



## **Beyond Free College: How State Policies Can Boost BA Attainment**

By Patrick Cooney, Vice President, Michigan Future, Inc.

In late 2005, Kalamazoo Public Schools (KPS) superintendent Dr. Janice Brown announced one of the most ambitious educational initiatives in recent memory. Supported by the generous donations of anonymous benefactors, KPS launched the Kalamazoo Promise, a program that would provide a tuition-free pathway to any public community college or public four-year university in Michigan for all KPS graduates.<sup>1</sup> The Promise was founded on the belief that the high cost of college was the primary obstacle preventing more low-income students and students of color from attaining college degrees and that, once removed, college attainment rates for KPS students would dramatically increase.

However, data from the first seven classes of KPS graduates eligible for the scholarship present a more complicated story. While 70% of white women and 63% of white men in those first seven classes went on to secure a postsecondary credential within 10 years of graduation, just 42% of Black women and 26% of Black men did the same. While 48% of white graduates went on to complete a bachelor's degree within 10 years, just 19% of Black students did. And while 51% of middle-class or affluent students completed a bachelor's degree within 10 years, just 20% of low-income students did.<sup>2</sup>

In other words, despite the removal of what many think of as the central barrier to college completion, completion rates for KPS students – and particularly for non-affluent students and students of color – remained low. There remained large attainment gaps between white and Black students and affluent and low-income students. And even among middle-class and affluent students, only half went on to complete a bachelor's degree within 10 years of high school graduation.

What we see from the data on the Kalamazoo Promise is that the interventions required to meaningfully improve college completion rates, both for all students and more specifically for non-affluent students and students of color, extend far beyond paying for tuition. Indeed, the research on college completion suggests that though cost is surely an important factor, many other factors come into play of equal, if not more, importance. These include a student's academic preparation in K-12; the quality of college counseling they receive in high school; the systems that support their transition from K-12 to higher education; the academic and social supports they receive in college; and many others.

This paper will dig into the literature on college completion, outline the factors that are most important to college success, and identify state policy levers that can be used to create the conditions needed to increase educational attainment in a given state.

I will start with a discussion of the importance of a college degree in the 21<sup>st</sup> century, both for an individual's long-term economic prospects, and for the health of a state or region's economic vitality. This discussion will include our rationale for placing the focus on bachelor's degree completion, rather than on sub-BA credentials.

I will then discuss what is needed along each step of the K-16 education system to expand the number of students who go on to complete a bachelor's degree, and the levers state policymakers can pull to make meaningful change in the various elements of that system. This includes designing a K-12 education system



that is centered around the knowledge, skills, and behaviors needed for success in college and career, rather than success on standardized tests; equipping high schools with the resources they need to provide high-quality college counseling; helping four-year institutions deploy the student success “playbook” that has been designed by leading institutions over the past decade; and redesigning our community college system so that community colleges can serve as a meaningful bridge to a four-year degree.

### **The importance of a four-year college degree in the 21<sup>st</sup> century**

In this paper we will be focusing primarily on bachelor’s degree attainment. We care about four-year college attainment for two reasons. At the macroeconomic level, in the 21<sup>st</sup> century knowledge economy the economic prosperity of a given state is highly dependent on the human capital within that state. In today’s economy, economic growth is driven by the capacities of people – their innovations, discoveries, and ways of organizing collaborative work. This means the knowledge, technical skills, and wide range of “soft” skills (e.g., the ability to manage and work with others, the ability to clearly communicate, the ability to think creatively and critically) of the people in a particular economy are directly linked to the productivity of that economy.

Economists tend to measure this range of capacities, often referred to as “human capital,” by educational attainment. And, indeed, we see a striking correlation between the educational attainment of a given state and that state’s per-capita income, our preferred measure of economic prosperity and overall well-being.<sup>3</sup> The eight states with the highest per-capita income all rank in the top 20 in the share of their working-age adult population with a bachelor’s degree or more. The bottom six states in per-capita income all rank in the bottom ten in educational attainment. In today’s economy, the educational attainment of your residents determines your economic fate.

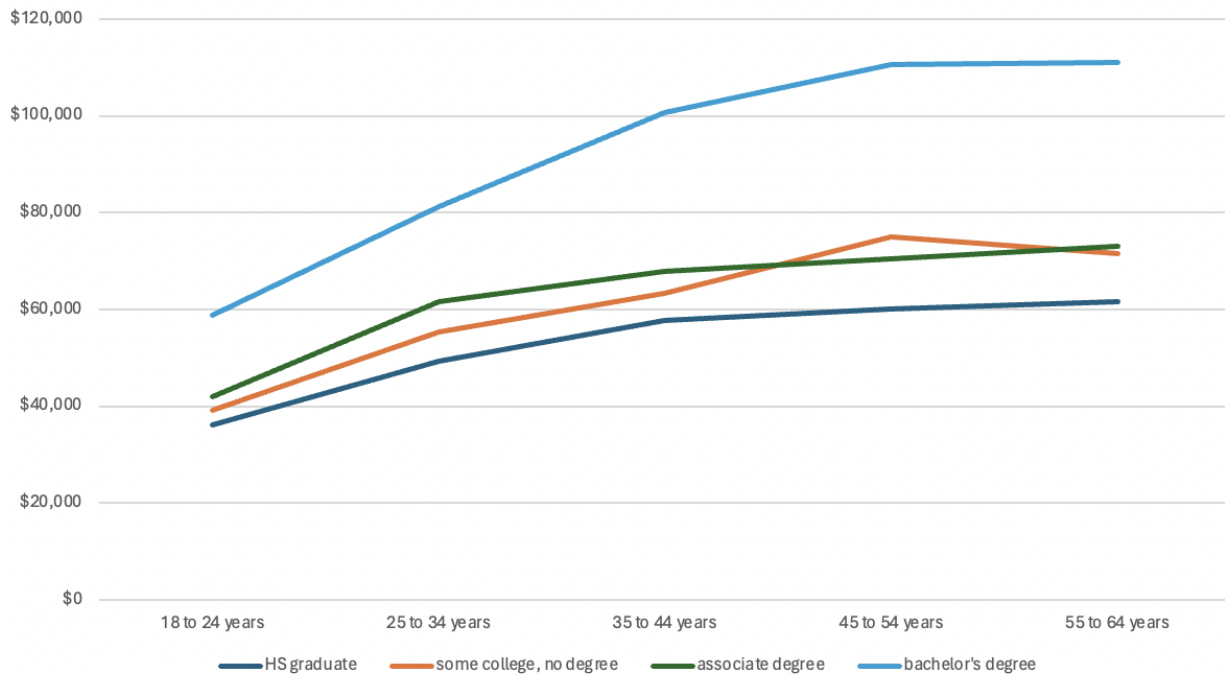
But in addition to its importance to macroeconomic goals, educational attainment is also critical at the individual level. Despite media narratives that often suggest otherwise, a four-year college degree remains an individual’s surest route to a middle-class income. In our analysis of labor market data, we set a “middle-class” income threshold at \$57,700: this is the annual income a worker would need to support a family of three at the lower end of a middle-class lifestyle. 60 percent of jobs in the U.S. economy that pay enough to clear this threshold require a bachelor’s degree or more. If we set the threshold at \$86,500, our threshold for “upper middle-class,” the share of jobs requiring a bachelor’s degree or higher jumps to 73 percent.<sup>4</sup>

Indeed, the so-called “wage premium” associated with earning a four-year college degree is large and growing. If we look at the average full-year, full-time worker with a bachelor’s degree (this analysis is limited to bachelor’s degree holders, and does not include those with graduate degrees, whose earnings are even higher), we find that in 2022 that worker earned roughly \$96,500. This is \$42,000 more than the average income for a full-year, full-time worker with no education beyond high school, \$33,000 more than a worker with some college, but no degree, and \$29,800 more than a worker with an associate degree. The gap was slightly smaller, though still substantial, for workers early in their careers (\$22,700, \$19,700, and \$17,030 respectively), but is massive by mid/late career: for those between 55 and 59, the gaps were \$52,900, \$41,200, and \$38,900 (see Chart 1).<sup>5</sup>



## Chart 1

Mean earnings for full-time, full-year workers by education and age (2022)



*The four-year college degree wage premium is already large for younger workers but grows substantially throughout one's career.*

Source: Current Population Survey Annual Social and Economic Supplement

A college degree is even more important for those growing up in non-affluent households, as earning a college degree remains the most dependable route to economic mobility. Harvard economist Raj Chetty, and his team at Opportunity Insights, used detailed tax records and administrative data from colleges and universities to track adult earnings based on an individual's parents' income, whether or not that individual graduated from college, and the selectivity of the college they graduated from. What we see from this data is that, in general, the income of one's parents is highly predictive of an individual's income as an adult: children raised in non-affluent households tend to remain non-affluent as adults. However, we also see that graduating from college, and especially graduating from a selective college, disrupts this general pattern. If you earn a college degree, parental income no longer determines one's fate.<sup>6</sup> On average, an individual whose parental income fell in the bottom quintile is expected to have adult income in the 30<sup>th</sup> to 40<sup>th</sup> percentile. However, if that individual graduates from a four-year college, their income as an adult is expected to rise to around the 60<sup>th</sup> percentile; if they graduate from an elite school, over the 70<sup>th</sup> percentile. Earning a four-year college degree completely alters one's economic trajectory.<sup>7</sup>

This is all worth dwelling on because in recent years there has emerged an anti-college backlash, driven by concerns over the high price of college, and stories about young, underemployed students crushed by student loan debt. In one high-profile piece in the New York Times Magazine, Paul Tough cited research showing that while college graduates enjoyed a wage premium, the high cost of college erased any *wealth* premium a college graduate might receive, because they had to use those higher wages to pay down student loan debt.<sup>8</sup> However, research Tough cited was based on the faulty assumption that the college



wage premium does not grow throughout one's adult life (as we previously noted, it more than doubles throughout one's career).<sup>9</sup> When corrected, one finds college graduates enjoy not only a large wage premium, but also a large wealth premium. Recent data from the Federal Reserve found that in 1989, the total wealth gap between those with a bachelor's degree and those with some college was roughly \$14 trillion in inflation adjusted dollars; by 2023 it was \$87 trillion.<sup>10</sup> This is all in addition to the host of non-pecuniary advantages that accrue to those with a bachelor's degree.<sup>11</sup>

Simply put, educational attainment is *the* most important lever both for the long-term economic success and well-being of the individual, and for the overall prosperity of a state or regional economy.

### **How to produce more college degrees**

With the macroeconomic and individual advantages of educational attainment established, we return to our main question: how do we increase educational attainment in a given state?

There are two ways to do this. One is to attract talent from across the country and around the world, a strategy we dug into in a prior paper.<sup>12</sup> But the second strategy, which we explore in this paper, is to ensure more of our young people are prepared for, have the opportunity to pursue, and are supported along the path to a four-year college degree.

Here we will outline both the elements of that system, and the public policy levers that can enable such a system to take hold. We will discuss four central elements:

- (1) A K-12 education system that prepares students for college success.
- (2) High-quality college counseling.
- (3) The supports colleges need to provide their students to get them to graduation.
- (4) And the redesign that is needed in our community college system to ensure community colleges serve as a meaningful bridge to four-year institutions.

### ***Section 1: A K-12 education system designed for college success***

Aside from the anti-college sentiment that has emerged in some circles in recent years, over the past few decades there has been a growing general acknowledgement of the importance of earning a college degree, and the importance of earning a four-year college degree in particular. The college wage premium is as high as it has ever been, and, up until the past few years, the share of high school graduates enrolling in college had been trending upwards.<sup>13</sup>

College attainment has grown as well. Whereas 31% of U.S. adults over 65 have a bachelor's degree or higher, and 34% of those between 45 and 64 do, the BA attainment rate shoots up to 40% for those between the ages of 25 and 44.<sup>14</sup>

Despite this progress, however, there are far too many young adults who start college but fail to complete a degree. Roughly one out of every three students who enrolls directly in a four-year college after high school will not have a bachelor's degree six years later.<sup>15</sup> And though 80 percent of students who enroll in a two-year college have plans of transferring to a four-year college and completing a bachelor's degree, just one in six actually do.



The problem of low completion rates is only magnified for low-income students: while nearly two-thirds of all full-time entering freshman at four-year colleges will complete their bachelor's degree within six years of entry, that figure is just 30% for students who receive a federal Pell Grant, which is only available to students from lower-income households.<sup>16</sup> Looking across all Pell Grant recipients, just 45% complete a postsecondary credential of any kind within six years of initial enrollment, and just 20% earn a bachelor's degree.<sup>17</sup> If we look across the entire path of one's education – from K-12, to college transition, to college completion – the odds of college completion for low-income students is that much worse. Analysis of one longitudinal survey, looking at youth born between 1979 and 1982 found that just 9% of those raised in homes in the bottom income quartile completed a four-year degree, versus 54% of those raised in top income quartile homes.<sup>18</sup> There also continues to be significant racial gaps in college graduation – of those who entered a four-year college in 2015, 68% of white students and 78% of Asian students graduated in six years, versus 46% of Black students and 59% of Hispanic students.<sup>19</sup>

Low completion rates are particularly troubling because the student loan “crisis” is largely centered on students who fail to graduate. Though media coverage around student loans tends to focus on the cumulative debt burden of American students, or on those borrowers who owe large sums, it is actually those borrowers who owe relatively small amounts who are most likely to default on their loans.<sup>20</sup> Why? Because those with relatively small loan burdens tend to be those who did not complete their degree, and therefore did not receive the earnings bump that comes with a bachelor's degree.

The reasons so many students who start college fail to complete are many, ranging from financial obstacles, to inadequate academic and social supports, to poorly structured transfer pathways from two-year to four-year colleges. But we're going to start with what should be the most obvious, but often the most overlooked and consequential reason so many students fail to graduate from college: their academic preparation in the K-12 education system.

When we talk about academic preparation, most will think of test scores. And, to be sure, test scores can tell us *something* meaningful about the academic preparation of our nation's high school students. In the book *Crossing the Finish Line*, a definitive study on who does and does not complete college, and why, the authors find that a student's high school grade point average was more predictive of their eventual likelihood of college graduation than were SAT scores. However, SAT scores *are* highly correlated with student success in the first year of college, suggesting that those with better math and reading skills will have an easier time adjusting to the rigors of college courses.<sup>21</sup>

But while attaining the kind of math and reading fluency needed to be successful on the SAT is clearly a piece of college preparation, it's only a piece. There are two other aspects of college preparation which we will focus on here that are just as important – and in many ways more important – than the reading and math fluency tested on the SAT: how to be an independent learner, and how to be a clear, analytical, and critical writer.

We'll start with writing. Writing is at the core of what a college student does. Lawrence McEnerney, the director of the University of Chicago's Writing Program, along with his coauthor Joseph M. Williams, wrote about college:



“For four years, you are asked to read, do research, gather data, analyze it, think about it, and then communicate it to readers in a form in which enables them to assess it and use it. You are asked to do this not because we expect you all to become professional scholars, but because in just about any profession you pursue, you will do research, think about what you find, make decisions about complex matters, and then explain those decisions--usually in writing--to others who have a stake in your decisions being sound ones. In an Age of Information, what most professionals do is research, think, and make arguments. (And part of the value of doing your own thinking and writing is that it makes you much better at evaluating the thinking and writing of others.)”<sup>22</sup>

And it’s not just any writing, but a specific kind of writing – writing that demonstrates clarity of thought, and a well-supported argument. Williams and McEnerney note that in college you will be asked, nearly every other week “to analyze (a) reading, to make a worthwhile claim about it that is not obvious, to support your claim with good reasons, all in four or five pages that are organized to present an argument.” The authors note that so many students struggle with the transition from high school to college writing because what instructors are asking for is “not just something *better*, but something *different*.”<sup>23</sup> No longer does it suffice to summarize a work (though students often struggle with this as well) or follow a formulaic path; rather, to excel, students must make an original claim, and then effectively back up that claim with evidence.

The trouble is, if this is a skill students have long struggled with, by all accounts this trend is only accelerating. Trade publications and the popular press are filled with articles by college faculty and writing instructors, bemoaning the declining ability of their students to string together coherent, well-researched arguments. One potential culprit, it seems, is the test-based accountability movement sparked by No Child Left Behind (NCLB), and the Common Core standards that followed in its wake. Thought at one time to serve as a way to introduce some sense of accountability, uniformity, and rigor to the American K-12 curriculum, NCLB and the Common Core standards have now been accused – by college professors and professional employers – of turning millions of American high school students into poor readers and writers. Students are not taught to write, *per se*, but are taught a formula for a five-paragraph essay.<sup>24</sup> Students don’t read books, but rather test-ready short passages.<sup>25</sup>

Marc Tucker, the founder and former president of the National Center on Education and the Economy writes that “high school students are hardly ever asked to write anything of significant length. Why not? Because in this age of accountability, they are not tested on their writing ability. By which I mean that they are not asked to submit to the testing authorities 10- or 15- or 20-page papers in which they are expected to present a thesis and defend it, analyze something complicated from multiple points of view and draw a reasoned conclusion.”<sup>26</sup> He goes on to say that the only way to learn how to do it, like almost anything else, is to do it, a lot. But our current K-12 system is not designed to encourage this kind of practice. It is designed for students to do well on standardized tests, by practicing the kinds of questions that appear on standardized tests, which, by their very presence on standardized tests, are relatively intellectually shallow. Time to work on the foundations of writing a solid argument – of finding your thesis, of conducting research to find data that backs that thesis, of entertaining and then striking down counterarguments, of truly and rigorously exploring ideas and claims – has not been carved into the school day.<sup>27</sup>

Yet Tucker, like Williams and McEnerney, also believes that clear, critical writing is the core skill we should be centering education around in the 21<sup>st</sup> century. Tucker writes, “We are fond of producing long lists of





things we want 21<sup>st</sup> century students to be able to do. But the ability to write well and think critically always tops the list, both because so much work requires these skills and because they are so fundamental to so many other kinds of cognitive activity we value. What could be more central to a good education?"

And it's not just the tricky transition from high school writing to college writing that is giving students trouble. There is ample evidence that most American high school students can't write in even the most basic sense – that is, writing in complete sentences with appropriate grammar, or writing sentences that build off of one another to create a paragraph with a main idea. Roughly 75 percent of twelfth graders taking the National Assessment of Educational Progress were deemed not proficient writers, and 40 percent of students who took the ACT did not have the skills needed to be successful in a first-year college writing course.<sup>28</sup> Again, the likely culprit is the two decades of high-stakes test driven accountability brought on by No Child Left Behind, which appears to have pushed out whatever meager amount of writing was previously in the K-12 curriculum.<sup>29</sup>

In addition to this core college-ready skill, there are many other kinds of knowledge, behaviors, mindsets, and skills needed to succeed in college, that all set a foundation for enabling a student to learn independently. David Conley, an emeritus professor of education at the University of Oregon, has developed what is likely the most comprehensive model of college readiness.<sup>30</sup> It consists of a whole range of knowledge, skills, mindsets, and behaviors that you will not find assessed on any standardized test. Under Conley's model, for a student to make a successful transition to college she must possess:

- (1) **Key cognitive strategies**, that enable her to learn content from a range of disciplines. These strategies include the ability to formulate problems, engage in active inquiry, construct arguments, and interpret conflicting claims to arrive at a truth.
- (2) **Core academic subject knowledge and skills**, which include the central ideas and concepts that construct various disciplines; reading comprehension and the aforementioned writing fluency; a deep conceptual understanding of basic mathematics, and algebra in particular; a fluency in scientific thinking; and the ability to evaluate evidence and understand broad themes and big ideas in the social sciences.
- (3) **Academic behaviors**, which include the ability to assess one's own understanding of a set of material, as well as the study and organizational skills to manage one's own time and mastery over a given set of material.
- (4) **Contextual skills and awareness**, which includes understanding all of the often unwritten rules of the college application and selection process, as well as a whole range of knowledge and skills that enable one's success in college, including how to interact with faculty, administrators, and peers; how to take advantage of student support systems; how to work collaboratively with peers; and how to work well with peers from other backgrounds and cultures.

It's safe to say that in most high schools, most of these strategies, knowledge, skills, and behaviors are not actively developed. Rather, school is school. There is content to be learned, and students will be tested on this content, both in class, and through college entrance exams. Learning tasks are largely shallow in nature, involving the copying down and memorizing of material. Little attention is paid to constructing



quality arguments; understanding central ideas and concepts that form the foundation of various disciplines; achieving a transferable fluency in core academic courses; creating an environment in which students manage their own learning; or teaching the unwritten rules that govern admission to and success in college.<sup>31</sup>

So, what is to be done? How can we use public policy to push American high schools to help their students develop the knowledge, skills, behaviors, and mindsets needed to be successful in postsecondary education?

In the book *In Search of Deeper Learning*, Harvard education scholars Jal Mehta and Sarah Fine find that the goals of what they call “deeper learning” are largely only met in “affluent private schools and in the highest-track classes at the most advantaged public schools.”<sup>32</sup> Their definition of deeper learning is learning in which a student builds a deep understanding of the concepts that make up the domains they are studying, and that asks them to not only consume but produce knowledge. This definition of deeper learning, and the kind of pedagogy required to achieve it, aligns closely with the development of the kinds of knowledge, skills, mindsets, and behaviors Conley believes are needed for success in college. But what they find is that educational models designed for deeper learning are largely missing in most American public high schools.

Where Mehta and Fine did find examples of deeper learning occurring outside of private schools and the honors classes of affluent public schools, they found them not in core academic classes, but in elective courses and extracurricular activities – spaces where teachers perhaps felt more free to go deeper into a particular subject and engage in more discussion with students.<sup>33</sup>

It's probably no coincidence that in all these environments – private college-prep schools or elective and extracurricular courses in traditional public schools – instructors are for the most part free from the strictures of standardized tests and mandated curricula. Though standardized tests give us some valuable information about what a student does or does not know, or what they can or cannot do, we argue that the way in which our education system is oriented around standardized tests detracts from our ability to adequately prepare them to be successful in college. There are only so many hours in the day, and the more time spent preparing students for the kinds of material they will face on a standardized test, the less time is available for active inquiry, argumentation, building deep conceptual knowledge, discovery-based pedagogy, and the ability to articulate one's thoughts clearly and logically in writing. College faculty continue to note that there is a clear distinction between students' ability to write clearly, think critically, and operate with a greater degree of independence before and after the passage of No Child Left Behind.<sup>34</sup> The nature of high-stakes tests (multiple choice responses; limited, if any, opportunities for writing) and the type of teaching they encourage has resulted in students only looking for the “right” answer, and only attempting to learn material that will be “on the test.” This is troubling. In college courses, and much more so in the world of work, there is rarely one right answer, and those who are learners – who seek out new material because of genuine curiosity, rather than the chance they may one day be assessed on it – are those who thrive.

#### *The role of state policy in designing a K-12 system built for college success*

There are many different places we can and should intervene to create a K-12 education system that equips students with the knowledge, skills, mindsets, and behaviors needed to be successful in college. But for





the purposes of this paper, we will focus on only two: our accountability systems, our approach to college counseling, and our school funding systems.

*Strategy 1: Pilot accountability systems centered on college success*

As outlined above, a central reason why our current K-12 system fails to properly prepare students for college is that it is designed almost exclusively around a system of bad tests. To alter this state of affairs, we can start by designing better tests – ones more closely aligned with the knowledge and skills students need to be successful in college – and making those tests less of a presence in the daily lives of our K-12 students and teachers.

In a 2014 report, Marc Tucker of the National Center for Education and the Economy made an attempt at defining the contours of such an accountability system, which we believe remains one of the best examples of what a comprehensive overhaul of our accountability system might look like.<sup>35</sup> Rather than annual high-stakes standardized tests that every student takes, Tucker advocates for just three “census” exams (i.e., every student would take them) through a student’s K-12 career – one in fourth grade, one before high school, and one after a student’s sophomore year of high school. And while today’s high-stakes standardized tests are focused primarily on multiple choice questions assessing basic math and literacy skills, the tests Tucker is proposing would consist of “performance items” such as extended essays, “designed to assess both the kinds of skills traditionally associated with the academic disciplines” as well as “21<sup>st</sup> century skills.” Whereas today’s assessments are cheap to produce and grade, Tucker notes that these new assessments “would be expensive and time-consuming to develop and administer, and they should be.” In Tucker’s model, these three census assessments would be accompanied by multiple-choice tests focused on basic math and literacy skills that would still be administered annually, though only to samples of the student population, to get a regular check on the performance of a given state, district, or school. Tucker’s design envisions using the data from both the census and sampling exams to identify schools that need support, and then deploying teams of expert educators to provide that support.

It's worth noting here that many schools and educational models that we would consider exemplars of a college preparatory environment already use some version of the system Tucker proposes. At many private college-prep schools, the academic program, particularly in the later years of high school, might center around a thesis project or another long-term research project, that mimics the kind of work students may regularly face in college and career. In the International Baccalaureate program (IB) – an academic program that high schools can implement to ensure a level of rigor needed to adequately prepare students to succeed in college – students must complete an extended essay: a 4,000 word research paper about a topic of interest to them, that centers on the ability to formulate a research question, engage in deep research, develop an argument, and communicate ideas.<sup>36</sup> And at New York’s “Performance Standards Consortium” schools, instead of taking New York’s Regents exams students submit “performance assessments” to external evaluators, which might include “analytical essays on literature, social studies research papers, extended or original science experiments, and problem-solving at the higher levels of mathematics.”<sup>37</sup> In recent research on the performance of New York City high schools, these consortium schools stood out for their success in “getting graduates into college – and the success of their students once they are in college.”<sup>38</sup> It's also worth noting that Tucker’s proposed testing regime is much closer to the kinds of testing protocols seen in high-performing countries.<sup>39</sup>



In short, one small step towards an accountability system that intentionally tries to build the capacities needed for college success would be to utilize performance items – such as the kinds of analytical essays and research papers students will be asked to execute regularly in college. Such assessments would likely present a starker image of just how unprepared our young people are for a world that values critical thinking and clarity of communication. But by using these kinds of performance items as the north star of our education system – rather than formulaic and intellectually shallow multiple-choice tests – we can begin the long journey of better preparing our young people for the world into which they are heading.

Another way states can hold K-12 systems accountable to preparing students to be successful in their postsecondary education is to hold schools and districts accountable to their students' ultimate outcomes in postsecondary education. If schools and districts regularly were forced to reflect on their students' success, or lack thereof, at the postsecondary level, they would be forced to wrestle with the extent to which their educational model prepares their students, or not, for postsecondary success. Do students have the foundational math and reading skills to be able to thrive in their first-year courses? Do students get enough opportunities to practice writing substantive essays, in which they must make a claim, and back that claim up with evidence from several sources? Are students given opportunities to manage their own work and learning, as they'll have to do in college? Are courses designed to build a deep understanding of the core concepts of various disciplines, that sets a foundation for future learning?

#### *Strategy 2: Increase funding for college counseling*

By shining a light on postsecondary outcomes we can also highlight the importance of high schools' college counseling programs, and overall college-going culture. The college application and financial aid process is incredibly complex, particularly for first-generation students. And we know that where a student enrolls in college is important to their eventual success. One of the most important findings in the literature on college success is around the phenomenon now known as “undermatching,” where a student chooses to attend a school that is *less selective* than other colleges she could have gained admission to.<sup>40</sup> This turns out to be important because a student who undermatches is *less likely* to graduate than an observationally equivalent student who attends a more selective institution. This is because more selective institutions tend to have more resources, that they devote to financial aid and student support efforts, not to mention the influences of higher-achieving peers.

Undermatching is that much more of a problem because it predominately occurs among low-income students, who could most benefit from the economic mobility impact of a college degree. The reason it largely occurs among low-income students is because most low-income students lack access to highly-qualified college counselors, who can provide expert advice on college match, the college application process, and financial aid. The national student to counselor ratio is roughly 400 to 1 – a figure that is much worse in under-resourced schools serving non-affluent students.<sup>41</sup> It should also be noted that this high ratio accounts for *all* counselors –rather than solely college counselors – who have to squeeze whatever college guidance they can among traditional duties of a guidance counselor. If we hope to design a system that produces more college graduates, investments will be required to not only dramatically reduce student to counselor ratios in our schools, but also ensure college counselors are trained on how to use student success data to direct their students to the school that offers them the best chance of success.



### *Strategy 3: Increase core K-12 funding*

Finally, if we want a system that produces more college graduates, we have to equip our schools with the resources they need to prepare their students for college success.

It's hard to talk about K-12 education reform without also talking about funding. Because just about any reform one might advocate for – higher teacher pay, smaller class sizes, additional help for special education students, curricular reforms, revamped teacher training – would require funding beyond the status quo. This is particularly true in schools and districts serving non-affluent students. For all the faults and areas for improvement in our K-12 education system, those schools and districts serving affluent students generally do a decent job of preparing students to be successful in college and beyond. To be sure, some of the advantages these students have come from what they experience outside of school. But schools – and the resources that enable them to attract experienced, high-quality teachers and offer a wide array of extracurricular and elective courses – play a role as well. If we are going to ask those schools serving non-affluent students to prepare a far larger share of their students for college success than currently meet that threshold, we need to equip them with the needed resources as well.

Over the past decade, a strong consensus has emerged in the literature that school funding is really important to student achievement and educational attainment. Furthermore, school spending is that much more important for non-affluent students. In a landmark study by C. Kirabo Jackson and colleagues, the authors look at school spending “shocks” over a period of several decades brought on by legislative action or court orders. And they find that if a non-affluent student attends a school that receives a 20% increase in funding, and that increase persists through twelve years of education, that student is likely to complete an additional year of education, earn 25% more as an adult, and is 20% less likely to be low-income as an adult.<sup>42</sup> In the world of education research, these are huge impacts. Meanwhile, more affluent students who experienced the same funding shocks saw no change in their predicted attainment or economic outcomes. In short, adequate funding really matters, and it really matters specifically for non-affluent students.

What does adequate mean? Bruce Baker, a school finance expert at Rutgers University, and his colleagues publish an annual report looking at education funding adequacy across U.S. states. While there is tremendous variation between states (roughly half of states continue to grant less revenue per pupil to their higher-poverty districts than to their lower poverty districts), on average higher-poverty districts are funded at roughly 20% higher levels than lower-poverty districts. However, when Baker and colleagues model the level of funding needed for students in higher-poverty districts to achieve average educational outcomes (as measured by test scores of basic math and reading skills), they find that students in higher-poverty districts should be funded at rates nearly 90% higher than lower-poverty districts.<sup>43</sup>

There are all sorts of strategies states, districts, and schools can employ to ensure their students are prepared for success in college and career. But all of these strategies rely on adequate funding. States need to ensure that their schools and districts serving non-affluent students are funded at levels far higher than what is allocated for schools and districts serving affluent students if we are to get anywhere close to our goal of increasing educational attainment for all students.



## ***Section 2: Improving completion rates at four-year colleges***

Let's say, for a moment, that we were to design a K-12 system as we describe above: one that prioritizes the development of the knowledge, skills, behaviors, and mindsets students will need to be successful in college and career; one that teaches students how to think critically, communicate clearly, and learn deeply; and one that prioritizes the transition from K-12 to higher education, ensuring graduates are put on a pathway to attend an institution from which they have a high likelihood of graduating.

Even if this were to happen, we would still need to redesign our systems of higher education, to ensure that far more of the students who attend college end up leaving with a degree in hand.

There were roughly 3 million 16- to 24-year-olds who completed high school in 2015. Roughly 2 million (69% of all graduates) went on to college, with 1.3 million attending a four-year college, and 700,000 attending a two-year college. Of those that went directly to a four-year college, roughly 850,000 (65%) graduated with a four-year degree within six years of entry. Of those that started at a two-year college, 238,000 (34%) received an associate degree within three years, and roughly 112,000 (16%) went on to receive a bachelor's degree within six years of entry. In total, on top of the roughly 1 million high school graduates from the 2015 cohort who did not enroll in any college at all, this leaves another 800,000 students who began college, but had no two- or four-year degree to show for it six years later.<sup>44</sup>

The good news is that we know what it takes for colleges to graduate many more students than they currently do. Over the past two decades, a number of pioneering institutions have written the guidebook on what it takes to dramatically improve graduation rates, particularly for non-affluent and first-generation students.

Georgia State University in Atlanta is considered by many to be the standard bearer for student success. Georgia State is a mid-selectivity public institution that in the early 2000s graduated just 30% of its students. Since then, however, led by former president Mark Becker and former senior vice president for student success Tim Renick, the school transformed itself into a leader in student success, boosting its graduation rate by nearly 70 percent between 2003 and 2017, and eliminating outcome gaps between white and Black students.<sup>45</sup> They did it through a number of now well-known strategies, including:

- Obsessive attention to data on student success, using predictive analytics to better understand which students were likely to struggle when, and developing new programs to intervene at those pain points.
- Dramatically increasing student support staff, and, with the support of robust data systems, reaching out to students proactively, rather than waiting for students to come to them.
- Implementing an emergency cash grant program to provide students who are on track academically but short on tuition with small grants to make up the difference and keep them enrolled.

More important than any one strategy, however, was the way in which university leadership prioritized student success as a central attribute of the institution. Georgia State leadership made the conscious



decision that they weren't going to try and become an elite public institution, but rather one that admitted and then graduated academically marginal non-affluent students.<sup>46</sup> This commitment, more than anything else, seems to be what's most needed for institutions to make progress on student success.

Another example of what works, this time at the two-year level, comes from the ASAP (Accelerated Study in Associate Programs) program at the City University of New York (CUNY) community colleges. ASAP is a program available to New York City residents attending a CUNY community college full-time and facing at least two developmental course needs.<sup>47</sup> The program provides these students with financial supports (tuition waivers, textbooks, subway card), highly structured course sequences, and personalized, mandatory advising.<sup>48</sup> The advising structure is particularly noteworthy. Traditionally, advisors at community colleges have enormous caseloads, with some as high as 1,200 students per advisor – in the ASAP program, advisors had a caseload of between 60 and 80 students.<sup>49</sup> And whereas the average community college student might meet with an academic advisor once a semester or academic year – if at all – ASAP students are required to meet with their advisors twice a month, and attend any tutoring or other support sessions that might be prescribed following those meetings.<sup>50</sup>

The results of the ASAP program have been astounding. After the initial study period, which looked at the outcomes of entering students three years after initial enrollment, the program had nearly doubled completion rates, with 40% of the treatment group having received an associate degree, versus 22% of the control group. This analysis also found that, despite the high cost of the program, the “cost per degree” to the institutions was less than it was for non-ASAP students, given how much lower completion rates are for community college students generally, and for developmental students in particular.<sup>51</sup> Subsequent analyses, which took into account the performance of ASAP students who transferred to a four-year institution, found that ASAP students were both more likely to successfully transfer to a four-year institution than non-ASAP students, and more likely to earn a bachelor's degree. In total, 63.6% of ASAP students earned a degree (AA or BA) six years after initial enrollment at a CUNY community college, while just 43.3% of non-ASAP students did the same.<sup>52</sup>

These are just two examples. There are dozens of other colleges across the country rolling out innovative programs to get and keep students on track, enhance students' sense of belonging on campus, help students manage expenses, and get them across the finish line.<sup>53</sup> The broader point is that there is a strong evidence base of promising practices, centered around a deep focus on student data, predictive analytics, intrusive advising, corequisite coursework, financial support, and other innovative practices. The guidebook is out there – it's up to the institutions themselves to take up the practices.

### *The role of state policies in boosting completion rates*

What is the role of state policy in helping to push institutions to, like Georgia State, make student success the centerpiece of their institutional mission?

#### *Strategy 1: Shine a light on student success data by institution*

One relatively low-cost way states can compel institutions to do this is by simply publishing student success data in a way that's publicly accessible and user-friendly. Currently, this data is hard to access. The federal Department of Education maintains the National Center for Education Statistics, and through their “College Navigator” tool users can uncover a range of data about every institution, including financial aid, net price, admissions data, and completion rates. However, the site is not user friendly, nor widely known.



One can imagine a state putting together a user-centered site that highlights completion rates, by racial and income subgroups, over time, to see how an institution is or is not improving.

Here in Michigan, the story of the student success turnaround at Wayne State University provides a good example of what can emerge from public attention on student success. Wayne State is a mid-selectivity public institution in midtown Detroit – the type of urban institution that should serve as an engine of economic mobility for young Detroiters. However, as late as 2011, the institution was not living up to this mission. Just 26% of Wayne State students graduated in six years, and just 7.6% of Black students did.<sup>54</sup> A number of organizations, including Michigan Future, highlighted this data publicly, and called on Wayne State to take on the hard work of ensuring more of their students ended up leaving with a degree. And this public pressure did indeed spark institutional change. By following the playbook popularized by Georgia State, Wayne State earned national awards for its rapid improvements in student success.<sup>55</sup> In 2023, the institution’s six-year graduation rate was 60%, more than double what it was in 2011, and its six-year graduation rate for Black students had risen to 40% - still a lot of room to grow, but moving in the right direction.<sup>56</sup>

*Strategy 2: Provide funding for institutions to implement the student success playbook*

Aside from the pressure of public data, states must also ensure that institutions of higher education have the resources needed to take on impactful student success reforms. David Deming, a Harvard University economist, has found that “there is a strong causal relationship between per student spending by an institution and degree completion.”<sup>57</sup> “More spending” might not feel very innovative, but it turns out to be essential if we hope to boost completion rates.

Deming notes that between 1990 and 2015, inflation-adjusted state spending on higher education rose less than 4 percent, while college enrollment grew by 45 percent. This means that our public colleges have, over the past three decades, been asked to support many more students with less resources. Deming notes that colleges have always spent much more per student than they charge in tuition; the more they are able to spend per student, on academic support, instruction, and advising, for instance, the higher quality the student’s educational experience. Deming refers to this surplus that colleges spend above and beyond the price of tuition as the “subsidy.” Deming notes that in 1990, as a result of more generous public support for higher education, public institutions had, on average, \$7.26 in subsidy for every one dollar paid in tuition; by 2014, this subsidy had been early cut in half, down to \$3.87.<sup>58</sup> While elite institutions are able to lean on high tuition rates and large endowments to provide financial, academic, and social supports, Deming notes that minimally selective public institutions, which end up serving the majority of students, “often have large classes and provide little in the way of academic counseling, mentoring, and other student supports” because of budgetary constraints.<sup>59</sup> When colleges are able to boost spending on student supports and mentoring, however, we see increases in persistence and completion rates.<sup>60</sup>

The common critique of simply increasing spending on higher education is that the institutions will not use the additional funding wisely. Indeed, it’s not hard to find an op-ed suggesting that our nation’s colleges are simply funneling student tuition into fancy gyms and dining halls, all to lure more students paying higher tuition.<sup>61</sup> Though this narrative is not entirely baseless (institutions have increased spending on facilities to compete for students), a hard look at the data yields a more complicated picture; for example, spending on deferred maintenance from an initial building boom in the 1960s has driven facilities spending far more than new buildings.<sup>62</sup> However, if there is concern that institutions receiving additional





state support will spend the money not on student supports but on fancy buildings, states could restrict how the funds could be used, requiring some share be put towards counseling, academic advising, instruction, and academic supports.<sup>63</sup>

Yet even these restrictions might be unnecessary. Research has shown that when higher education institutions are provided additional public resources, they generally put the money towards student supports, as they try and emulate the kind of educational experience found at highly-selective institutions.<sup>64</sup> Completion rates are higher at highly-selective institutions in part in part because they admit students who are better prepared academically, but also because they have far more resources than their less selective peers. With these additional resources, students are provided robust wraparound supports that, in effect, don't allow them to fail. Less selective institutions, when provided additional resources, attempt to do this same thing. Deming found that "a 10 percent increase in state funding of nonselective public institutions leads to a 17 percent increase in spending on academic support programs."<sup>65</sup>

It turns out that if we care about completion rates, state spending on higher education – that is, funding to support the institutions themselves – ends up being really important, much more important than financial aid programs. For all the attention on financial aid to individual students – be it federal Pell grants, state-based "free college" programs, or even more ambitious efforts like the Kalamazoo Promise – there is very little evidence to show these programs meaningfully impact completion rates.<sup>66</sup> The removal or easing of the burden of tuition is surely a positive intervention and could indeed allow students to take on behaviors that would increase the odds of persistence and completion. However, if a student needs additional supports – if they're struggling in their coursework, or they don't know what classes to take, or they feel like they don't belong in college – tuition assistance is of no help. Rather, the student needs support from the university; they need a higher quality education.

### ***Section 3: Community college success and transfer pathways***

Forty percent of college students, and a majority of non-affluent students, will start their college journey at a community college.<sup>67</sup> And while 80% of students who begin at a community college say they intend to transfer to a four-year institution, just 16% of these students will have completed a bachelor's degree six years later.<sup>68</sup> This already low rate is even lower for low-income, older, Black, and Hispanic students.<sup>69</sup>

Today, transfer pathways appear to be blocked for many students. Despite starting at community college with high expectations for eventual bachelor's degree completion, just 33% of students eventually transfer, with less than half of those students going on to complete their bachelor's degree.<sup>70</sup> A recent report from the Community College Research Center at Columbia University notes that while there is some variation among states in bachelor's degree attainment rates for entering community college students, there is no state in which the BA attainment rate is over 25% - New Jersey leads the way at 21%.<sup>71</sup>

Part of the solution is better college-counseling at the high school level. Given the poor student outcomes at so many community colleges, many more students who want to pursue a four-year degree should be enrolling directly in a four-year institution out of high school. There's a common belief that starting at a community college might be the smart move, to either save on tuition or to build up academic skills. As the data suggests, however, the vast majority of students who embark on this journey don't complete it. Research has also found that if you take two nearly identical academically marginal students, and one enrolls in a four-year institution while the other enrolls in a two-year institution, the one who enrolls in the four-year institution is far more likely to earn a bachelor's degree and earn more in the labor market.<sup>72</sup>



Incredibly enough, that student who starts at a four-year college is also more likely to earn a sub-BA credential than the student who starts at a two-year school.<sup>73</sup> Assuming a student wants to pursue a four-year degree, if that student can gain admission to a four-year college, the data convincingly suggests she should enroll in a four-year college.

All that said, tens of thousands of students will continue to enter our community colleges every year with dreams of attaining a bachelor's degree, and we need to make major changes in our community colleges to make sure those students are well served. This includes ensuring community college students experience success at their community college, as well as ensuring there are strong and predictable transfer pathways to four-year schools.

### *Community college success*

The potential areas for reform in the community college landscape are too many to be named here, but we can outline broad themes that community colleges ought to pursue, and that state policies ought to incentivize, to build a system designed for community college success. These broad themes are largely pulled from *Redesigning America's Community Colleges*, the definitive text on community college reform, written by Thomas Bailey, Shanna Smith Jaggars, and Davis Jenkins of the Community College Research Center at Columbia University.

Bailey and his colleagues note that what is needed at the community college level is not actually reform, but a complete redesign of the system. At base, the community college system was simply not designed for the aims we currently need it to achieve – namely, to take a student population that is less academically prepared and more likely to face barriers outside the classroom than the general college-going population, and then ensure they experience success. As the authors write, “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.”<sup>74</sup>

Potential areas for reform include:

- **Moving from a “cafeteria style” model to structured pathways.** Traditionally, community colleges have been designed to offer something for everyone, allowing students to select the courses or programs that are right for them. However, entering community college students are often ill-equipped to select the right courses or structure the right pathways, leading to false starts and eventual drop out. Leading community colleges have instead sought to dramatically limit student choice, by instituting guided pathways, default curriculums, and meta-majors, whereby students select a general area of interest, and are then assigned a pre-determined pathway or basket of courses.<sup>75</sup>
- **Intentional design around course scheduling.** Temporal flexibility is another hallmark of the community college experience, as students take courses that fit around their schedule – after work, at night, or on the weekends. However, this type of flexibility also contributes to students’ failure to make meaningful progress, and to eventually dropping out. Those community colleges with some of the highest completion rates have more options for students that allow for full-time enrollment and block scheduling.<sup>76</sup>



- **Supplemental instruction and co-requisite coursework.** For years, entering community college students have been hampered by remedial education: courses designed to build foundation skills, but which carry no credits towards graduation, and in which students often struggle. To counter this, leading schools have introduced “co-requisite” models, in which students are placed directly in a credit-bearing course while simultaneously taking a course that offers supplemental instruction, allowing students to build foundation skills while making progress towards graduation.<sup>77</sup>
- **Expanding the number of academic advisors, and instituting mandatory advising.** As noted previously, to achieve the results that they did, the CUNY ASAP model lowered academic advisor caseloads to between 60 and 80 students to an advisor, and mandated that students met with their advisor twice per month.<sup>78</sup> The ASAP structure is much closer to the kind of academic advising you will see at elite four-year universities with high graduation rates. It only follows that the student body entering community colleges, who are less academically prepared and face more out-of-class barriers than their peers attending prestigious four-year colleges, would need advising services on par with if not more intensive than those offered at elite institutions.
- **Reforming community college instruction to center on more active forms of learning.** Research on college success finds that if there is a single factor most important to student success it is student engagement. If a student is interested in and motivated to learn the content before them, they are that much more likely to take on the academic behaviors needed to be successful.<sup>79</sup> And Bailey notes that if there is a single pedagogical shift community college instructors can make to boost engagement in their classrooms, it is a shift from a “transmission” style of delivery (i.e., lecture-style instruction, presenting content to be learned) to a “learning facilitation” style of teaching, where a professor guides students through problems as students construct knowledge and understanding on their own.<sup>80</sup> In recognition of the need for pedagogy centered on active learning and engagement, Valencia College, for years a leader in community college success efforts, shifted how they award tenure based on faculty achieving pedagogical goals that they set out for themselves through individual learning plans.<sup>81</sup>

### *Transfer pathways*

If students do achieve success at community college, how can we ensure they can then experience a stable, predictable pathway to a four-year college and, eventually, to a bachelor’s degree? There are good examples across the country of strong partnerships between individual institutions, in which a particular community college and a particular four-year college work together to establish transfer pathways for their students, ensuring the transferability of credits and instituting advising supports to ensure a smooth transition. And, indeed, partnerships like this should be highlighted, and encouraged.<sup>82</sup>

But there is also work to be done at the system level to ensure students entering any community college have a decent shot at obtaining a bachelor’s degree from any four-year college they might transfer to. A major priority in this area is establishing articulation and transfer agreements between all two-year and four-year institutions in given state. This is obviously easier said than done. Four-year institutions, particularly elite four-year institutions, may be likely to guard against policies that push for transfer



uniformity, the logic being that part of what makes the institution elite is the non-transferability of the educational experience at that institution.

However, many states have done this hard work of executing universal articulation agreements. Thirty-eight states have policies in place that require a set of core lower-division courses be transferable; thirty-five states guarantee the transfer of an associate degree, such that associate degree holders will be able to transfer all of their credits at a public four-year institution, and enter as a junior; and thirty-one states have taken the additional step of instituting common course numbering between community colleges and four-year institutions.<sup>83</sup>

### *Dual-enrollment*

A final area to examine in the transition from K-12 to college success is dual enrollment. Dual enrollment programs enable high school students to take college courses while still in high school through a partnership between the high school and a college or university. The most intensive form of dual enrollment is the Early College High School Model, in which a high school is intentionally designed in partnership with a college as a five-year course of study, that integrates high school and college courses and results in both a high school diploma and an associate degree. The idea behind dual enrollment is that it offers high school students the opportunity to acclimate to college-level academic expectations and get a jump on the college transition by building up a bank of college credits. And, indeed, giving students this head start on college appears to be an effective strategy for increasing bachelor's degree completion. A recent CCRC report found that students who had taken dual-enrollment courses in high school and entered a community college upon high school graduation had BA attainment rates double those of students who did not take a dual enrollment course in high school.<sup>84</sup>

Perhaps in recognition of its promise, the number of students participating in dual enrollment has expanded dramatically in recent years, from roughly 800,000 students in the fall of 2009, to more than 1.5 million in the fall of 2019.<sup>85</sup>

However, while dual enrollment can be an effective strategy for increasing college enrollment and college completion, we must be sure that as programs expand, the quality of the student experience does not diminish. Today, 80 percent of dual enrollment students are enrolled through programs in which the college course is taught at their home high school, by a certified instructor.<sup>86</sup> There are two problems with this arrangement. The first is that part of the potential benefit of dual enrollment programs is that they can help students understand and get acclimated to the academic and social expectations of college. If this is the goal, it is very hard to do without being in a college class with college-age peers.

The second problem is around the transferability of credits. For high schoolers, part of the motivation for enrolling in dual-enrollment coursework is to accumulate college credits. However, this benefit can only be realized if the destination college accepts those dual-enrollment credits. And while we would like to think there is some level of uniformity around what does and does not count as a college-level course, the process by which colleges accept dual-enrollment credits is quite subjective.<sup>87</sup> Some colleges won't take dual-enrollment credit unless the course was taught on a college campus, by college faculty.<sup>88</sup>

For both of these reasons – to build college-level expectations and to increase the likelihood that a higher education institution will accept dual enrollment credits – we believe dual enrollment programs should



strive to ensure students are taking their dual enrollment courses on college campuses, with college-age peers, and taught by college faculty. This is obviously more costly and presents greater logistical concerns than if students took their dual enrollment courses at the high school, with their high school age peers, and taught by a high school instructor who gained additional certification. But if dual enrollment is to be a meaningful strategy for putting more students on a path towards a bachelor's degree, students need to be integrated with the college itself as much as possible in their dual enrollment experience.

Therefore, if states hope to implement high-quality, broad access dual-enrollment programs, they need to adequately fund them. The cost of dual-enrollment courses that is borne by the student varies from state to state.<sup>89</sup> In some states, the additional costs of taking a college course are paid for by the state, or by some combination of funds from the school district and the state. In other states, costs are split between the school district, state, and the student/family. And in other states, the student/family are responsible for the full cost of a dual-enrollment course. In those states that place a financial burden on the student/family or the school district, we will likely see larger equity gaps between who does and does not participate. For all students to have access to the full benefits of dual enrollment coursework, and take courses in college classrooms, taught by college faculty, would require states to bear the costs for students that want to participate – a model already in place in several states.<sup>90</sup>

#### *The role of state policies in designing community colleges for student success*

A variety of potential levers are outlined above for how we can ensure students' experience in community colleges propel, rather than hinder, their bachelor's degree aspirations. Some of these levers are ones states may have control over. States can provide community colleges with needed resources to deploy robust student support programs and broad access dual enrollment programs; states can push for broadly applicable articulation agreements around what community college credits transfer to four-year institutions; and states can provide carrots and sticks to community colleges that do and do not deploy leading student success practices.

However, many of other levers are only applicable at the institutional level – what else can states do to alter institutional practice?

Just as we highlighted in the four-year space, we think there is great potential in the use of broadly accessible, user-friendly data to spur reform. More and better data on the outcomes of community college students is critical to spark change. The most commonly cited student success figure for community colleges is the share of first-time, full-time students who complete a credential within 150 percent of the time allotted (e.g., completing a two-year associate degree in three years of initial enrollment). Community college leaders, however, may argue that this figure offers a poor representation of whether or not a school is doing right by their students. They'll note that most community college students are not full-time, but part-time students, balancing work and school; that students come to community college for all sorts of reasons that may not result in the completion of a credential; and that these completion rates do a poor job of capturing transfer outcomes.

Setting aside for a moment the veracity of these claims, the bigger question is why we don't have data systems that capture, with great detail, this broader set of outcomes. If there is a particular community college that is sending large numbers of their students to four-year institutions, and those students are experiencing success there, state policymakers and education leaders should know that, so we can learn from successful institutions, and spread promising practices to less successful ones. The opposite is also



true – if we find that a particular community college is transferring very few students, and/or the students who transfer are not experiencing success at their destination college, we can figure out ways to better support reforms at that institution.

We should know this data by race/ethnicity, age, and income, and it should be widely available and easily accessible. Indeed, as bad as the aggregate numbers are for the share of students who begin at a community college and end up with a bachelor's degree six years later, the numbers are that much worse for low-income students and students of color. In our home state of Michigan, just five percent of Black students who begin at a community college will complete a bachelor's degree six years later, and just ten percent of low-income students will.<sup>91</sup> This kind of data is only available through a report by the Community College Research Center; states could and should put it at everyone's fingertips. A separate CCRC report provides a "how-to" guide for replicating their analysis using National Student Clearinghouse data.<sup>92</sup> For states, making this data readily accessible is a first step to reform – to identify high-achieving institutions and system-wide failings.

More and better data is also needed on labor market outcomes for all community college students, both those who do and don't complete a credential. If, as some community college leaders will say, those who leave community college prior to completing a credential are still capturing some amount of economic value from their community college experience, we should know that. However, it is unlikely this is the case. Research finds that though the labor market returns on sub-BA credentials are modest, those who complete a credential do much better than those who take some number of credits but fall short of the credential.<sup>93</sup>

More data is also needed on the returns to various credentials. Though labor market returns by major and degree do vary at the baccalaureate level, we also know that the wage premium for a bachelor's degree holder is large, regardless of major.<sup>94</sup> The same is not true at the sub-BA level. Yes, there are some credentials that yield a solid earnings premium; but there are others that provide no boost, or whose holders do worse, relative to those with just a high school diploma.<sup>95</sup> Prospective students deserve to know this data for the schools they are considering, and colleges themselves should look closely at this data, to make student-centered choices about what programs to keep, and which to jettison.

## **Conclusion**

As previously noted, after years of consistent and growing support for bachelor's degree attainment, there has emerged over the past few years a sort of anti-college backlash.<sup>96</sup> Despite all evidence to the contrary, there is growing popular opinion that a college degree is not worth the money, that there are lots of good jobs available for those without a four-year degree, and that pursuing a college degree will mean a lifetime mired in debt. Part of the reason that this backlash has occurred, perhaps, is that over the past fifteen years, more and more students have sought to pursue a college degree, but many have left college without a degree in hand. For these students, it is in fact quite likely that their college experience will not be worth the money, and that they will end up having trouble paying their college debt, as they fail to realize the wage premium that comes with earning a degree.

A four-year college degree remains the best investment one can make in one's life, providing substantial and growing returns.<sup>97</sup> We need to design our K-16 education system to ensure many more of the individuals that wish to pursue a four-year degree are adequately prepared, and leave college with that





degree in hand. As previously noted, this is not only the surest route to long-term economic stability and mobility for individuals, but also the surest route to building a robust knowledge economy workforce.

Building this system will require a K-12 system that is designed around building the knowledge, skills, behaviors, and mindsets needed in college and career, and a higher education system that is centered on student success. It will require deep investments, but also a paradigm shift around the kinds of capacities we want students to develop, and how many more students need to develop them.

---

<sup>1</sup> Students must have at least attended KPS schools for all of high school to be eligible for the scholarship. Students who attend KPS schools from kindergarten through 12<sup>th</sup> grade receive a 100% scholarship, with the scholarship gradually declining for students who enroll in KPS in later years, falling to 65% for those who enroll in 9<sup>th</sup> grade.

<sup>2</sup> Julie Mack, “Top hurdle for Kalamazoo Promise isn’t sending kids to college. It’s getting them to finish,” *MLive*, June 13, 2023.

<sup>3</sup> For a detailed discussion on the correlation between educational attainment and per-capita income, see our paper “An Economic Development Strategy Centered on People and Place”

<sup>4</sup> MFI analysis of wage and employment data from the Bureau of Labor Statistics

<sup>5</sup> U.S. Census Bureau, Current Population Survey, 2023 Annual Social and Economic Supplement (CPS ASEC) 2022; Emily Peck, “Show this chart to anyone who tells you college isn’t worth it,” *Axios*, March 4, 2024, <https://www.axios.com/2024/03/04/college-graduates-median-annual-wage-difference>

<sup>6</sup> Richard V. Reeves and Eleanor Krause, “Raj Chetty in 14 charts: Big findings on opportunity and mobility we should all know,” *The Brookings Institution*, January 11, 2018, <https://www.brookings.edu/articles/raj-chetty-in-14-charts-big-findings-on-opportunity-and-mobility-we-should-know/>

<sup>7</sup> *Ibid*

<sup>8</sup> Paul Tough, “Americans Are Losing Faith in the Value of College. Whose Fault Is That?,” *The New York Times*, September 5, 2023, <https://www.nytimes.com/2023/09/05/magazine/college-worth-price.html>

<sup>9</sup> David Deming, “The College Backlash Is Going Too Far,” *The Atlantic*, October 3, 2023, <https://www.theatlantic.com/ideas/archive/2023/10/college-degree-economic-mobility-average-lifetime-income/675525/>

<sup>10</sup> Federal Reserve, “Distributional Financial Accounts,”

<https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/chart/#quarter:137;series:Assets;demographic:education;population:all;units:levels;range:1989.4,2023.4>

<sup>11</sup> For analysis of the long term wealth premium of a bachelor’s degree, see:

<https://twitter.com/jtrothwell/status/1699169953826459768>; For research on the nonpecuniary benefits of education, see Philip Oreopoulos and Kjell G. Salvanes, “Priceless: The Nonpecuniary Benefits of Schooling,” *Journal of Economic Perspectives*, Vol. 25, No. 1, Winter 2011, <https://www.aeaweb.org/articles?id=10.1257/jep.25.1.159#:~:text=It%20leads%20individuals%20to%20make,consumption%20value%20to%20some%20students>

<sup>12</sup> MFI, “An Economic Development Strategy Centered on People and Place”

<sup>13</sup> David Deming, “Increasing College Completion with a Federal Higher Education Matching Grant,” *The Hamilton Project*, Policy Proposal 2017 – 03, April 2017,

[https://www.hamiltonproject.org/assets/files/increasing\\_college\\_completion\\_with\\_federal\\_higher\\_education\\_matching\\_grant\\_pp.pdf](https://www.hamiltonproject.org/assets/files/increasing_college_completion_with_federal_higher_education_matching_grant_pp.pdf)

Emily Peck, “Show this chart to anyone who tells you college isn’t worth it”



---

Authors review of National Center for Education Statistics data.

It should also be noted that while enrollment has been trending upwards, it has not increased as sharply as one might think it would have given the large and growing college wage premium. In 2019, the share of high school graduates who enrolled in a four-year college (44%) was the same as it was in 1997. The real growth came between the late 1970s and the late 1990s when the share of high school graduates enrolling in a four-year college rose from roughly 33% to over 40%.

<sup>14</sup> Authors analysis of 2022 American Community Survey 1-year estimates

<sup>15</sup> Authors analysis of National Center for Education Statistics digest of education statistics for 2015 entry cohort

<sup>16</sup> Deming, “Increasing College Completion”

<sup>17</sup> Ibid

<sup>18</sup> Ibid

<sup>19</sup> Authors analysis of National Center for Education Statistics digest of education statistics for 2015 entry cohort

<sup>20</sup> Susan Dynarski, “Why Students With Smallest Debts Have the Larger Problem,” *The New York Times*, August 31, 2015, <https://www.nytimes.com/2015/09/01/upshot/why-students-with-smallest-debts-need-the-greatest-help.html>

<sup>21</sup> William G. Bowen, Matthew M. Chingos, and Michael McPherson, *Crossing the Finish Line*, Princeton University Press, 2009

John Friedman, Bruce Sacerdote, and Michele Tine, “Standardized Test Scores and Academic Performance at Ivy-Plus Colleges,” Opportunity Insights, January 2024, [https://opportunityinsights.org/wp-content/uploads/2024/01/SAT\\_ACT\\_on\\_Grades.pdf](https://opportunityinsights.org/wp-content/uploads/2024/01/SAT_ACT_on_Grades.pdf)

<sup>22</sup> Joseph M. Williams and Lawrence McEnerney, “Writing in College,” The University of Chicago Writing Program, <https://www.fcusd.org/cms/lib/CA01001934/Centricity/Domain/3762/University%20of%20Chicago%20Writing%20an%20Argument%20in%20College.pdf>

<sup>23</sup> Ibid

<sup>24</sup> Jeffrey R. Young, “Why Students Can’t Write – And Why Tech Is Part of the Problem,” *EdSurge*, April 2, 2019, <https://www.edsurge.com/news/2019-04-02-why-students-can-t-write-and-why-tech-is-part-of-the-problem>

<sup>25</sup> Marc Tucker, “Our Students Can’t Write Very Well – It’s No Mystery Why,” *Education Week*, January 12, 2017, <https://www.edweek.org/teaching-learning/opinion-our-students-cant-write-very-well-its-no-mystery-why/2017/01>

Adam Kotsko, “The Loss of Things I Took for Granted,” *Slate*, February 11, 2024, <https://slate.com/human-interest/2024/02/literacy-crisis-reading-comprehension-college.html>

<sup>26</sup> Tucker, “Our Students Can’t Write Very Well”

<sup>27</sup> Jal Mehta and Sarah Fine, *In Search of Deeper Learning*, Harvard University Press, 2020

<sup>28</sup> Dana Goldstein, “Why Kids Can’t Write,” *The New York Times*, August 2, 2017, <https://www.nytimes.com/2017/08/02/education/edlife/writing-education-grammar-students-children.html>

<sup>29</sup> Valerie Strauss, “The real reasons so many young people can’t write well today – by an English teacher,” *The Washington Post*, November 8, 2017, <https://www.washingtonpost.com/news/answer-sheet/wp/2017/11/08/the-real-reasons-so-many-young-people-cant-write-well-today-by-an-english-teacher/>

<sup>30</sup> David T. Conley, “Rethinking College Readiness,” New England Board of Higher Education, <https://files.eric.ed.gov/fulltext/EJ794245.pdf>

<sup>31</sup> For a good review of the research on the dominant learning tasks in American high schools, see *In Search of Deeper Learning*, by Jal Mehta and Sarah Fine

<sup>32</sup> Mehta and Fine, *In Search of Deeper Learning*

<sup>33</sup> Ibid

<sup>34</sup> Strauss, “The real reasons so many young people can’t write well today”

<sup>35</sup> Marc S. Tucker, “Fixing Our Accountability System,” National Center on Education and the Economy, 2014, <https://ncee.org/wp-content/uploads/2014/08/FixingOurNationalAccountabilitySystemWebV4.pdf>

<sup>36</sup> “What is the extended essay?” International Baccalaureate, <https://www.ibo.org/programmes/diploma-programme/curriculum/dp-core/extended-essay/what-is-the-extended-essay/>

<sup>37</sup> Jay Mathews, “Shockingly good news about New York City public high schools,” *The Washington Post*, January 23, 2022, <https://www.washingtonpost.com/education/2022/01/23/nyc-schools-consortium-bloomberg-deblasio/>

<sup>38</sup> Ibid



---

<sup>39</sup> Tucker, “Fixing Our Accountability System”

<sup>40</sup> Caroline Hoxby and Christopher Avery, “The Missing ‘One-Offs’: The Hidden Supply of High-Achieving, Low-Income Students,” The Brookings Institution, Brookings Papers on Economic Activity, Spring 2013, [https://www.brookings.edu/wp-content/uploads/2016/07/2013a\\_hoxby.pdf](https://www.brookings.edu/wp-content/uploads/2016/07/2013a_hoxby.pdf)

<sup>41</sup> Ron French, “Lack of school counselors hobbles Michigan college enrollment efforts,” *Bridge Michigan*, September 29, 2023, <https://www.bridgemi.com/talent-education/lack-school-counselors-hobbles-michigan-college-enrollment-efforts>

Lauren Hubbard, Sophie Zamarripa, and Jordan Tafari, “School Counselors Matter,” The Education Trust – Midwest, February 5, 2019, <https://midwest.edtrust.org/2019/02/05/school-counselors-matter/>

<sup>42</sup> C. Kirabo Jackson, Rucker C. Johnson, and Claudia Persico, “The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms,” *The Quarterly Journal of Economics*, Volume 131, Issue 1, February 2016, <https://doi.org/10.1093/qje/qjv036>

Patrick Cooney, “More on why school funding matters,” *Michigan Future*, November 25, 2016, <https://michiganfuture.org/2016/11/school-funding-matters/>

<sup>43</sup> Bruce Baker, Matthew Di Carlo, and Mark Weber, “The Adequacy and Fairness of State School Finance Systems,” Albert Shanker Institute, University of Miami School of Education and Human Development, and Rutgers Graduate School of Education, January 2024, [https://www.schoolfinancedata.org/wp-content/uploads/2024/02/SFID2024\\_annualreport.pdf](https://www.schoolfinancedata.org/wp-content/uploads/2024/02/SFID2024_annualreport.pdf)

<sup>44</sup> This is a conservative estimate because it assumes those who start at a two-year and earn an associate’s degree are a mutually exclusive group from those that start at a two-year and earn a bachelor’s degree, when in fact there may be significant overlap between these two groups.

<sup>45</sup> Richard Fausset, “Georgia State, Leading U.S. in Black Graduates, Is Engine of Social Mobility,” *The New York Times*, <https://www.nytimes.com/2018/05/15/us/georgia-state-african-americans.html>

<sup>46</sup> Ibid

<sup>47</sup> Diana Strumbos and Zineta Kolenovic, “Six-Year Outcomes of ASAP Students: Transfer and Degree Attainment,” The City University of New York, January 2017, [https://www1.cuny.edu/sites/asap/wp-content/uploads/sites/8/2017/01/201701\\_ASAP\\_Eval\\_Brief\\_Six\\_Year\\_Outcomes\\_FINAL.pdf](https://www1.cuny.edu/sites/asap/wp-content/uploads/sites/8/2017/01/201701_ASAP_Eval_Brief_Six_Year_Outcomes_FINAL.pdf)

<sup>48</sup> Ibid

<sup>49</sup> “Advising and Student Supports at Community Colleges,” Community College Research Center, July 2021, <https://ccrc.tc.columbia.edu/publications/advising-student-supports-community-colleges.html> “Evaluation of Accelerated Study in Associate Programs for Developmental Education Students,” MDRC, <https://www.mdrc.org/work/projects/evaluation-accelerated-study-associate-programs-asap-developmental-education-students>

<sup>50</sup> “Application and Requirements,” Borough of Manhattan Community College, <https://www.bmcc.cuny.edu/academics/success-programs/asap/application-and-requirements/>

<sup>51</sup> Susan Scrivener, Michael J. Weiss, Alyssa Ratledge, Timothy Rudd, Colleen Sommo, and Hannah Fresques, “Doubling Graduation Rates: Three-Year Effects of CUNY’s Accelerated Study in Associate Programs (ASAP) for Developmental Education Students,” MDRC, February 2015, <https://www.mdrc.org/work/publications/doubling-graduation-rates>

<sup>52</sup> Strumbos, “Six-Year Outcomes”

<sup>53</sup> Patrick Cooney, “Increasing College Graduation Rates for Low-Income, Minority, and First-Gen Students: Lessons Learned From Four Colleges That Are Doing the Work,” *Michigan Future*, <https://michiganfuture.org/wp-content/uploads/2011/08/MFS-McGregor-Report.pdf>

<sup>54</sup> Matt Lockwood, “Decade of transformation: Graduation rate gains continue,” September 29, 2021, <https://today.wayne.edu/news/2021/09/29/decade-of-transformation-graduation-rate-gains-continue-45268>

<sup>55</sup> Ibid

<sup>56</sup> “College Navigator,” National Center for Education Statistics, <https://nces.ed.gov/collegenavigator/?q=wayne+state&s=all&id=172644#finaid>

<sup>57</sup> Deming, “Increasing College Completion”

<sup>58</sup> Ibid

<sup>59</sup> Ibid

<sup>60</sup> Ibid



---

<sup>61</sup> Melissa Korn, Andrea Fuller, and Jennifer S. Forsyth, “Colleges Spend Like There’s No Tomorrow. ‘These Places Are Just Devouring Money.’” *The Wall Street Journal*, August 10, 2023, <https://www.wsj.com/articles/state-university-tuition-increase-spending-41a58100>

<sup>62</sup> Jon Marcus, “The Paradox of New Buildings on Campus,” *The Atlantic*, July 25, 2016, <https://www.theatlantic.com/education/archive/2016/07/the-paradox-of-new-buildings-on-campus/492398/>

<sup>63</sup> Deming, “Increasing College Completion”

<sup>64</sup> Ibid

<sup>65</sup> Ibid

<sup>66</sup> Ibid

<sup>67</sup> Tatiana Velasco, John Fink, Mariel Bedoya-Guevara, Davis Jenkins, and Tania LaViolet, “Tracking Transfer: Community College and Four-Year Institutional Effectiveness in Broadening Bachelor’s Degree Attainment,” Community College Research Center, <https://ccrc.tc.columbia.edu/research/transfer.html>

<sup>68</sup> Nathan Sotherland, Kevin Stange, and Jordan Matsudaira, “New Measures of Postsecondary Education Transfer Performance: Transfer-out rates for community colleges, transfer student graduation rates at four-year colleges, and the institutional dyads contributing to transfer student success,” Office of the Under Secretary, U.S. Department of Education, <https://sites.ed.gov/ous/2023/11/new-measures-of-postsecondary-education-transfer-performance-transfer-out-rates-for-community-colleges-transfer-student-graduation-rates-at-four-year-colleges-and-the-institutional-dyads-contributi/>

<sup>69</sup> Velasco, “Tracking Transfer”

<sup>70</sup> Ibid

<sup>71</sup> Ibid

<sup>72</sup> David Leonhardt, “College for the Masses,” *The New York Times*, April 24, 2015, <https://www.nytimes.com/2015/04/26/upshot/college-for-the-masses.html>

<sup>73</sup> Ibid

<sup>74</sup> Thomas R. Bailey, Shanna Smith Jaggars, and Davis Jenkins, *Redesigning America’s Community Colleges*, Harvard University Press, 2015

<sup>75</sup> Bailey, *Redesigning America’s Community Colleges*

“The 2017 Aspen Prize for Community College Excellence,” The Aspen Institute, March 14, 2017, <https://www.aspeninstitute.org/publications/the-2017-aspen-prize-for-community-college-excellence/>

<sup>76</sup> Bailey, *Redesigning America’s Community Colleges*

<sup>77</sup> Ibid

<sup>78</sup> Scrivener, “Doubling Graduation Rates”

<sup>79</sup> Robert Shireman, “The Real Value of What Students Do in College,” The Century Foundation, February 25, 2016, <https://tcf.org/content/report/the-real-value-of-what-students-do-in-college/>

<sup>80</sup> Bailey, *Redesigning America’s Community Colleges*

<sup>81</sup> “Defining Excellence: Lessons From the 2013 Aspen Prize Finalists,” The Aspen Institute, [https://ia801306.us.archive.org/7/items/ERIC\\_ED541446/ERIC\\_ED541446.pdf](https://ia801306.us.archive.org/7/items/ERIC_ED541446/ERIC_ED541446.pdf)

<sup>82</sup> “The Aspen Prize for Community College Excellence,” The Aspen Institute, 2011, <https://files.eric.ed.gov/fulltext/ED528904.pdf>

<sup>83</sup> “Transfer and Articulation 2022,” Education Commission of the States,” July 2022, <https://reports.ecs.org/comparisons/transfer-and-articulation-2022>

<sup>84</sup> Velasco, “Tracking Transfer”

While a potentially interesting finding, it’s not clear that there is a causal relationship between dual enrollment and eventual BA completion. In other words, students who take dual enrollment courses may have been more likely to be successful in college regardless of whether or not they had taken a dual enrollment course.

<sup>85</sup> John Fink, “Greater Equity in College Access Through High School/College Dual Enrollment Programs,” The Campaign for College Opportunity, October 2023, <https://collegecampaign.org/wp-content/uploads/2023/10/FINAL-EIA-Dual-Enrollment-comp.pdf>

<sup>86</sup> Ibid

<sup>87</sup> Ron French, “Dual enrollment growing in popularity and frustration,” *Bridge Michigan*, November 17, 2016, <https://www.bridgemi.com/talent-education/dual-enrollment-growing-popularity-and-frustration>



---

<sup>88</sup> Kelly Field, “The Rise of Dual Credit,” *Education Next*, Vol. 21, No. 1, September 2020, <https://www.educationnext.org/rise-dual-credit-more-students-take-college-classes-high-school-degree-attainment-rigor/>

<sup>89</sup> “Dual/Concurrent Enrollment,” Education Commission of the States, June 2022, <https://reports.ecs.org/comparisons/dual-concurrent-enrollment-2022-16>

<sup>90</sup> Chris Duncombe and Sharmila Mann, “State Approaches to Funding Dual Enrollment Programs,” Education Commission of the States, November 2022, <https://www.ecs.org/wp-content/uploads/State-Approaches-to-Funding-Dual-Enrollment-Programs.pdf>

<sup>91</sup> Velasco, “Tracking Transfer”

<sup>92</sup> Ibid

John Fink and Davis Jenkins, “How to measure community college effectiveness in serving transfer students,” Columbia University, Teachers College, Community College Research Center, 2017

<sup>93</sup> Clive Belfield and Thomas Bailey, “The Labor Market Returns to Sub-Baccalaureate College: A Review,” Center for Analysis of Postsecondary Education and Employment, Teachers College, Columbia University, March 2017, <https://ccrc.tc.columbia.edu/media/k2/attachments/labor-market-returns-sub-baccalaureate-college-review.pdf>

<sup>94</sup> David Deming, “In the Salary Race, Engineers Sprint but English Majors Endure,” *The New York Times*, September 20, 2019, <https://www.nytimes.com/2019/09/20/business/liberal-arts-stem-salaries.html>

<sup>95</sup> Belfield, “The Labor Market Returns to Sub-Baccalaureate College”

<sup>96</sup> Deming, “The College Backlash Is Going Too Far”

<sup>97</sup> Ibid

Deming, “Salary Race”