REDESIGNING AMERICA'S COMMUNITY COLLEGES

Redesigning America's Community Colleges

A Clearer Path to Student Success

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Preface

The impetus for this book arose from a goal and an observation. Our goal is to conduct research to help improve student success at community colleges. Our observation was that despite an expansive reform movement built on the dedicated participation of thousands of faculty, administrators, policymakers, state education officials, researchers, and others, there is little evidence that the nation is moving toward a widespread and significant improvement in the outcomes of community college students.

Collectively, the three of us have studied and worked with community colleges for over sixty years. Throughout those years, we have been continually reminded how important community colleges are in achieving the aspirations of their students, many of whom are from disadvantaged backgrounds. A well-functioning community college system is instrumental in improving educational equity and in efficiently developing skills and talents essential for a thriving economy and society. And yet, while these colleges have helped educate millions, it is also true that many, probably a majority, of students who enter higher education through a community college do not achieve their long-term educational objectives. Thus in our recent work, we have redoubled our efforts in building a foundation of knowledge and insight to help substantially improve the outcomes of community college students.

In pursuing that goal we joined many educators, policymakers, philanthropists, and other researchers who have also worked to improve the functioning of community colleges. Indeed, since the late 1990s, a vital reform movement has germinated, flourished, and produced many exciting and interesting innovations. Through our participation in that movement, we have studied a variety of programs and policies that have yielded positive yet limited effects on student success, and have observed that while some individual institutions have improved their performance, the sector as a whole has not.

In this book, we set out to identify the barriers that have limited the effectiveness of reforms to date. We find no deficiencies in the enthusiasm, dedication, or skill of the faculty and staff of community colleges, but rather observe problems in the structure of the colleges and of the overall system of higher education—a structure that may have served this country well in the 1960s and 1970s when community colleges were a core part of the nation's effort to dramatically expand access to higher education, but which is not well suited to the needs and challenges we now confront. The reform movement has operated within that structure, rather than questioning whether the structure itself may be contributing to students' lack of progress. We thus argue that that structure needs to be fundamentally rethought, and we present proposals for what should take its place.

This book focuses on community colleges. This is our area of expertise, and our thinking and recommendations have been built on interactions with thousands of community college educators. However, research and recommendations in this book may also be quite relevant to open-access public four-year colleges, which serve similar populations of students. Indeed, across the past decade, community colleges have surpassed the open-access four-year sector in their attention to student outcomes, as well as in the energy they have focused on innovating and experimenting with new strategies to improve those outcomes. If four-year colleges and universities heed the mistakes, lessons learned, and occasional triumphs of community colleges across their decade or two of reform, we believe that the four-year sector can move forward with its own reforms more quickly and effectively. This book, then, is for all colleges that serve economically disadvantaged students and that are committed to supporting the success not only of those students but of all students from all backgrounds.

In one sense, the book has been built on the research that we have carried out at the Community College Research Center (CCRC) since it was founded nearly twenty years ago in 1996. The idea for a community college research center came from Jesse Ausubel, a program officer at the Alfred P. Sloan Foundation, who invited Teachers College, Columbia University, to develop a research center devoted to the study of these colleges. Jesse had the insight that turned out to be the foundation of the CCRC mission—while close to half of undergraduates in the United States attend community colleges, outside of the colleges themselves, within the vast universe of education research throughout the nation, only a handful of researchers focused their attention on the country's two-year public colleges.

More directly, our work on the book started in 2009 with funding from the Bill & Melinda Gates Foundation, when we initiated a set of reports designed to review research—and report the results of our own studies—on some promising but largely untested ideas for how to move beyond the incremental improvements of the reform movement thus far and substantially improve student success. We called this the Assessment of Evidence Series, and the reports were released beginning in 2011. We have drawn extensively on that work, and subsequent Gates-funded projects, for this book. We particularly want to thank Diane Troyer, our first program officer at Gates, who worked closely with us as we started the project. Her suggestions and advice are reflected in all of the reports. We also thank the many other Gates Foundation program officers—particularly Brock Grubb, Kendall Guthrie, Hilary Pennington, Ann Person, and Suzanne Walsh—whose personal and intellectual support was vital to the work of this book.

We participated in the founding and development of Achieving the Dream: Community Colleges Count (ATD), an initiative originally funded by Lumina Foundation but subsequently supported by many other foundations. Our participation in ATD has had a profound influence on our thinking for this book. We were also a partner in the development of Completion by Design (CBD), an initiative funded by the Gates Foundation. Our experience with CBD has also shaped our ideas about how colleges should be organized.

Other funders have also provided support for research that has found its way into the book's pages. These include College Spark Washington, the Ford Foundation, the James Irvine Foundation, the Kresge Foundation, the William and Flora Hewlett Foundation, Lumina Foundation, and the U.S. Department of Education through the Institute of Education Sciences. We want to thank our many program officers at these organizations, especially Leah Meyer Austin, Sam Cargile, John Colborn, Cyrus Driver, Heather Gingerich, Allen Ruby, Caroline Altman Smith, Anne Stanton, Katina Stapleton, and Dennis Udall.

Members of the CCRC advisory board also helped us shape the book and indeed all of the work of CCRC. These include Carole Berotte Joseph, Cynthia Bioteau, Geraldo de los Santos, Jim Jacobs, William Law, Jeffrey Rafn, Scott Ralls, Karen Stout, Henry Shannon, and Susan Wood. We also drew on the help of a special advisory board that we organized for the initial three-year Gates Foundation grant, which included several members of the CCRC advisory board as well as others: Anthony Bryk, Norton Grubb, Rob Johnstone, Henry Levin, Bridget Terry Long, Kay McClenney, Donna McCusick, Daniel Solarzano, and Holly Zanville. Each of these dedicated individuals served as our "critical friends," providing advice, incisive feedback, and encouragement. Our work was immeasurably strengthened by their thoughtful reviews of the initial drafts of reports and working papers that contributed to this manuscript, as well as reviews of the manuscript itself.

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During the past fifteen years, CCRC has collaborated with the social policy research organization MDRC on several projects that informed this book, including the evaluation of Achieving the Dream and the National Center for Postsecondary Research (NCPR), a center funded by the U.S. Department of Education's Institute of Education Sciences. Many researchers worked on these projects, but we particularly want to thank Thomas Brock, Oscar Cerna, Dan Cullinan, Rob Ivry, Lashawn Richburg-Hayes, Elizabeth Zachry Rutschow, Mary Visher, Michael Weiss, and Evan Weissman.

During the course of our research, we have benefited from the collaboration, friendship, insights, and enthusiasm of many individuals from a number of other research and policy organizations whose missions overlap broadly with those of CCRC. In particular, we would like to thank Elif Bor, Sue Cleary, Michael Collins, Lara Couturier, Will Friedman, Alison Kadlec, Richard Kazis, Adrianna Kezar, John Lee, Carol Lincoln, Derek Price, Isaac Rowlett, Gretchen Schmidt, Nancy Shulock, and Heather Wathington.

The research and recommendations we set forth in this book were shaped in large part by the senior research staff here at CCRC, many of whom were first authors on reports and working papers from which this manuscript draws. CCRC researchers who were authors of the Assessment of Evidence reports include Nikki Edgecombe, Michelle Hodara, Katherine Hughes, Melinda Mechur Karp, Dolores Perin, and Judith Scott-Clayton. Other CCRC researchers who have shaped our thinking and collaborated with us on research used in the book include Elisabeth Barnett, Clive Belfield, Susan Bickerstaff, Sung-Woo Cho, Maria Scott Cormier, Peter Crosta, Kevin Dougherty, Dong Wook Jeong, Monica Reid Kerrigan, Olga Rodríguez, Madeline Joy Trimble, Michelle Van Noy, John Wachen, Di Xu, and Matthew Zeidenberg. Our CCRC colleagues also provided invaluable input and feedback on manuscript drafts. We also thank the many research associates and research assistants who contributed to those reports and working papers, and particularly Jeffrey Fletcher, who assisted us with the preparation of several case studies that appear in these pages. Special thanks are also due to Rebecca Jones, who assisted with references and citations; Gladys Perez-Mojica and Sarah Phillips, who helped with a multitude of practical matters; and Georgia West Stacey, who has worked tirelessly to make sure that our work is widely known. Nothing would happen at CCRC if it were not for Lisa Rothman, our associate director, who makes the organization function. Most of the manuscript was expertly edited by Justin Snider, and we thank him for helping us to strengthen our language and sharpen the argument. We also worked closely with Doug Slater, CCRC's managing editor, in the final stages of the writing. We know that we can rely on his judgment to help us hone the content, tone, and emphasis of our writing. Elizabeth Knoll was our editor at Harvard University Press throughout most of the work on the book. She urged us to write this book in the first place, and kept us on track with grace and enthusiasm. The project was completed under the guidance of Andrew Kinney.

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REDESIGNING AMERICA'S COMMUNITY COLLEGES

Introduction

Community colleges in the United States provide access to higher education for over 10 million students each year, representing nearly half of the nation's undergraduates.[1] These open-door institutions—which are expected to serve nearly anyone who wants to attend college—are a manifestation of our society's commitment to educational opportunity, and they reflect a common understanding of postsecondary education as the foundation for economic growth and upward mobility. The role community colleges play in providing postsecondary access to underrepresented students is obvious when one examines the demographics of their enrollment: they serve a disproportionate number of low-income, immigrant, first-generation, and ethnic minority students. Indeed, a majority of low-income, Hispanic, and Native American students who are undergraduates are enrolled in community colleges.[2]

Yet most students who enter these colleges never finish: fewer than four of every ten complete any type of degree or certificate within six years.[3] The failure of students to complete college represents a loss to the overall economy, which has prompted calls from the federal government, major foundations, and public intellectuals for a significant increase in the number of people with postsecondary degrees. But just as important as the economic consequences is the fact that a large majority of new community college students aspire to some kind of degree; thus, these low completion rates reflect widespread failure, disappointment, frustration, and thwarted potential among the millions of students who do not achieve their educational goals.

The disappointing outcomes of community colleges and indeed many four-year institutions have not gone unnoticed by policymakers, who have called for more transparency in and accountability for postsecondary performance. As a result, we have seen the birth of consumer information efforts such as the U.S. Department of Education's College Navigator website, which allows students and parents to compare graduation rates at prospective colleges. In an attempt to create incentives for colleges to improve student outcomes, a growing number of states have also adopted college funding systems that financially reward colleges based on outcomes (such as the number of graduates, or the earnings of graduates) rather than exclusively on enrollments. In late 2013, the Obama administration proposed the development of a rating system for colleges based on outcomes. One possible consequence of such a system would be that students enrolled in more highly rated colleges would receive favorable treatment concerning grants and loans.

But while policymakers are applying pressure to colleges to improve their outcomes, this pressure is not likely to be accompanied by significant increases in resources. Indeed, while the discussion about higher education toward the end of the first decade of the twenty-first century focused on increasing degree completion, by 2012 the criticisms also included the problem of affordability. Colleges were expected to improve outcomes and lower tuition at the same time. In general, although state higher education budgets recovered somewhat after the extreme cuts following the 2008 Great Recession, state funding had been declining for years before the recession.[4] Typically, budgets are cut during downturns but are never completely restored; thus, there has been a long-term downward ratcheting in state support. Community colleges in most states, as with other public higher education institutions, have raised tuition in response to the cuts in state funding, but these increases have not made up for the loss of state funds. Given the outcry about the cost of college, it seems unlikely that colleges will be able to rely on tuition increases for additional revenue. Thus, colleges face a difficult situation: They are being asked to improve their performance without being able to count on additional revenue. And they are doing this in an environment of greater public scrutiny, skepticism, and criticism of college performance.

How can colleges improve their performance without a substantial infusion of new resources? In this book, we draw on a wide variety of research to propose a strategy for improving student outcomes at community colleges and other broad-access institutions. Our argument can be simply stated. Community colleges were designed to expand college enrollments, particularly among underrepresented students, and to do this at a low cost. They have been extraordinarily successful in achieving these goals. However, colleges designed to maximize *course enrollment* are not well designed to maximize *completion of high-quality programs of study.* In particular, the emphasis on low-cost enrollment has encouraged colleges to offer an array of often-disconnected courses, programs, and support services that students are expected to navigate mostly on their own. Students are confused by a plethora of poorly explained program, transfer, and career options; moreover, on closer scrutiny many programs do not clearly lead to the further education and employment outcomes they are advertised to help students achieve. We refer to this as a *cafeteria-style, self-service model.*

We argue that to improve outcomes, colleges need to move away from the prevailing cafeteria-style model. Instead, they need to engage faculty and student services professionals in creating more clearly structured, educationally coherent program pathways that lead to students' end goals, and in rethinking instruction and student support services in ways that facilitate students' learning and success as they progress along these paths. In short, to maximize both access *and* success, a fundamental redesign is necessary. We refer to the resulting strategy as the *guided pathways model.*

These ideas build on more than a decade of efforts by community colleges to improve student outcomes, and in particular to increase the rates at which students complete credentials. In this introduction, we examine some of the notable reforms that have unfolded under this "college completion agenda." We argue that these reforms have not produced the desired outcomes because they have stopped short of making the systemic changes necessary to shift colleges' organization and culture from a focus on *access* alone to a focus on *access with success.* We then lay out the basic features of the guided pathways model and end with a summary of the remaining chapters of the book, which explore the design features of the guided pathways model and propose steps that colleges can take to redesign programs and services on a large scale.

The College Completion Agenda

In 2014, higher education has a prominent place on the nation's policy agenda, as the public becomes more aware that most people need at least *some* college in order to find decent, family-supporting jobs. At the same time, there are growing concerns that the quality of a college education is suspect and that the cost of college is now beyond the means of a middle-class family.

These concerns about higher education are relatively new. As few as twenty years ago, colleges and universities were rarely mentioned in the extensive public discussion of education reform, which focused on K–12 schools. Until recently, American higher education enjoyed a stellar reputation. The public image of the sector was shaped by a relatively small number of prestigious and selective colleges: the Ivy League, the elite residential liberal-arts colleges, and the flagship public universities. These colleges and universities were well regarded and attracted students from all over the world. It is fair to say that it was never completely clear what students learned there, but a degree from these institutions was widely believed to open doors to well-paying careers and upward social mobility. Of course these institutions in reality account for only a small percentage of college students. Yet the entire postsecondary sector was bathed in their positive aura, and the quality or effectiveness of higher education more generally was rarely questioned.

If quality was not doubted, then the most important postsecondary policy issue had to do with access. Access was important from two perspectives. First was the growing economic need for more highly educated workers—the need to find employment for the millions of returning veterans after World War II and the rise of the Baby Boom generation in the 1960s gave impetus to the expansion of higher education, but there was also a general conviction that the economy needed more trained workers. Second, the access issue had to do with equity. In particular, in 1947 the Truman Commission noted the desirability of severing the strong link between socioeconomic background and educational achievement, advocated for increased education for African Americans, and recommended an expansion of community colleges.[5]

In order to facilitate access, the higher education sector expanded significantly over the next decades. Total fall enrollment increased nearly tenfold from 1947 to 2011, from 2.3 million to 21.0 million. During that time, fall enrollment in public higher education institutions grew from 1.2 million to 15.1 million.[6] In the forty years between 1970 and 2010, fall enrollment at community colleges more than tripled from 2.2 million to 7.2 million.[7] By the early part of the twenty-first century, the majority of high school graduates had some contact with higher education.[8] But racial and income inequalities continued to be important problems, and postsecondary observers became increasingly concerned about racial disparities in access. Affirmative action became the most salient and controversial issue in U.S. higher education in the 1990s. Here once again, the selective elites dominated the conversation, given that racial representation was hardly a problem at open-access institutions.

Outside of affirmative action, the broad education reform movements of the 1980s and 1990s had little to say about higher education. The influential 1983 publication *A Nation at Risk* barely mentioned college. The accountability movement of the late 1980s and reforms of the early 1990s that led to the School-to-Work Opportunity Act of 1994 were also primarily concerned with K–12 schooling.

The shift from a predominant focus on college access to a consideration of the performance of colleges and universities—the outcomes for enrolled students—was signaled by the passage of the Student Right-to-Know (SRK) and Campus Security Act of 1990. In order for students attending a particular college to be eligible for federal financial aid, the college was required to provide extensive information to the U.S. Department of Education, including graduation rates. For the first time, there was a specific outcome measure that would, at least in principle, allow comparisons among colleges in terms of performance.

Although the 1990 SRK Act did call for college outcome measures, five years would pass before the required graduation rates were defined, and it was nearly a decade before institutions were required to publish their graduation rates.[9] The definitions underlying these rates were—and continue to be—widely criticized, especially among community colleges,[10] but they represented at least some attempt to measure colleges' performance in terms of student outcomes.

Thirteen years after the first rates were published, President Obama proposed the development of a policy that would not only require colleges to publish outcomes but also create strong incentives for colleges to improve performance, possibly providing more generous financial aid to students attending higher-performing colleges. This proposed incentive system came after several years of growing efforts by state policymakers to tie state funding to outcomes rather than enrollments. In 2013, nearly two-thirds of states had enacted or were developing performance funding policies that base at least some state subsidies for colleges and universities on student outcomes.[11]

This sequence of events clearly indicates that a concrete and consistent national focus on postsecondary outcomes is a very recent phenomenon. Why did this shift occur? We can point to several factors that were likely influential.

First, the publication of graduation rates was eye-opening. For many community colleges, the percentage of first-time, full-time students who graduated from their original institution within three years (150 percent of the time in which a full-time student would be expected to graduate) was below 20 percent. Some colleges had single-digit graduation rates. Public four-year "open-admissions" institutions had a national six-year completion rate of 29 percent—compared to 82 percent among their more selective peers.[12] Although college personnel argued that these rates reflected the weak preparation and diverse goals of entering students, it was hard to argue that rates in the teens or twenties represented successful organizational performance. These rates reinforced the idea that quality varied greatly among higher education institutions. The elites continued to be seen as world-class, but other sectors of higher education were apparently not as successful.

Second, as the economy and underlying technology evolved, a consensus developed that at least some college was necessary to earn a family-sustaining wage. College was no longer an opportunity that should be open only to the ambitious, but was a basic economic necessity, much as high school was viewed a generation earlier. Thus, policymakers became more concerned about what happened to students while they were in college and whether they graduated. Although studies indicate that attending college without earning a credential provides some benefit in the labor market, they also show that earning occupational credentials, such as certificates or associate degrees, provides further labor market benefits, and that, on average, higher-level credentials provide even better returns.[13]

Third, prospective students also heard the discussion about the importance of college and increasingly set their sights on completing a degree. The vast majority of students who enroll for credit in community colleges state that they want to complete a credential or transfer to complete a degree at a four-year school.[14] Indeed, over 80 percent of entering community college students indicate that they intend to earn a bachelor's degree or higher.[15] Yet six years after initial enrollment, only 15 percent have done so.[16] This number would rise if we considered a longer time window, but it still represents a large gap between students' stated goals and their actual outcomes.

Fourth, over the last decade, the cost of college has become a much more controversial issue. College tuition has increased faster than prices overall. During an era of earnings stagnation, this means that paying for college takes a much larger share of a typical family's income than it did a generation ago. Although much of the rise in tuition (for public institutions, at least) is attributable to cuts in state subsidies rather than rising college costs, the hikes in tuition nevertheless created an environment in which students, parents, and policymakers began to ask what they were getting in return for their money. And while broad-access institutions—and community colleges in particular—remain relatively affordable to students, critics have cited their low completion rates in arguing that these institutions are making poor use of taxpayer dollars.[17]

Finally, international comparisons have suggested that the United States is no longer the most educated country in the world. Widely referred-to data published by the Organisation for Economic Co-operation and Development (OECD) indicate that in 2011, the United States ranked twelfth among OECD countries in the percentage of the population age 25 to 34 that had attained a tertiary education. But among 25-to-64-year-olds, the United States ranked fifth—suggesting that other countries are overtaking the United States.[18] This apparent threat to American international competitiveness has been a rallying cry for postsecondary reform.

For all of these reasons, the first fifteen years of this century saw a rapid growth of reform efforts focused on improving student outcomes in both two- and four-year institutions. In 2009, the Obama administration called for 20 million additional college graduates by 2020. In the same year, Lumina Foundation, one of the largest private funders of postsecondary reform, announced its "Big Goal": by 2025, 60 percent of the U.S. population would have a high-quality postsecondary credential or degree. Many states set similar goals, which were sometimes backed up by funding for reforms (although the overall funding for colleges and universities in most states was cut). Soon after he took office in 2009, President Obama proposed a $12 billion initiative to improve the performance of community colleges. Although in the end only $2 billion was funded, this amount of money was still historically unprecedented.

Private philanthropy also invested in reforms, and much of the foundation funding focused on improving outcomes in community colleges, given the disproportionate number of low-income and otherwise disadvantaged students these institutions serve. Early in the last decade, the Ford Foundation funded the Bridges to Opportunity project, which worked with six states to improve outcomes for low-income adults in community colleges. In 2004, Lumina Foundation launched Achieving the Dream: Community Colleges Count (ATD). This initiative was explicitly designed to improve institutional outcomes, including helping academically underprepared students succeed in college-level work, increasing semester-to-semester persistence, and improving rates of degree completion. Lumina and many other national and local funders eventually invested over $150 million in ATD.[19] In 2008, the Bill & Melinda Gates Foundation launched a postsecondary program designed to increase college completion among low-income young adults, and by 2013 they had invested $343 million.[20] After an initial focus on community colleges, both the Lumina and Gates foundations branched out to less selective four-year colleges as well as minority-serving institutions. Many other foundations—including the James Irvine Foundation, the William and Flora Hewlett Foundation, and the Kresge Foundation—also invested in college-completion-related reform efforts.

How did colleges respond to the increasing focus on student outcomes? Although the public push for college improvement may be relatively new, faculty, staff, and administrators at community colleges across the country have been working for decades to improve instruction and student services. For example, the League for Innovation in the Community College was founded in 1968 to host conferences and workshops, conduct research, and provide services to its many community college members, as part of its continuing effort "to make a positive difference for students and communities." Perusing the conference programs of professional associations, such as the American Association of Community Colleges and the American Association of State Colleges and Universities, reveals workshops on many types of innovations and reforms, particularly from the 1990s onward. However, developments in the last decade have provided more visibility and resources to colleges' improvement efforts, and these efforts have also been examined more systematically, which has allowed researchers and practitioners to pull together syntheses in terms of what colleges were doing and what seems to be effective. For example, in 2002, the National Center for Developmental Education published a guide to improving the outcomes of academically underprepared students, who make up a majority of incoming community college students and who are typically supported through a set of precollege courses known as "developmental education." The center's recommendations included thirty-three "best practices," such as making developmental assessment and placement mandatory, teaching critical thinking in all developmental courses, and creating a clearly defined mission, goals, and priorities for the developmental program.

The experience of the Achieving the Dream initiative during its first five to seven years provides a good picture of the state of community college reform in the first decade of the twenty-first century, just as the completion agenda took hold. As mentioned, ATD began in 2004 with funding from Lumina Foundation. The initiative was explicitly designed to increase the academic success of community college students by building a "culture of evidence" in which administrators, faculty, and others would use data to identify barriers to student success and develop reform strategies to overcome those identified barriers. The initiative assigned experienced administrators—usually retired community college presidents—as coaches for the participating colleges. These coaches helped colleges develop and implement their reform strategies. The initiative also assigned the colleges "data facilitators," who were often institutional researchers, to help assemble, analyze, and interpret their data. In addition, Lumina Foundation funded several organizations, including the Community College Research Center (CCRC), our own organization, to provide research and policy support. Overall, ATD represented an ambitious and well-supported effort, based on extensive operational experience and expertise, that drew on the best research and evidence available to develop strategies with the explicit goal of improving student outcomes, including completion of credentials.

In 2011, the research organization MDRC, in partnership with CCRC, published a report on the first five years of the Achieving the Dream experience, focusing on the twenty-six colleges in five states that were the first to join the initiative.[21] The report grouped the various colleges' reform-oriented "interventions" into three broad categories: student support services, instructional support, and changes in classroom instruction. Student support services interventions—including advising, student success courses, early alert programs, and the like—accounted for nearly half (48 percent) of all ATD-related interventions. The other half focused on instruction, but half of those involved "instructional support," such as tutoring or summer "bridge" programs for new students. Only about a quarter of interventions involved new instructional techniques, reforms of college-level curricula, or changes in classroom instruction. Across all types of interventions, about half—and at least one in each of the twenty-six colleges—were devoted to improving outcomes for developmental students. Between these reforms of developmental education and changes to new student orientation and advising, the majority of ATD reforms focused on helping students during the early stages of their college experience. When these types of reforms have been rigorously evaluated, the studies have found mixed results for the reform participants, often consisting of modest positive effects that fade over time.[22]

The ATD report also investigated the *penetration* of reforms—the percent of potential target students reached by the practice. About half of the ATD interventions enrolled fewer than 10 percent of the college's potential target students, and only 31 percent reached at least one quarter of the target students. The few interventions that were large-scale tended to be low-intensity, such as an orientation program that engaged students for fewer than five hours in total.

To promote the scale-up of promising practices, the Bill & Melinda Gates Foundation funded the Developmental Education Initiative in 2009. Fifteen ATD colleges were chosen to participate, and each received $743,000 to assist it in these efforts. The chosen colleges were engaging in practices that had evidence of initial positive results and therefore seemed worthy of scaling up. However, the typical college was still only able to extend a given practice to about one-third of the target population.[23] Thus, even with supportive leadership, encouragement, and technical assistance from national organizations, as well as grant support, colleges have had difficulty scaling up programs that they perceive to be successful.

In general, the experience during the early years of ATD illustrates the dominant characteristics of reform in community colleges during the "completion agenda" era—more or less since the early 2000s. Colleges have been willing, and often enthusiastic, to experiment with new practices and strategies. These innovative practices are frequently directed at one segment of the student experience—usually at the beginning—and they generally reach a relatively small number of students, although very "light touch" efforts are more likely to reach a larger group of students.

Across the past decade, this approach to reform gave the impression of widespread innovation, experimentation, and commitment to improving student outcomes. Yet further results from the ATD study suggest that these reforms have not changed colleges' overall outcomes in any substantial way.[24] At its inception, the ATD initiative established five categories of performance metrics against which to judge participating colleges: developmental education program completion rates; "gatekeeper" course completion rates (particularly for the first college-level courses in math and English); completion of attempted courses with a grade of C or better; term-to-term and year-to-year persistence; and attainment of credentials. Despite the ATD colleges' many interventions—including some with at least modest positive effects on participating students—four categories of performance metrics remained essentially flat for the colleges included in the study.[25] In the remaining category, there was a modest positive effect on completion of gatekeeper English. A follow-up study with two more years of data found the same results.[26]

To be sure, the authors of the ATD report emphasized that this was not a rigorous study with an appropriately chosen control group; thus, we cannot definitively say that the ATD reforms did not cause overall improvements. Nevertheless, these data would suggest strong positive effects only if we expected that *without* ATD, performance would have dropped significantly during the years of the study. In any case, if one is looking for significant improvements in outcomes—the types of changes that would give the country a chance to achieve the ambitious goals set by the federal government, many states, and foundations—the reform model represented by early years of ATD cannot achieve this change on its own.

There are several reasons why ATD and similar reforms had a limited effect on student outcomes. As we have mentioned, most of the reforms either benefited a small number of students (and were not scaled beyond this select group), or they affected larger numbers but provided only low-intensity, or "light touch," support. In addition, most of the reforms implemented under ATD and similar initiatives focused on only one segment of the student experience: usually the intake process, developmental education, or in some cases the first year of a student's experience.

It is not surprising that colleges have focused on getting new students well established in college, but concentrating on this segment of the experience alone is insufficient. Indeed, we have conducted a simulation using data from one community college to estimate the change in graduation rates that would be generated by improvements in various first-semester or first-year outcomes. For example, we calculated that a 20 percent increase in the share of students who complete a college-level math course in the first year (a very large increase) would lead to only a 2.5 percent increase in the graduation rate.[27] This research suggests that to substantially improve rates of student progression and completion requires changes in practice throughout the students' experience with the college, and not just at the front end. Indeed, while students deemed "college ready" upon entering community colleges are more successful than those referred to remedial instruction, the majority of such students do not end up earning a college credential, suggesting that there are barriers to success in college-level coursework even for those considered academically prepared for college.[28]

Moreover, most instructional reforms have focused on tutoring and other supplemental support services rather than on classroom instruction. When instruction has been the target of reform, it has tended to be developmental education rather than college-level coursework. As a result, most faculty in the college—and particularly those teaching in college-level programs—have been largely uninvolved in, and unaffected by, reform efforts.[29]

To achieve significant institutional-level improvements in student success, reforms need to involve more thoroughgoing organizational change. In fairness, ATD sought to change colleges' wider organizational practice and culture through its emphasis on five organizational improvement practices: leadership commitment; use of data to prioritize actions; stakeholder engagement; implementation, evaluation, and improvement of strategies; and establishment of an infrastructure for continuous improvement.[30] These practices—together referred to by the ATD organizers as a "culture of evidence"—are similar to those that research suggests are characteristic of high-performing organizations in higher education, K–12 schools, and the private sector.[31] And the twenty-six colleges included in the ATD evaluation report did indeed make some progress toward a culture of evidence. The evaluators categorized the colleges into three groups: strong or very strong culture of evidence, some culture of evidence, or weak or very weak culture of evidence. In the spring of 2006, only 23 percent had been in the strong group; three years later, 42 percent were in that group.[32]

But this degree of organizational change seemed insufficient to change institution-level performance. While performance measures rose for some colleges and dropped for others, the researchers were not able to identify any relationship between improvement in the culture of evidence and improvement in institutional performance.

Achieving the Dream and other related reforms have made important contributions to the community college reform movement in the country. By emphasizing the crucial role of data analysis and calling for broader institutional change, they have changed the reform conversation. Many of the ideas that we propose in this book were influenced by our own participation in ATD and our reflections on its successes and limitations.

Yet why didn't a movement toward the type of thorough organizational change represented by the culture-of-evidence model help improve student outcomes? We suspect that principles such as "stakeholder engagement," "leadership commitment," and "continuous improvement" are too abstract to promote deep change. Colleges interpreted these goals in many different ways, and no outlines of a common strategy emerged. Thus, calling for fundamental change based on abstract principles is apparently an inadequate strategy. Current organizational structures, hierarchies, and cultures are too powerful and well entrenched to be threatened by abstractions, no matter how ambitious. Deeper organizational change likely needs to be supported by a more concrete set of reform plans, accompanied by an explicit strategy to win over and engage faculty, staff, and administrators. One purpose of this book is to further the reform movement by proposing a comprehensive, concrete, and evidence-based approach to reform, while including suggestions for engaging the cooperation and enthusiastic participation of college personnel. Just as important, recent reforms did not question the fundamental design of community college programs and services, but rather sought to improve performance within the same design framework that had been in place since the 1960s and 1970s, when most of these institutions were established. In this book, we argue that to improve their outcomes on a substantial scale in an environment very different from the past, colleges must undertake a more fundamental rethinking of their organization and culture.

The Cafeteria College

Community colleges and other broad-access institutions are well designed to serve the mission of providing low-cost access to college. However, the same features that have enabled these institutions to provide broad access to college make them poorly designed to facilitate completion of high-quality college programs—that is, programs that support deep student learning and that prepare students for success in further education and employment. We refer to the prevailing model as the *cafeteria* or *self-service* college because students are left to navigate often complex and ill-defined pathways mostly on their own.

The next four chapters of this book discuss different components of a typical community college: program structure, intake and student support services, instruction, and developmental education. Within each chapter, we draw on research first to describe how the cafeteria college operates in terms of the given component and then to suggest how the component can be redesigned following the guided pathways model to promote student completion of high-quality credentials that better enable students to achieve their goals for employment and further education. Below, we summarize our description of each component as it appears within the typical community college—which is currently organized as a cafeteria college. Later in this chapter, we will summarize our recommendations for redesign under the guided pathways approach.

Program Structure

Because they are designed to provide access to a wide variety of students with a wide variety of goals, community colleges give students many choices. Students have broad flexibility to decide when to enroll, which courses to take, how many to take per term, and what programs to pursue. Most colleges offer an extensive array of courses and programs, which allows students to explore different areas and discover their interests. Yet students are expected to explore these options more or less on their own, with minimal guidance. Moreover, the courses available within a given program are often not closely connected or coherently sequenced in ways that build to a clear set of meaningful learning outcomes. As a result, students end up taking courses merely to meet program requirements—"checking off boxes" rather than mastering skills and knowledge relevant to their goals. Too often, program learning goals are also not well defined or are poorly aligned with requirements for further education and employment.

Intake and Student Supports

The intake process for new students often consists of a placement test, a brief face-to-face or online orientation, and an abbreviated (and not always mandatory) advising session, typically focused on registering for the first semester's courses rather than on exploring the student's longer-term goals. After their initial registration, most students remain confused about their potential goals, and how these might align with the college's program offerings. Even if the student chooses a specific program or transfer goal, most colleges do not closely monitor students' progress toward their goals over time; both the college and the students themselves are thus unclear about how far students have progressed and how far they still need to go. Advisors and faculty have no way to know when a student is going "off track," and it is therefore up to students to recognize when they need help and seek it out on their own. Unfortunately, it is students most in need of such help who are the least likely to seek it.

Instruction

Just as students must rely on themselves in the cafeteria model, instructors are often isolated and unsupported in their teaching, a situation reinforced by the extensive use of adjunct instructors. There is little opportunity for cooperative work to improve teaching and learning. And while many professors in community colleges are excellent instructors, their innovations tend to result from individual initiative rather than institutional policy or culture. Consistent with a culture of faculty isolation, curricular content is developed course by course, with less emphasis on programs as a whole. Rather than recognizing and explicitly working to improve students' weaknesses in self-direction, time management, academic motivation, and other factors critical to students' success in college, faculty often regard these weaknesses as outside the scope of course instruction. Moreover, course content and instruction often seem irrelevant to students' interests and career and personal aspirations, thus contributing to a demotivating learning environment. To provide students with more flexible learning options, community colleges are increasingly turning to fully online instruction, which tends to reinforce the cafeteria model of disconnection and isolation, while undermining many students' academic success.

Developmental Education

The typical community college devotes considerable resources to helping academically underprepared students—who represent the broad majority of incoming students—reach the college's standards of academic readiness. However, the current system of developmental education is hampered by inadequate placement information, lengthy prerequisite sequences, and, in many cases, uninspiring instruction. As a result, most students who enter developmental education never successfully emerge from it to embark on a college-level program of study.

Overall, across the four components of structure, intake and supports, instruction, and developmental education, the various parts of the college are consistently characterized by a lack of interaction and alignment toward students' end goals. Students must rely mostly on themselves; professors and advisors generally work in isolation; and there is little coordination between instructors and student services personnel. Meanwhile, options abound: students can chose from a large menu of courses, which ultimately confuses and frustrates them, while faculty can choose to engage in instructional improvement or not. Of course, even in a cafeteria college, there will be areas of excellence and collaboration; however, the fragmented or "siloed" structure of the college does not encourage this in a systematic way. Community college faculty and administrators seeking to shift away from the cafeteria model must overcome an entrenched organizational structure and culture. The weaknesses that we have observed emerge from the logic of the college structure, not from the failings of individual institutions or certainly not of individual faculty and staff.

When considering the path to reform, it becomes clear that the typical approach to reform in community colleges is also consistent with their underlying cafeteria structure. As we have argued, reforms have been sporadic, focused on one element of the college in isolation from other elements and reforms, and based primarily on the initiative of individuals or small groups of individuals. Thus, reforms have sought to strengthen elements of the prevailing model without challenging that model. But if the problems originate in the model itself, then it is not surprising that the results of these reforms have been disappointing. In the next section, we outline how these elements would change under a more ambitious and comprehensive guided pathways model.

Designing Guided Pathways to Student Success

Research on organizational effectiveness in and outside of higher education indicates that, in contrast to the disconnection and isolation that characterize the cafeteria college structure, high-performing organizations implement their "core functions" in a coordinated, complementary fashion that is aligned with organizational goals.[33] The offerings and support services provided by community colleges under the prevailing model are well designed to achieve the organizational goal of access to college *courses*. They are not well designed to help students enter and complete college *programs* that prepare them for further education and employment. From this perspective, it would appear that Achieving the Dream and other similar reforms have been too limited in their goals. To support student success, it is not enough to try to find ways to improve student completion in courses as they are currently designed; rather, courses need to be incorporated into larger program redesigns. The guided pathways approach to redesign starts with students' end goals in mind, and then rethinks and redesigns programs and support services to enable students to achieve these goals. A growing number of colleges and universities are doing just this. Instead of letting students find their own paths through college, they are creating "guided pathways" to completion of credentials, further education, and advancement in the labor market. In the process, they are redesigning the conventional college in fundamental ways.

Within the next four chapters of the book, after describing the prevailing cafeteria design of key college functions, we review research that supports a shift to a guided pathways model and describe the work of some colleges that are implementing redesigns consistent with this approach. Below we summarize the guided pathways approach that is unfolding across these and other innovative colleges.

Program Structure

In guided pathways colleges, faculty clearly map out academic programs to create educationally coherent pathways, each with clearly defined learning outcomes that build across the curriculum and are aligned with requirements for further education and career advancement in the given field. Students who enter without clear program or career goals are assisted in choosing a broad initial field of interest (such as business; allied health; education and social services; social and behavioral science; science, technology, engineering, and math; or English, arts, and humanities), each of which features a default curriculum that gives students a taste of the given field and helps them either narrow down their choice to a specific program or switch to another area of interest. While each broad field and the programs nested within it are built upon a default sequence of courses, students can opt out of the default if they wish. Rather than restrict students' options, the guided pathways structure is intended to help students make better decisions without limiting their options.

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