprehensive community college reform that adopts solutions targeting all these challenges to reach the goal: more community college students earning postsecondary credentials leading to greater economic opportunity.

The idea is not just to replicate small pilots or even to scale up individual reforms, but rather for community colleges to take a more holistic approach: to change policies, programs, and practices across the institution for all students and for the entire tenure of students' experiences, in ways that address these challenges and thus improve student educational and economic outcomes.

Comprehensive community college reform is not a new idea. Over the past decade or longer, stakeholders have been pushing toward comprehensive system change in community colleges. Several initiatives, with significant leadership from the Bill & Melinda Gates Foundation, the Lumina Foundation, and a core of institutional partners, have been helping community colleges transform. Most efforts have focused on increasing degree or program completion and the steps toward completion, with some success. However, past efforts have given limited attention to students' economic outcomes after completion and the importance of aligning completed credentials with market demand. Here we first briefly describe reforms in the four areas identified above: aligning program offerings with labor market demand, boosting students' basic academic skills, making it easier for students combine education with other responsibilities, and helping students choose effective programs of study. We then describe past and ongoing efforts at comprehensive community college reform.

## Reform 1: Align Program Offerings with Labor Market Demand

The vast majority of community college students enroll in order to acquire the necessary skills to secure a good job upon graduation. One strategy for increasing the alignment between the skills students acquire and those required in the labor market is through sector-based training programs. These programs focus on skills training and education for specific occupations currently in demand with the potential for career development. For example, the rapidly growing health care sector needs skilled workers, from nurses to pharmacy technicians to medical assistants. Local community colleges can offer credential programs (both two-year degrees and certificates) specifically designed to train graduates to secure those jobs.

Typically, an intermediary organization or partners that understand an industry, with significant engagement or leadership from employers, develops solutions that support workers in gaining skills that meet employers' needs. Other programs that align education with labor market demand follow a "career pathways" approach. A career pathways approach is a combination of high-quality education, training, and other services that

- align with an industry's skill needs;
- prepare students for a range of postsecondary opportunities;
- include counseling and, where appropriate, education offered concurrently with workforce preparation and specific occupational training; and
- accelerate advancement and help students obtain industry-recognized postsecondary credentials, preparing them to enter and advance in a specific occupation or a cluster of occupations.<sup>18</sup>

Rigorous evaluations of sector-based approaches have found promising results. In one example, results for the WorkAdvance model, which offers formal training for industry-recognized credentials, show increased training completion, credential receipt, and employment.<sup>19</sup> One example of a program following a career pathways approach Is Year Up, a program working with 18- to 24-year-olds to provide 21 weeks of occupational training, classes in professional skills and business communications, guidance and supports,

and connections to employment that include a six-month internship. This model allows students to earn credit (often at community colleges) in high-demand areas with internships providing close connections to employers. Early evidence shows positive impacts on earnings; Year Up is part of the ongoing evaluation of Pathways for Advancing Careers and Education, a rigorous evaluation of multiple programs following a career pathways approach.<sup>20</sup> Another career pathways program is Health Profession Opportunity Grants, also currently undergoing rigorous evaluation.<sup>21</sup>

In addition, the National Fund for Workforce Solutions, a group of foundations working to improve workforce systems, has for the past decade promoted sectorwide industry partnerships that bring together employers and other stakeholders to meet regional workforce needs, including improving alignment of education and training with employer demand. Some partnerships have worked closely with community colleges to retool specific curricula and meet other workforce needs.<sup>22</sup>

### Reform 2: Accelerate and Better Target Basic Skills Education

A substantial percentage of community college students enter needing to improve their reading, writing, and mathematics skills to take college-level coursework. Over one-third of community college students take developmental classes to address basic skills deficiencies.<sup>23</sup> The problem is, these sometimes-long sequences of "developmental" or "basic" math, reading, and writing classes often are not providing credit and significantly lengthen time to completion. Evidence is mixed on whether traditional developmental programs are really necessary—that is, whether they increase the probability that a student will complete college-level courses or receive a credential or a degree.<sup>24</sup>

Several innovative models redesigning basic skills education at community colleges have been developed and tested in response to this concern. These include accelerated models that shorten the time students spend in developmental education and integrated or co-requisite models that combine basic skills with college-level coursework and make greater use of classroom supports such as tutoring. Examples of models that have been evaluated include the Accelerated Learning Program, which placed students needing developmental reading into college-level classes with additional supports. The Accelerated Learning Program increased course completion relative to students in standard developmental reading.<sup>25</sup> Integrated Basic Education and Skills Training combines basic skills learning with college-level material and has increased credits accumulated and receipt of postsecondary credentials.<sup>26</sup> While these models are new and their impact on labor market outcomes still unclear, they provide exciting approaches for addressing an obstacle to meaningful educational attainment.<sup>27</sup>

## Reform 3: Make It Easier for Students to Combine Work, Caregiving, and Education

Many students need to work while attending community college to support themselves and their families. Combining work, caregiving, and education can be challenging, increasing the time and difficulty of completion. Some community colleges are addressing these challenges by structuring programs to make it easier for students to work while taking full course loads that shorten the time to completion. These programs use what is called structured or block scheduling, in which coursework needed to complete a specific certificate or degree program is scheduled in a specific block of time—such as 8:00 a.m. to 12:00 p.m.—for multiple semesters so students can plan work around school. Some community colleges using this model, in combination with other reforms, have shown improved completion outcomes. For example, the Accelerated Study in Associate Programs (box 1) required full-time attendance and used block scheduling, among other reforms. The program showed positive impacts.<sup>28</sup>

#### BOX 1

#### **Accelerated Study in Associate Programs**

One program that has combined multiple reforms is the Accelerated Study in Associate Programs (ASAP) at the City University of New York (CUNY). This three-year program was developed in 2007 to improve completion rates by combining proven approaches. ASAP provides students financial assistance (including tuition waivers, textbooks, and transportation assistance); structured pathways to "support momentum," including full-time enrollment with block scheduling and ongoing developmental education; and extensive advising, tutoring, and career advancement supports over the three years. A rigorous evaluation found that the program substantially increased associate's degree completion, from 22 percent to 40 percent, almost doubling graduation rates relative to a comparison group. ASAP also increased the rates of transfer to fouryear colleges. The evaluation also found that the cost CUNY incurred per associate's degree completed under ASAP was lower than for standard CUNY associate's degree program. Although ASAP did require meetings with a career counselor every semester, the evaluation has not yet tracked students' employment or earnings outcomes. Additional studies found ASAP led to substantially higher graduation rates for all race, ethnicity, and gender subgroups. ASAP initially served only a relatively small number of CUNY students. It has since been expanded to all students of Bronx Community College and three Ohio community colleges, with promising initial results. No evaluations have yet measured the impacts on employment after completion.

Sources: Susan Scrivener, Michael Weiss, Alyssa Ratledge, Timothy Rudd, Colleen Sommo, and Hannah Fresques, "Doubling Graduation Rates: Three Year Effects of CUNY's Accelerated Study in Associate Program's for Developmental Education Students" (New York: MDRC, 2015); Colleen Sommo and Alysa Ratledge, "Bringing CUNY Accelerated Study in Associate Program (ASAP) to Ohio: Early Findings from a Demonstration in Three Community Colleges" (New York: MDRC, 2016); and Diana Strumbos and Zaneta Kolenovnic, "ASAP Graduation Rates by Race/Ethnicity, Gender, and Pell Status" (New York: CUNY, 2016). In addition, some community colleges are finding ways to assist working students who are parents, with supports such as child care. Examples of strategies around child care include assessing student needs at entrance to help students plan for their child care needs, facilitating access to child care and subsidies, and expanding child care options.<sup>29</sup> Evaluation of how these strategies affect credential attainment is needed.

### Reform 4: Help Students Structure Their Programs of Study Effectively

Another challenge for students is structuring their programs of study, including what classes to take when and how to fit them together, to reach their goals. The traditional structure of community colleges has been called a "cafeteria" or "self-service" model, with many options to meet students' varying needs. The problem is that such flexibility can be confusing and lead students to take unnecessary classes, slowing their progress toward completing a credential. Students may also lack information to select a program of study for which there is demonstrated need in the labor market. Although community colleges have advisors or counselors to help students, the number of students per advisor is often high, with short, infrequent meetings often limited to the beginning of the college experience. Nationwide, the median community college ratio of students to advisors is 441 to 1.<sup>30</sup>

Strategies to address these issues include increasing the amount of advising time throughout students' college experience, with an early focus on goal setting and continued advising throughout their college careers. That said, several evaluations of enhanced advising have found only modest impacts on academic outcomes.<sup>31</sup> More recent innovations to improve advising services use technology combined with redesigned advising services to provide students with more information and expand advisors' capacity. One model of technology-mediated advising, Integrated Planning and Advising for Student Success (iPASS), uses technology in education planning, counseling, and coaching, as well as to target advising resources to students at greatest risk of not completing their educations. An evaluation of iPASS is being implemented in 26 colleges, with a rigorous evaluation just getting under way.

Community colleges have also implemented models that simplify their offerings by creating highly structured programs, referred to as "guided pathways." These pathways clearly outline requirements for completion to accelerate students' progress and prevent them from taking unnecessary credits. Guided pathways make choices easier for students, while allowing them to explore major program areas more productively.<sup>32</sup> These changes are often combined with additional navigation support and other reforms. Pathways can focus on programs for credentials, degrees, or transitions to four-year schools, ideally beginning with the end goal, a career, in mind. Yet for students to start with a career in mind, colleges need

to provide more and better tools earlier in the student life cycle so students' career exploration may be informed by current and future labor market conditions.

Each of these reforms has shown some promise in improving the community college experience for students, and it is important to continue assessing these and other solutions. However, for community college to increase economic mobility, comprehensive reform that encompasses strategies in all these areas for all students is necessary.

### **Existing Comprehensive Reform Initiatives**

As noted above, comprehensive reform efforts have been ongoing at community colleges. Many comprehensive reform initiatives have focused on increasing completion rates, and to a lesser extent on graduates' economic outcomes. Other efforts, mainly government-funded initiatives as part of the public workforce development system, have focused more directly on promoting in-demand credentials. Here we describe some of these prior and ongoing efforts (box 2).

One early initiative working to transform community college systems and improve student outcomes was Achieving the Dream (ATD). ATD, launched in 2004 by the Lumina Foundation and partners, is a coalition of more than 200 community colleges working toward systemic change in community colleges to improve students' success, particularly among low-income students and students of color. As part of its efforts, ATD has helped community colleges embrace a "culture of evidence," using data in new ways to track student outcomes, make data-driven decisions, and increase performance.

Completion by Design, a Bill & Melinda Gates Foundation initiative from 2010 through 2017, engaged a set of community colleges to design more comprehensive change. Study of Completion by Design led to findings on the factors important for systemic change.<sup>33</sup> This and related efforts, such as Jobs for the Future's DesignForScale approach and ATD's Catalyst for Change, sought to assist community colleges in scaling evidence-based reforms statewide to reach more and more students.<sup>34</sup> For example, the American Association of Community Colleges, in conjunction with several partners, is implementing the Pathways Project, engaging teams from 30 colleges in intensive meetings to design structured *"academic and career pathways"* for all students.<sup>35</sup> A related effort is the development of Student Success Centers, state-level organizations that support community colleges' efforts to develop student-centered pathways and increase student completion rates. These centers aim to help connect and bring to scale disparate efforts across a state's community colleges. Fourteen Student Success Centers are part of the national Student Success Center Network.<sup>36</sup>

#### BOX 2

#### It Can Be Done: Successful Community College Reforms

Despite the challenges, a few community colleges are implementing comprehensive reform and showing institutionwide increases in various student outcomes. While none have had formal evaluations, reported outcomes are promising. Examples include winners of the Aspen Institute's \$1 million Aspen Prize for Community College Excellence, which considers completion, labor market, and learning outcomes, as well as whether positive outcomes are distributed equitably among underserved student groups. The 2015 winner, Santa Fe College in Gainesville, Florida, reports that 62 percent of full-time new students graduate or transfer within three years (compared with 40 percent nationally) and that two in three students who transfer to a four-year school complete their bachelor's degrees. The average wages in 2013 of the 2008 cohort were \$40,820 annually, comparable with all workers in the metropolitan area.

Guttman Community College, part of the City University of New York, opened in 2012 and was created expressly to incorporate evidence-based reforms to dramatically improve graduation rates. The school requires full-time attendance for the first year, provides structured pathways for courses, builds develop-mental education into credit classes, and offers intensive advising, tutoring, and counseling. It also includes a threeweek bridge program in the summer before starting school to prepare students for college. Guttman reports a three-year graduation rate of 49 percent for 2012 enrollees, more than twice the rate for all CUNY students.

In 2010, City Colleges of Chicago (CCC) began implementing a reform agenda called Reinvention, with the goal of increasing students' receipt of credentials, increasing the number transferring to four-year institutions after receiving a degree, improving outcomes for students needing basic skills remediation, and advancing adult education students to and through credit-bearing courses. CCC implemented several institutionwide strategies, including clear pathways to accelerate student progress:

- structured program pathways, predictive scheduling, and whole-program enrollment;
- alignment of programs offered with employer needs; and
- integrated student supports.

Reinvention also instituted a "college to careers" program linking students with local employers. Finally, the plan focused on operational changes in administrative and human resources to improve hiring, attract and retain talented faculty, and reduce administrative costs to redirect funds toward other needed areas. An important element of Reinvention was to create benchmark goals and continually measure progress against these goals through annual scorecards. In 2015, CCC reports the three-year graduation rate was 17 percent, more than double its 2010 rate of 7 percent.

Tennessee Colleges of Applied Technology are the state's publicly funded system of technical career training. They implemented highly structured programs with identified career pathways and close ties with industries. In the 2014–15 school year, 87 percent of students completed a program, 95 percent received a license or credential, and 87 percent of those seeking work in a related field were placed in a job.

Sources: "Aspen Prize for Community College Excellence," Aspen Institute, 2016, http://highered.aspeninstitute.org/aspen-prize/; Guttman Community College, "2015 Fast Facts" (New York: CUNY, n.d.); City Colleges of Chicago, "5-Year Plan Scorecard 2015" (Chicago: CCC, 2014); and Courtney Swim, "Tennessee Colleges of Applied Technology: A Primer" (Nashville: Office of Research and Education Accountability, Tennessee Office of the Comptroller, 2016).

Another comprehensive reform initiative is Complete College America, a nonprofit established in 2009 to "work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations."<sup>37</sup> Complete College America works with states to implement reforms that will improve students' academic outcomes for all their higher education institutions. This effort focuses on many innovations described above:

- reducing developmental education as an impediment to completion by tailoring requirements to the needs of each program and implementing strategies that allow students to build basic skills while taking college courses;
- accelerating completion rates by incentivizing and supporting full-time course loads;
- creating structured schedules to assist students in balancing work and school; and
- creating guided pathways of program offerings, providing students easier-to-use information, and using technology to support students' movement along pathways.<sup>38</sup>

Complete College America encourages state leadership to adopt clear performance outcome metrics and to tie state funding to metrics.

The federal government has also invested in community colleges to build their capacity to provide quality education and training in high-demand occupations and industries.<sup>39</sup> The goal is squarely focused on improving individuals' labor market outcomes and creating a more skilled workforce. Federal investments have largely taken the form of time-limited grants to community colleges (and some other providers). Early efforts include the High Growth Job Training Initiative launched in 2001 and the Community-Based Job Training Grant program in 2005. Both provided grant funding to support training as well as capacity-building activities, including building training facilities with the latest equipment, developing curricula that responded to employers' needs, funding and training instructors, articulating (laying out options for transferring) noncredit to for-credit programs, and building partnerships between community colleges and employers and the public workforce system. The High Growth Job Training Initiative evaluation included analysis that indicated some positive short-run employment and earnings gains for those participating.<sup>40</sup>

Another major federal investment in community college capacity building is the Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program. Funded by the US Department of Labor, TAACCCT has provided \$2 billion in grants in four rounds, with most community colleges in the country receiving grants. These grants focused on building capacity for in-demand education and training (for either certificates or degrees) that take two years or less to complete. Again, capacity building means increasing collaboration with employers and the public workforce system. A national evaluation of TAACCCT is under way, although some programs show positive early employment outcomes.<sup>41</sup>

In addition, the Workforce Innovation and Opportunity Act, passed in 2014, significantly changed the federally funded public workforce system. The law requires states to align education and training with demand in the labor market, as well as to bring partners together to design career pathways. The law creates greater incentives for provision of high-demand training by including performance measures around building career pathways and participants' receipt of employer-recognized credentials.

### Challenges to Comprehensive System Change

Evaluation of the first round of 26 community colleges in ATD demonstrated some challenges to systemwide change.<sup>42</sup> The colleges moved toward creating a culture of evidence, but little evidence showed that reforms substantially increased institutionwide student academic outcomes. (The exception was that completion of the gatekeeper English class increased for all students.) One reason for this lack of results could be that although the colleges implemented multiple reforms intending systemic change, they were not successful in scaling reforms institutionwide. In most colleges, interventions only reached a small portion of the student population and tended to focus on students' entry into school. The three colleges that did show institutionwide progress on multiple student outcomes were able to expand their strategies to more students and support multiple people in change-leadership roles.<sup>43</sup>

Knowing small pilot or "boutique" innovations are not enough does not also imply that simply scaling innovations and embedding them in an institution's ongoing operation is easy. Reform efforts to date have highlighted challenges to systemwide reform:

- finding and retaining leaders with a vision of change and the skills to manage complex change efforts;
- getting faculty and staff to engage and buy in to reforms necessary to make cultural and organizational changes;
- connecting accreditation to educational quality, with a greater emphasis on programs' relevance to the workforce; and
- ensuring sustainable financial resources for changes in operational reforms, professional development, and implementation and operation of specific reform models.

In addition, reformers point out that changing institution- or systemwide practices can take time, sometimes longer than expected. Efforts at reform need to address these challenges to make comprehensive change.

## Our Proposal: Comprehensive Community College Reform to Increase Economic Mobility

Community colleges have the potential to be engines of economic mobility. For their students, including many who are low income, working, caring for children, or people of color, earning a postsecondary credential aligned with labor market demand can be an important step on the path to improved economic outcomes, career advancement, and a better quality of life. Evidence of specific reform strategies coupled with findings from small but comprehensive pilot programs and outcomes from wide-ranging efforts at a few community colleges suggest that comprehensive systemwide reforms can improve student academic and economic outcomes. Efforts are ongoing to improve community college completion rates and to connect programs with industry, but we need to accelerate the number of community colleges adopting these reforms and continue to assess their progress toward these goals. Both philanthropy and government have roles to play in achieving these goals.

### **Role of Philanthropy**

Philanthropy continues to play a key role in expanding reform to more community colleges. The initiatives described above educate community colleges on evidenced-based changes, facilitate peer sharing with colleges making reforms, provide technical assistance on system reforms, and fund innovations. Philanthropy can also develop and fund efforts to build a talent pipeline of those capable of managing change at scale. Current efforts need to continue and expand to reach even more community colleges and systems. As our section on challenges points out, achieving scale in reforms is a difficult challenge. Philanthropic organizations (and consortiums) have an important role to play in funding efforts across multiple community colleges to further encourage peer learning and accelerate change. This includes providing funding for self-formed networks of institutions that come together around a shared reform agenda.

As initiatives focus on improving completion rates, they must incorporate reforms that lead to indemand postsecondary credentials and put students on a pathway to economic mobility. This includes ongoing improvements in aligning pathways and providing high-quality vocational programs. Partnering with public workforce agencies and employers is an important aspect of this work. Ongoing assessment of how community colleges are progressing toward this goal and how colleges overcome challenges to implementing comprehensive reform is also needed.

### **Role of Government**

Community colleges should set clear goals for academic and economic outcomes and measure progress toward those goals. One aspect of community college reform has been to encourage development of a culture of collecting and using data for measuring outcomes. The federal government has a role to play in continued development of measures and assistance with access to necessary data. Efforts to make measures of progress public should be considered, in ways that encourage competition and improvement across colleges and provide information for students making choices.

Additionally, federal and state governments can help expand community college reforms by creating incentives for change. State governments play key roles in funding community colleges and adopting policy directions. Many states have adopted performance-based funding schemes for colleges to encourage desired outcomes. Designed properly, these systems likely could move community colleges toward such goals as improved educational outcomes and alignment with labor market needs.<sup>44</sup> Current federally set goals for the public workforce system provide incentives for states and localities to align education and training with labor market demand, which, in turn provides community colleges with incentives to move toward this goal.

As community colleges serve so many college students, increasing their capacity as engines of economic mobility is critical. More community colleges need to implement comprehensive evidenced-based reforms to improve students' academic and economic outcomes, putting them on a pathway toward economic mobility.

## Notes

- <sup>1</sup> Percentages are based on 2016 median usual weekly earnings from the US Bureau of Labor Statistics, Current Population Survey (https://www.bls.gov/emp/education\_pays\_handout.pdf). Additional discussion of college returns can be found in Philip Oreopoulos and Uros Petronijevic, "Making College Worth It: A Review of Research on the Returns to Higher Education," Working Paper 19053 (Cambridge, MA: National Bureau of Economic Research [NBER], 2013).
- <sup>2</sup> Harry J. Holzer and Sandy Baum, Making College Work: Pathways to Success for Disadvantaged Students (Washington, DC: Brookings Institution Press, 2017); Anthony Carnevale, Stephen J. Rose, and Andrew Hanson, "Certificates: Gateways to Gainful Employment and College Degrees" (Washington, DC: Georgetown University, 2012); Christopher Jepsen, Kenneth Troske, and Paul Coomes, "The Labor Market Returns to Community College Degrees, Diplomas, and Certificates," Journal of Labor Economics 32, no. 1 (2014): 95–121.
- <sup>3</sup> Raj Chetty, John Friedman, Emmanuel Saez, Nicolas Turner, and Danny Yagan, "Mobility Report Cards: The Role of Colleges in Intergenerational Mobility" (Cambridge, MA: Equality of Opportunity Project, 2017).
- <sup>4</sup> This is the average tuition and fees at public two-year colleges for in-district students in 2016–17. College Board, *Trends in College Pricing* (New York: College Board, 2016).
- <sup>5</sup> National Center for Education Statistics, Digest of Educational Statistics, table 326.20 (Washington, DC: US Department of Education, 2015), https://nces.ed.gov/programs/digest/d15/tables/dt15\_326.20.asp. These numbers reflect graduation rates from the first institution attended within 150 percent of normal time for first-time, full-time students seeking a degree or a certificate at public two-year postsecondary institutions.
- <sup>6</sup> Many studies of the economic returns to community college credentials across fields of study focus on specific states using state administrative data. The returns to specific degrees and certificate programs vary across states. Peter Riley Bahr, *The Earnings of Community College Graduates in California* (New York: Center for the Analysis of Postsecondary Education and Employment, Teachers College, Columbia University, 2016).
- <sup>7</sup> Oreopoulos and Petronijevic, "Making College Worth It"; Jepsen, Troske, and Coomes, "Labor Market Returns."
- <sup>8</sup> This is the average tuition and fees at public two-year colleges for in-district students in 2016–17. The total average estimated cost of attendance is \$13, 600 for students living off campus and not with their families, which includes room and board, books and supplies, transportation, and other expenses. College Board, *Trends in College Pricing*.
- <sup>9</sup> National Center for Education Statistics, "Profile of Undergraduate Students: Trends from Selected Years, 1995–96 to 2007–08," Web Tables, NCES 2010-220 (Washington, DC: US Department of Education, 2010).
- <sup>10</sup> Sara Goldrick-Rab, Jed Richardson, and Anthony Hernandez, Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education (Madison: Wisconsin HOPE Lab, 2010).
- <sup>11</sup> "Fast Facts 2017," American Association of Community Colleges, 2017, http://www.aacc.nche.edu/AboutCC/Pages/fastfactsfactsheet.aspx.
- <sup>12</sup> National Center for Education Statistics, *Digest of Educational Statistics*. These numbers reflect graduation rates from the first institution attended within 150 percent of normal time for first-time, full-time students seeking a degree or a certificate at public two-year postsecondary institutions.
- <sup>13</sup> Doug Shapiro, Afet Dundar, Phoebe Khasalia Wakhungu, Xin Yuan, Angel Nathan, and Youngsik Hwang, Completing College: A National View of Student Attainment Rates—Fall 2010 Cohort, Signature Report No. 12 (Herndon, VA: National Student Clearinghouse Research Center, 2016).
- <sup>14</sup> David B. Monaghan and Paul Attewell, "The Community College Route to the Bachelor's Degree," Educational Evaluation and Policy Analysis 37, no. 1 (2015): 70–91.
- <sup>15</sup> Jepsen, Troske, and Coomes, "Labor Market Returns"; Carnevale, Rose, and Hanson, "Certificates."

- <sup>16</sup> Many studies of the economic returns to community college credentials across fields of study focus on specific states using state administrative data. The returns to specific degrees and certificate programs vary across states. Bahr, *Earnings of Community College Graduates in California*.
- <sup>17</sup> Carnevale, Rose, and Hanson, "Certificates."
- <sup>18</sup> This is a summary of the definition of career pathways in the Workforce Innovation and Opportunity Act. The exact language can be found at H.R. 803 Sec. 3 (7).
- <sup>19</sup> See, for example, Richard Hendra, David Greenberg, Gayle Hamilton, Ari Oppenheim, Alexandra Pennington, Kelsey Schaberg, and Betsy Tessler, *Encouraging Evidence on a Sector-Focused Advancement Strategy: Two-Year Impacts from the WorkAdvance Demonstration* (New York: MDRC, 2016); and Sheila Maguire, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz, *Tuning In to Local Labor Markets: Findings From the Sectoral Employment Impact Study* (Philadelphia: Public Private Ventures, 2010).
- <sup>20</sup> Anne Roder and Mark Elliott, "Year Up's Initial Impacts on Low-Income Young Adults' Careers" (New York: Economic Mobility Corporation, 2011).
- <sup>21</sup> For more information on Pathways for Advancing Careers and Education and Health Profession Opportunity Grants, see http://www.career-pathways.org.
- <sup>22</sup> For more information on the National Fund for Workforce Solutions and on partnerships and their work, see https://nationalfund.org/.
- <sup>23</sup> National Center for Education Statistics, Digest of Educational Statistics.
- <sup>24</sup> For a discussion of these issues, see Eric Bettinger, Angela Boatman, and Bridget Terry Long, "Student Supports: Developmental Education and Other Academic Programs," *Future of Children: Postsecondary Education in the US* 23, no. 1 (2013): 93–115.
- <sup>25</sup> Sung-Woo Cho, Elizabeth Kopko, Davis Jenkins, and Shanna Smith Jaggars, "New Evidence of Success for Community College Remedial English Students: Tracking the Outcomes of Students in the Accelerated Learning Program (ALP)" (New York: Community College Research Center, Teachers College, Columbia University, 2012).
- <sup>26</sup> Matthew Zeidenburg, Sung-Woo Cho, and Davis Jenkins, "Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness," Working Paper 20 (New York: Community College Research Center, Teachers College, Columbia University, 2010).
- <sup>27</sup> These initiatives include Accelerating Opportunity, a multicollege initiative that incorporates Integrated Basic Education and Skills Training models and is currently being evaluated. "Evaluation of the Accelerating Opportunity Initiative," Urban Institute, n.d., http://www.urban.org/policy-centers/income-and-benefitspolicy-center/projects/evaluation-accelerating-opportunity-initiative.
- <sup>28</sup> Another example is the Tennessee Colleges of Applied Technology, which uses a structured scheduling system.
- <sup>29</sup> Examples of some of these programs can be found in Gina Adams, Teresa Derrick-Mills, and Caroline Heller, Strategies to Meet the Child Care Needs of Low-Income Parents Seeking Education and Training (Washington, DC: Urban Institute, 2016).
- <sup>30</sup> National Academic Advising Association, "2011 Survey of Academic Advising," table 6.28 (Manhattan: Kansas State University, n.d.), https://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/2011-NACADA-National-Survey.aspx.
- <sup>31</sup> Eric Bettinger and Rachel Baker, "The Effects of Student Coaching in College: An Evaluation of a Randomized Experiment in Student Mentoring," Working Paper 16881 (Cambridge, MA: National Bureau of Economic

Research, 2011); Susan Scrivener and Erin Coghlan, "Opening Doors to Student Success: A Synthesis of Findings from an Evaluation at Six Community Colleges," Policy Brief (New York: MDRC, 2011).

- <sup>32</sup> Community College Research Center, "What We Know about Guided Pathways," Research Overview (New York: Community College Research Center, Teachers College, Columbia University, 2015).
- <sup>33</sup> Jean Baldwin Grossman, Janet Quint, Jessica Gingrich, Oscar Cerna, John Diamond, Andrew Levine, and Jacklyn Willard, Changing Community Colleges: Early Lessons from Completion by Design (New York: MDRC, 2015).
- <sup>34</sup> Derek Price, Jennifer McMaken, and Georgia Kioukis, "Case-Informed Lessons for Scaling Innovation at Community and Technical Colleges" (Indianapolis, IN: DVP-Praxis, 2015); and Lara Courturier, "Policy Meets Pathways: A State Policy Agenda for Transformational Change" (Boston: Jobs for the Future, 2014).
- <sup>35</sup> "Project Information," American Association of Community Colleges, 2015, http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Pages/ProjectInformation.aspx.
- <sup>36</sup> See Jobs for the Future website for more information at http://www.jff.org/initiatives/postsecondary-statepolicy/student-success-center-network.
- <sup>37</sup> "About CCA," Complete College America, 2014, http://completecollege.org/about-cca/.
- <sup>38</sup> Complete College America, The Game Changers: Are States Implementing the Best Reforms to Get More College Graduates? (Indianapolis, IN: Complete College America, 2013).
- <sup>39</sup> Lauren Eyster, Theresa Anderson, and Christin Dunham, "Federal Investments in Job Training at Community Colleges" (Washington, DC: Urban Institute, 2016).
- <sup>40</sup> Lauren Eyster, Teresa Derrick-Mills, John Trutko, Jessica Compton, Alexandra Stanczyk, and Demetra Smith Nightingale, Implementation Evaluation of the Community-Based Job Training Grant (CBJTG) Program: Final Report (Washington, DC: Urban Institute, 2012); Lauren Eyster, Demetra Smith Nightingale, Burt Barnow, Carolyn O'Brien, John Trutko, and Daniel Kuehn, Implementation and Early Training Outcomes of the High Growth Job Training Initiative: Final Report (Washington, DC: Urban Institute, 2010).
- <sup>41</sup> Employment and Training Administration, "TAACCCT: Trade Adjustment Assistance Community College and Career Training," US Department of Labor, 2017, https://doleta.gov/taaccct/.
- <sup>42</sup> Elizabeth Zachry Rutschow, Lashawn Richburg-Hayes, Thomas Brock, Genevieve Orr, Oscar Cerna, Dan Cullinan, Monica Reid Kerrigan, Davis Jenkins, Susan Gooden, and Kasey Martin, "Turning the Tide: Five Years of Achieving the Dream in Community Colleges" (New York: MDRC, 2011).
- <sup>43</sup> Alexander K. Mayer, Oscar Cerna, Dan Cullinan, Kelly Fong, Elizabeth Zachry Rutschow, and Davis Jenkins, "Moving Ahead with Institutional Change: Lessons from the First Round of Achieving the Dream Community Colleges" (New York: MDRC, 2014).
- <sup>44</sup> For example, Kansas has implemented performance metrics for improving educational attainment as well as for meeting local economic needs. See "Performance-Based Funding for Higher Education," National Conference of State Legislatures, July 31, 2015, http://www.ncsl.org/research/education/performance-funding.aspx.



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