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# **Prologue**

Historically, America has relied on higher education to create a ladder of opportunity for low-income families, and thereby reduce economic inequality. U.S. higher education has served as an important driver of social progress and wealth generation, and generally supported fiscal stability and job creation. Today, however, low-income students are achieving bachelor's degrees at significantly lower rates than middle class and wealthy students. Income-based inequality in higher education has grown increasingly significant and intractable, even as America depends on higher education as a pathway to the middle class and an engine of economic prosperity. In the company of the control of the c

An extraordinary initiative to fund higher education to bring about urban revitalization has grown into the ascendant policy response for boosting access to higher education for low-income students. In 2005, Kalamazoo, Michigan, allocated educational scholarship funds to students, not based on merit or on need, but on their local residency.<sup>iii</sup> The Kalamazoo Promise was premised on the idea that financing college-going on a local level would produce more educated workers and attract more employers, setting off a cycle of economic renewal and growth throughout the region.<sup>iv</sup>

Fueled by an increasing understanding of the returns to higher education in today's global, knowledge-driven economy, the development goals of the Kalamazoo Promise intersected with a national drive to get more Americans to and through college.v Following the recession of the late 2000s, jobs for workers with postsecondary degrees led the recovery, and, before long, the Kalamazoo Promise had spawned a new generation of Promise programs.vi By making community college attendance tuition-free, the programs have aimed to improve college access and narrow incomebased gaps in higher education.vii

Roughly seventeen states and hundreds of cities now have Promise programs, and the Biden administration has embraced making community college free for all Americans. VIII Given the swift national replication of the Promise model for increasing college access, ensuring that it effectively captures low-

income students who would not otherwise go to college has become urgent. Effort and investment must maximize reductions in real, persistent, economic-based inequality in college completion.

This White Paper, researched and written with the support of the ECMC Foundation, develops a more complete portrait of the diverse factors that shape and inhibit such policy outcomes. Drawing from a detailed three-year study of two representative and longer-operating Promise programs in Tennessee and Chicago, the findings unlock new information about how the programs are working, or not, to fulfill the goal of reducing economic inequality in higher education. The data suggest programmatic improvements to the free community college programs and point to further meaningful solutions to address persistent economic disparities in higher education. Tennessee's Promise program alone shapes educational paths of more than 17,000 lowincome student participants.

The overarching goal is to provide a fuller picture of both the compelling realities of young people and their families as they struggle to navigate serious financial obstacles, and the challenges and opportunities of leveraging investment at the community college level to equalize access to and completion of higher education regardless of economic position, in order, ultimately, to shift the discussion around increasing the number of Americans with four-year (and higher) college degrees.

## Glossary

**ASAP**: Accelerated Study in Associate Programs, at City University of New York's community colleges, that increased graduation rates by investing in intensive wraparound supports.

**AVID**: Advancement Via Individual Determination, a curriculum intended to prepare underrepresented students for success in college and beyond.

**FAFSA**: Free Application for Student Aid, through which families request federal grants, workstudy, and loans.

**IB**: International Baccalaureate Diploma Programme curriculum, offered in 140 countries, that provides an alternative to Advanced Placement coursework in some American schools.

**IDR**: Income-driven repayment plan, setting monthly student loan payments at affordable amounts based on income and family size.

**Low-income**: Families that fall into the lowest earnings quartile of less than \$37,679 per year. **OECD**: Organisation for Economic Cooperation and Development, intergovernmental economic organization with thirty-seven member countries founded in 1961 to stimulate economic trade. **Star Scholarship**: Chicago's Promise program that provides tuition-free community college to students with high school grade point averages of 3.0 and above.

**Summer Bridge Program**: Free three-week instructional summer program in Tennessee to help students become more college ready.

**TCAT**: Tennessee Colleges of Applied Technology, the twenty-seven technical colleges in Tennessee.

**Tennessee Promise**: Tennessee's Promise program that provides tuition-free technical and community college to all students, save the undocumented.

**TRIO:** Eight (originally three) federal student services and outreach programs to assist low-income, first-generation, and disabled students progress from middle school through college.

UIC: University of Illinois at Chicago, a public research university in Chicago.

**UT Promise**: Program providing free tuition to enroll at University of Tennessee's four campuses for families with household income below \$50,000 a year.

### **Featured Students**

Tennessee	Chicago	New York
Anastasia	Amanda	Muneeza
Caleb	Claudia	Sana
Emma	Eleanor	
Linda	Mandi	
Mida	Maria	
Rod	Nikki	
Sara	Ruby	
Tracy		
Yana		

#### Introduction

ersistent income-based disparities in higher education and bachelor's degree attainment rates jeopardize low-income students' ability to rise out of poverty, and also America's economic future. Low-income American families face a powerful trifecta of rising college tuition, mounting student debt, and stagnating income. At the same time, bachelor's degrees appear increasingly essential for true economic mobility and a shot at sustained higher lifetime earnings.ix Yet, as public financing of higher education has decreased, shifting tuition and fee burdens onto students and their families, higher education has threatened to fail the population that depends on it most for economic mobility.x

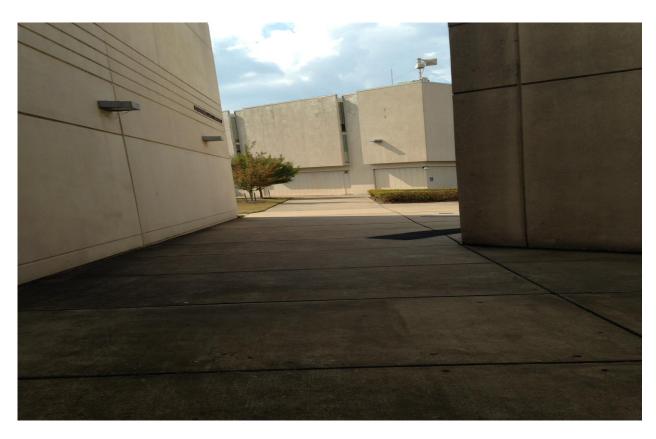
While tuition costs have risen faster than inflation and family income, available financial aid has fallen, leaving access to higher education and graduation increasingly dependent on family income, rather than academic aptitude.xi Wealthy students enroll in higher education at far higher rates than low-income students.xii Among the population of low-income students who do enroll, low-income students have become under-represented at four-year institutions, where half the number of lowincome students enroll than wealthy, and overrepresented at for-profit institutions, where they drop out and default on loans at high rates.xiii At the most selective colleges and universities, a meager three percent of incoming freshmen hail from families in the bottom income quartile, whereas 72 percent hail from families in the wealthiest quartile.xiv

Financial help can improve enrollment and persistence. At four-year institutions, scholarships and other interventions have boosted enrollment rates.<sup>xv</sup> The effects, however, may be slight.<sup>xvi</sup> At community colleges, tuition discounts have encouraged

students to enroll in higher numbers.xvii Few studies measuring the effect of reduced costs on persistence observe students for long enough periods to consider the impact of the reduction on degree completion, though additional grant aid has been shown to increase bachelor's degree attainment for low-income students at a state public university.xviii Scholarships and grants have improved retention of low-income community college students, though policy discussions have emphasized the absence of persuasive evidence of the effectiveness of tuition support to students of high economic need.xix

Moreoever, income poverty is not the only factor impeding postsecondary success among low-income students.xx For example, students' access to information, perception, and environment also affect enrollment rates.xxi Though community college tuitions vary substantially across states, tuition levels only weakly correlate with enrollment figures.xxii Student background, educational aspirations, preparation, support, nonacademic skills, and navigation of the financial aid process also, for example, influence postsecondary persistence and completion.xxiii In addition, understandings of the factors influencing transfer success remain limited.xxiv

The leading policy solution to address the problem of income-based inequality in higher education has been for states and cities to develop new Promise programs, assuring local families that students can attend community college for free. The have attracted programs enormous momentum and excitement, with 80 percent of Americans indicating support in polls.xxv Yet even in the absence of the programs, the poorest high school graduates who qualify for the federal Pell grant could already have attended community college for free just by



completing financial aid forms.

While the Promise programs offer a simpler message of "free college," which may help raise awareness of eligibility and contribute to a college-going culture, there are significant challenges to directing funding towards community college in order to narrow economic gaps in college completion.xxvi The majority of low-income begin higher education students community colleges, where just 15 percent of them complete their programs, a rate 17% percent lower than the rate for wealthy community college students.xxvii Eight percent fewer low-income community college students transfer to four-year institutions than wealthy students, and the low-income transfers earn degrees at 8 percent lower rates than wealthv transfers.xxviii

Meaningful change instigated by Promise programs would have to entail accessing low-income students who would not otherwise pursue higher education, and successfully moving low-income students through community college to completion and transfer to four-year institutions, where

students can earn bachelor's degrees that give them the best shot at climbing the economic ladder.xxix Although Promise programs seem to represent a significant first step toward genuine U.S. policy reform to address persistent economic inequality in higher education, there is evidence that the programs may not be working as well as intended and could benefit from "best practice" enhancements.xxx There is also evidence that the programs may not be sufficient to address many of the most persistent barriers to bachelor's degree attainment for low-income families.xxxi While some studies have found positive results, they have been heavily weighted towards the Kalamazoo Promise, which funds four-vear universities in addition to community college and limits eligibility in significant ways.xxxii Moreover, not all studies of Kalamazoo have demonstrated any beneficial impact.xxxiii Improvements to Promise programs may entail addressing factors beyond college cost, such as access to information, course loads, mentorship, and other potential student influences.

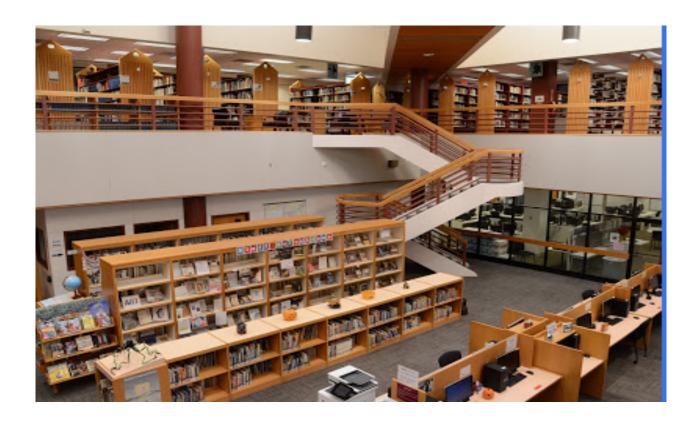
Our understanding of the impact of Promise programs remains incomplete. Many have



operated only a short time, without many student cohorts, while their effects may develop over the longer term.xxxiv Because the hundreds of new Promise programs vary in eligibility criteria, institutions covered, and financial awards, and operate in diverse communities, generalizing findings has proven difficult.xxxv Research has begun to investigate program design, but little is known about how outcomes depend on specific design features.xxxvi The dynamics the programs introduce call for rigorous qualitative assessment order in understand the processes involved, the details of students' understandings and experiences of navigating college costs and college choice, the differences that result from the intersection of economic student backgrounds, and changes over students' college careers.

Local and state legislators' escalating use of the free-community-college approach to narrow economic gaps in higher education, along with renewed federal interest, has made it increasingly necessary to gather detailed information on how these programs are working, where the programs are successful, and where they are failing. A detailed analysis illuminates which features

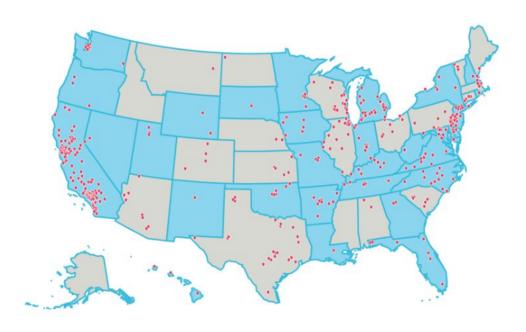
could be adjusted to make the programs more effective for helping low-income students, and to craft more meaningful approaches to alleviating the country's persistent income-based disparities in higher education. This White Paper draws on three years of on-the ground research following low-income students and their family members in two of the current generation of Promise programs with the longest tenures, and that also differ from each other in representative ways. It presents individuals' perceptions and choices in relation to the programs, their experiences of the programs, and their accounts of potential transfer to four-year institutions. It also considers the features important to students and contribute best practices for improving outcomes. The accounts fill in gaps in knowledge, transform the way of looking at the postsecondary access and completion problem, and open new vehicles for improving Promise programs, as well as approaches to public advocacy around postsecondary educational increasing attainment. The White Paper presents a comprehensive assessment of investment in Promise programs can best reduce income-based inequality in higher education.



# The Promise Model

Promise programs seek to improve postsecondary attainment by supplementing existing federal and state grant aid to make community college free for students on the basis of their local residency.xxxvii The red dots on Figure 1 below represent existing Promise programs.

Figure 1.



# Focus on Geography

romise programs target a simple message of "free college," but they diverge from the Kalamazoo Promise and vary from each other in how and to whom they offer it.xxxviii The hundreds of new programs differ in eligibility criteria, institutions covered, and financial awards.xxxix Most eligibility and fund only community college.xl They also operate as "last-dollar" programs and require students first to seek federal and state aid before they can access local subsidies.xli

While most Promise Programs provide a free pathway into higher education regardless of financial need, most also state an intention to increase postsecondary attainment among low-income youth. The programs generally operate in school districts with many economically disadvantaged families. Arguably, the emphasis on community colleges also reflects an orientation towards attracting low-income students, as a majority of low-income students begin higher education at those institutions.xiii

This White Paper focuses on the Tennessee Promise and Chicago, Illinois's Promise program, the Star Scholarship. Tennessee Promise, which launched in 2014, is the oldest of the current generation of Promise programs, and Chicago's Star Scholarship followed quickly on its heels in 2015.xliii The two programs' relatively long tenures make studying them in depth more feasible.xliv They have a higher number of students enrolled in, graduating, and transferring from participating community colleges than newer Promise programs and an overall greater accumulation of related data (though the data remains limited). Many other existing programs did not begin until 2017 or later.xlv

Tennessee Promise and Chicago Star also differ from each other in significant ways vet are broadly representative in approach to the vast majority of recent Promise programs.xlvi For example, the two initiatives differ regarding access: Tennessee offers broad tuition relief, eschewing grade point average (GPA) and remediation requirements to participate in the program. Instead, once enrolled, students must maintain a 2.0 GPA at their community college to remain eligible for the tuition support. Chicago, by contrast, fully removes remediation needs as a factor correlated with low persistence and transfer, by requiring participants to have GPAs above 3.0 and no identified English or Math remediation needs. These differing approaches, summarized in Figure 2, help to highlight whether and how the design features of Promise programs result in different outcomes in relation to reducing inequality and improving educational success.

In most of the U.S., and particularly its cities, future economic growth and success will depend on increasing opportunities for lowresidents.xlvii income The research concentrates on urban populations, in the cities of Memphis, Tennessee; Nashville, Tennessee; and Chicago, Illinois. Memphis and Nashville public schools share similar college access and success results. In both cities, about half of public school students do participate in higher education immediately after graduation, and the number of students foregoing college is rising.xlviii Their college-going patterns lag the state of Tennessee, the city of Chicago, and the country as a whole.xlix In a knowledge-driven economy, their low level of educational attainment is simply not sustainable. In both Memphis and Nashville, as well, the local community college enrolls



the largest proportion of college-going students.1 Chicago has achieved better results, with roughly 65 percent of public school students entering higher education, and 47 percent enrolling directly in a fourvear college.li

In terms of persistence and transfer, lowincome community college students in Tennessee and Chicago complete associate's degrees and transfer to four-year colleges at similarly low rates. In Tennessee, just 16 percent of low-income community college students earn community college degrees, while in Chicago, 16 percent of low-income community college students complete degrees in three years.lii In Tennessee and Illinois, a meager 16 percent of community college students successfully transfer to fourvear institutions and subsequently earn bachelor's degrees, and they earn them at lower rates than students who did not first enroll in a community college. liii Tennessee and Illinois, however, rank above the national average in transferring students from community colleges to four-year colleges and bachelor's degree in attainment.liv

In last-dollar programs like Tennessee Promise and the Chicago Star, the federal and state aid that low-income students would already have been entitled to makes community college tuition-free for lowincome students.1v Nevertheless, across the state of Tennessee in fall 2019, 17,065 students participated in Tennessee Promise and 39 percent were the first in their

families to attend college. lvi Thirty percent of program participants were eligible for the maximum Pell grant.lvii In Chicago in fall 2019, 4,142 students enrolled in the Star Scholarship. Roughly 80% of Star graduates that year were first-generation students, according to program reports. lviii

Figure 2.

	Tennessee	Chicago
Citizenship	Yes	No
requirement		
School	Yes	Yes
district		
requirement		
Limited by	No	No
Financial		
Need		
Limited by	No	Yes
Academic		
Achievement		
Type of Aid	Last-dollar	Last-dollar
Additional	Mentorship	Textbook
Support	and coaching	and
		transport
		vouchers,
		articulation
		agreements
		with four-
		year colleges
Founded	2014	2015
Website	https://www.	http://www.
	tn.gov/colleg	ccc.edu/dep
	epays/article	artments/Pa
	/tennessee-	ges/chicago-
	promise-	star-
	scholarship	scholarship.
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# **Design of Study**

How do low-income participants in the free community college programs account for the barriers they perceive in pursuing a community college education through to completion and transfer, and how can their experiences inform practical improvements to free community college programs and other ways of lessening economic inequality in higher education?

In order to answer these questions, the principal investigator (PI) interviewed and tracked low-income urban students in the Tennessee and Chicago Promise programs, along with their family members, for threeyears. This enabled a rigorous look at how Promise programs are performing on the ground, how low-income students and their families are responding to them, and what can be learned from these national experiments. The PI gained a deep understanding of their life circumstances. perceptions, and decision making from initial enrollment, through persistence, and potential transfer to four-year institutions.

The research geared its overall analytic inquiry towards developing best-practice knowledge in order to help improve procedures and practices related to the hundreds of Promise programs now in existence nationally. In addition to the prolonged research contact with the students and their families over a thirty-six-month period, the PI interviewed a range of educators, politicians, and professional researchers policy analysts and community colleges, nonprofits, and universities, as well as governmental and other agencies, across the country. The PI also surveyed available quantitative data, reviewed the academic literature, and connected the research and data with the personal "case stories" at the regional level to address gaps in information. Analyzing two free community college initiatives in very different regional contexts, in tandem with these additional activities generated robust and generalizable information. It provided a more nuanced and complete national picture

of the challenges and opportunities involved in leveraging investment at the community college level into successful transfer to and graduation from four-year institutions, a key focus of this White Paper because of the high value placed on four-year degrees in 21st century labor markets.

It should be noted that while all of the Tennessee students and their families truly qualified as low-income, the Chicago Star's eligibility requirements make the pool of program participants wealthier, as discussed below. Therefore, several of the Chicago study participants' families approached the median national household income of \$59,828.

Across the country, preliminary data from the Promise programs provide some indication of their effects on enrollment, graduation, and transfer rates. The numbers indicate that the programs results are mixed.lix However, the numbers communicate little of the reasons behind them. The students' voices and those of their families add necessary richness. methods enabled us to develop a groundlevel understanding of lived experiences essential for informing the programs' design and use as a lever to reduce income-based inequality in higher education.

Figure 3.

Last-dollar Aid	
Average cost of community college	\$4,892
Maximum Pell grant	\$6,495
Unmet need	\$o



#### Observations and Solutions Overview

#### We Noticed:

#### General Enrollment

- 1. Parents influence their children's college decisions
- 2. Students don't understand debt or how free-college works
- 3. College counseling around Promise programs lacks nuance
- 4. Simplified "free-college" messaging has pros and cons

## **Programmatic Effects**

- 5. Academic eligibility requirements raise the family income of participants
- 6. Remedial students' understanding of course and degree requirements undercuts persistence
- 7. Tuition-only funding and comprehensive funding for higherincome students are both a waste
- 8. Mentorship and coaching are good ideas that are failing in practice
- 9. Underfunded four-year options don't fix undermatching
- 10. Transfer articulation has pros and cons

#### Additional Observations

- 11. Full-time requirements aren't worth it 12. High-need students don't use existing supports
- 13. High-need students need more supports
- 14. Promise programs keep students local

## We Suggest:

#### General Enrollment

- 1. Involve parents in the college counseling process
- 2. Change the rhetoric around student
- 3. Enhance college counseling
- 4. Add nuance to counseling around Promise programs

## **Programmatic Effects**

- 5. Remove eligibility limits
- 6. Better connect high school curricula
- 7. Adjust funding formulas
- 8. Enhance in-college mentorship
- 9. At least proportionally fund four-year Promise programs
- 10. Enhance articulation partnerships while also broadening matched pathways

#### Additional Observations

- 11. Study effective ways of presenting information to high-need students
- 12. Equalize funding to community colleges to enhance student supports including innovative tutoring and campus jobs
- 13. Design federal partnerships to increase need-based aid at four-year colleges
- 14. Increase the federal role in Promise programs to sustain support

#### Promise Observed

#### General Enrollment

#### 1. Parents influence their children's college decisions

Whether to undertake debt and in what amount have become family decisions. Data from the U.S. Department of Education's National Center for Education Statistics indicates that the majority of low-income students are also first-generation students. In fact, fewer than a third of the parents of low-income students have completed bachelor's degrees. In interviews, the families of most of the low-income students had no experience with selecting and applying to colleges. Nevertheless, they, along with parents who had postsecondary degrees, significantly influenced students' decision making around college going. Students deferred to their families about whether or not to borrow for college.

Without exception, every student's family understood postsecondary training as an essential part of their children's future success. For example, Mandi, a first-generation Latina student who graduated from the International Baccalaureate (IB) track at her neighborhood public high school in Chicago, described how her father had not completed the sixth grade but felt excited about her educational future:

My father doesn't know anything about college, really. He liked the idea of his daughter going. I guess it's a proud moment for him. It's reassuring that his kids are doing better than him because it's been tough for him trying to make money. He never wants to see that for us. A parent doesn't want to see their children suffer because they couldn't have a higher education. My dad values education a lot. He thinks a one-way ticket to making good money is being well-educated. Education's always been important to him.

Nevertheless, she said, her family was "broke," and she recalled how her father didn't know what he needed to do to ensure she could go to college. In the fall of her senior year of high school, her father explored opening a savings account for the first time.

In spite of his lack of experience, Mandi's father influenced her college decision making. She felt that if she went away to college, she would have been acting selfishly towards her family:

Whenever I see someone struggling or having a hard time, it makes me feel like I'm selfish even thinking about – so I motivate myself and criticize myself hard at the same time. That I need to get my work done. That I need to think about this quickly. That I need to make my family proud. That's how I went on for all these years. Because every time where I felt I was being selfish for making my own decisions or acting, I reflected and thought about what I did. I don't want to feel that I've been selfish. With the college applications, my dad gave me a lot of mixed messages. So I was kind of hesitant about applying to colleges outside of Chicago. Sometimes you have to sacrifice your dream for reality.

Financial aid depends on family income, and because they must report their tax information, family members must generally participate in filling out the Free Application for

Student Aid (FAFSA) forms. Like some parents, the father of Mia, a mixed-race student who graduated fifth in her Memphis public high school class, hesitated to provide her with the financial information necessary to fill out financial aid forms. She said, "My dad didn't want to give his social security number to me. He's very cautious. He kept asking, 'What kind of organization is this? Who's going to be having this?' Other parents, including Mandi's father, seemed happy to help with financial aid forms but lacked knowledge and skills to complete them. Mandi said, "We created an account with my dad's social security number, but we had technical problems and trouble answering the questions."

Most students described further issues related to educational finance as family, not personal, matters, and families therefore made myriad decisions related to college choice. The father of Mia, the top Memphis student, depended on her to pay all the rent on the family's home, which they had lost to foreclosure and rented from the new owners. Her mother had a cosmetology license and no understanding of American higher education. She stayed out of the college process. Mia's father dropped out of the University of Memphis and worked for a time in maintenance before taking disability assistance. Though she gained acceptance to the University of Memphis, she felt the Promise program provided her only realistic option if she needed to help out her family. The mother of Rod, Mia's African American high school classmate who graduated with honors, expected him to contribute money to the household. She was raising five children on her own. Following an aunt's deportation to Mexico, the mother of Tracy, a first-generation Latinx graduate of another Memphis public high school, had taken five additional young children into their Memphis home, stretching the family's finances. Tracy made plans on the basis of sparing her family further financial burdens:

I'm glad I did [Tennessee Promise] because I haven't had to bother my mother for anything, especially considering that she had her [car] accident and bills to pay ... I've been able to help with payments my family needs to make. Hopefully by the time I work [full-time] I can help them more.

Even when it came to transferring from community college to a four-year college, Tracy waited for input from her family. "I'm not sure what the plans are," she said, "because I kind of follow the plans or the goals that my mom has, or my family."

Parents who went to college also influenced student decisions around borrowing for college. The mother of Emma, a Nashville public school honors graduate, had her own outstanding student loans. She began college at a four-year HBCU, dropped out, and then returned. She also held Parent Plus loans she undertook to help Emma's two older half siblings attend a nearby four-year college. Both siblings subsequently dropped out. With her mother struggling to pay household bills, and given all of the family's existing educational debt, Emma felt determined not to saddle her family with further encumbrances. She said:

I just don't want to put debt in my future. Especially with the different costs, it just gets very pricey. And I know some colleges could work with different student aid programs and stuff. But I've seen what my mom has to go through just because she took out loans. It was just because she had to make a way to get her degree. I want to stick around at home because my mom's student loans are still deducting from her checks. So her checks were smaller than they should have been at some points, and we have fallen behind on some things. So I just want to help her as much as I can, especially when I have an easier route to do it, going to community college for free.

The family of Ruby, a second-generation Latina student who graduated from a selective enrollment arts high school in Chicago, discouraged her from attending Butler University, a private four-year college in Indiana. Before becoming a public school teacher, her father began his education at community college. Her mother transferred from a four-year college into community college and eventually found work at a bank. Her parents told her, "in the long run it would be so much better for your future to graduate loan free." At community college, she effortlessly earned all A's and graduated with a 4.0 GPA.

Amanda, another second-generation Latina student in Chicago who attended her neighborhood public high school, knew that her father would put the loans for any money she borrowed under his name. Though her mother attended Chicago State University on a full merit scholarship and worked as a public school teacher, her father, a Mexican immigrant, had a thirdgrade education. He told Amanda he wanted to help her succeed. Nevertheless, after deciding not to enroll out of high school at the University of Iowa due to its cost, and choosing Chicago's Promise program instead, she also didn't want to burden her family with any educational debt when she transferred from community college to a four-year college:

I'm doing my best to avoid loans when I transfer. I had a conversation with my dad. We're the ones that talk about it. I'll try my best to find scholarships and no loans. But if it is ever needed, he will put the loan under his name. He said he'll pay off the debt, so I could focus on school. Because he always told me that 'once you enter college, if you stay in college, I'll do what I need to do to keep you there.' So, it's me not wanting them to be in debt. That's why I'm looking so hard for scholarships. I know for my sister's community college he took out money from a credit card. Maxed it out. And it's been like a year, and she dropped out of school, and he just finished paying it off. So, I don't want him to go through that kind of struggle again of having to work really hard just to pay it off. I would rather – sometimes I get fed up on classes, but it's like, I'm doing this for him, for them.

Though she earned all A's and B's in community college, she chose to transfer to the cheapest college available to her. She made her selection at the same time her father undertook a loan to buy her a car. The monthly car payments exceeded her tuition at the four-year college, considering transfer scholarships and financial aid. He felt more comfortable with car debt then education debt, she explained. "He drives a car," she said. "He can't drive tuition."

While ill-informed parents could undermine college counselors' messaging, deliberately bringing parents into the college counseling process had an impact. Carlos, the father of Maria, a Latinx student who completed the IB curriculum at her neighborhood public high school in Chicago, had only a sixth-grade education. Initially, he tried to soften her college-going expectations by suggesting she build a career by working her way up out of high school. "It was scary," he said. "I didn't see college as something she was going to be able to reach with the money that we make and our finances. It was very stressful . . .. My goal was to just kind of encourage her to start low and so on because I was just scared."

Rather than follow his advice, she brought him to meet with her college counselor. Carlos described the effect the meetings had on him:

She brought me into these seminars where they show you how to apply for and look for scholarships and funding, and they talk about how FAFSA joins in. I saw that there was help out there. They always yell out, 'GPA, GPA.' You've got to maintain that. So I told her, 'If you're going to maintain your GPA, you're going to maintain it, and you're going to get a scholarship.'

After a few meetings, he became convinced that higher education was worth it. "We went from 'We're not going to go to college' to 'We have options,'" he said. "It was a fun ride."

College finance and selection decisions are family decisions, so the more college counselors include parents, the more informed the decisions can be.

#### 2. Students don't understand debt or how free college works

Beyond their parents' beliefs, students absorbed rhetoric around burgeoning amounts of student debt. lxi Not only did students fear taking on education loans, they also had a limited understanding of them and the overall financial aid system. Students did not know how to weigh the risks and rewards debt entails or that a small amount of debt could ensure a better financial future.

Promise programs seemed to contribute to increased completion of financial aid forms. In fact, even students who found the process difficult and whose family members did not help them, found help from their high schools. Many Tennessee high schools made applying to Tennessee Promise mandatory, and those schools appeared well organized to maximize FAFSA completion rates. Since the inception of Tennessee Promise, FAFSA completion in the state has increased. Chicago high schools also boast high and rising FAFSA completion figures, though more likely due to district-wide reporting requirements.

Nevertheless, after they filled out financial aid forms, students did not understand their financial awards, even by the transfer stage. After Amanda, the Chicago Latina student, began receiving financial packages from local transfer universities, she described not knowing how to understand or compare them. "It's pretty confusing," she said. "I think maybe this is what the transfer center is for, but I feel like I need in-person help. Virtual help doesn't work for me. It's difficult to read the award letters. I tried asking my neighbor for help." When Emma, in Nashville, considered attending a four-year college, she said that she would put the tuition on a credit card, rather than deal with the financial aid process.

Research indicates that college generally offers a good investment for students who do not attend for-profit colleges and do not drop out. 1xii Yet Tennessee Promise students did not even consider taking out debt, and Chicago Promise students chose to avoid small amounts of debt, with limited understanding of the tradeoffs entailed in their decisions. Yana, a bright, firstgeneration African American Memphis student who skipped school during much of high school, echoed her classmates in saying, "I ain't playing that – ain't gonna fall for that trick. . . I can't go into debt. No, no debt. Say no to debt. No. Got to play it smart. Got to think with your head." In Chicago, Eleanor, an African American student who graduated from a selective-enrollment public high school, decided not to borrow to cover a \$5,000 gap to St. Louis University. The Promise program, she said, "seemed like a godsend because it was free."

Even among students whose college counselors told them the risk of a student loan would pay off, teachers could ruin the message. After Eleanor heard her teachers say that they were still paying off their loans, she decided on the Promise program:

My school was open to the idea of taking out loans. They informed us about them, and which ones would be smarter to take versus others. But then I talked to my



teachers. They would say how long it takes them to pay them off. It just did not sound fun. I want to get out of college and make my own money. And I just think having to pay loans is just not something I wanted to be part of . . .. This [Promise program] has worked out perfectly. They're paying for everything. The gap between scholarships and total cost would have had to be way less than \$5,000 for me to actually go away to college."

Further misunderstandings accompanied the decision to enroll in Promise programs. Tracy applied to in-state four-year colleges outside of Memphis. Then a high school classmate told her the local community college Southwest Tennessee Community College (Southwest) was "a low-income college." She understood that to mean, "it's not a high tuition, so there are people there with low incomes, like us." At the last minute, she therefore chose Tennessee Promise. "Southwest's been helping with the refunds," she said. "They have like my extra scholarships, so that's been a help."

Following the decision to enroll in Promise, information deficits continued. Students spoke in a way that indicated that they did not understand the source of their aid. Linda, an African American adult who earned her GED immediately before enrolling in Tennessee Promise, for example, did not know that federal financial grant aid paid for her college tuition. Even without the Promise program, she could have attended community college for free, given her low income. "Without Promise, I wouldn't be doing this because I couldn't afford it," she said. Her Pell grant aid exceeded the cost of community college tuition (see Figure 3), but she did not realize she received a Pell grant. Consequently, when she was told that the community college's laptop

lending program could only be used by students receiving Pell, she assumed that because she "was on Tennessee Promise" she did not qualify to borrow a laptop.

Students did not understand the nuances of last-dollar Promise programs. Mia, in Memphis, found charges for printing and a parking decal on her community college "bill" and wondered, "Why is money from our financial aid being taken out for these things, when we could use that money?" She thought that students in Tennessee Promise did not qualify for federal work study jobs and lamented that, with her stellar high school GPA, she "was supposed to get a lot of awards for financial aid." Instead, she was "not receiving any of that money - it's not paying for anything for me." Rod complained that "they're barely giving money back to us. My Pell grant. They take so much money out of my Pell grant that we're supposed to be getting." His financial aid refund checks seemed unpredictable:

We get no information. If something happens, it just happens and we're like why did this happen? Like we get checks. We didn't know we were supposed to get some checks or how many checks we were supposed to get. Even if we go to the cashier office and ask, they tell us something and then something happens different. So, they're really bad on information.

Several students indicated that they feared the Promise program would turn out to be a scam and that they would owe back the money they received from it. For example, Mia and Rod both persistently heard rumors about having to return their tuition funds. They considered dropping out before they ran up a larger tab. According to Mia:

My friend said that the money we're receiving for Tennessee Promise - we have to pay it all back. She said it's a loan. So, I asked the financial aid people, 'Is this money just free?' They said I don't have to pay it back. But my friend said that the person meant pay it back right now, that you do eventually have to pay all the money back. But they didn't inform me that I had to pay the money back when they gave it to me. They just gave it to me, and I thought it was free money. So now I'm confused. I think I should call the financial aid office again, but when I call, nobody answers, and I'm just on hold.

Yana's siblings told her to be careful, and she seemed to believe them. "Do they, without your permission, put loans into your refunds just so you can be in debt?" she asked. "I'm just finding out about that, and it's kind of scaring me," she said. "My sister was like, 'You don't even know what you're signing up for," she continued.

Meanwhile, students who understood that Promise saved them money, designed their subsequent postsecondary paths to minimize debt at every stage. Claudia, an African American student who graduated from a selective enrollment Chicago high school, chose Chicago's Promise program over acceptances to Lovola University, Alabama A & M University, and Western Illinois University that offered nearly full rides. After graduating, she intended to transfer to the University of Illinois at Chicago (UIC), a four-year college within the Promise program's articulation agreement, and, from there, apply to UIC's partnering law school. Though the sequence would cost less, it seemed unlikely to reflect her talent:

City Colleges has a partnership for transferring to UIC at a low cost, and UIC is partnered with John Marshall Law. I'll probably end up going there for law school. I think I got a path going straight through. I think I got it figured. I think I'm going to stay on that direct path until I graduate with my law degree. Go with it and go hard.

Back in high school, many of the college-access programs that could provide more information to first-generation or ill-informed students – programs such as Advancement Via Individual Determination (AVID), a curriculum intended to prepare underrepresented students for success in college and beyond, and Upward Bound, a federally funded education program to increase college opportunities among low-income, first-generation students, - serve only the small number of people who apply to the programs. Often, participation would preclude other useful college preparation, such as enrollment in IB programs. As Nikki, a first-generation, Latinx student who graduated from a neighborhood public high school in Chicago and did not choose Chicago's Promise program, said:

AVID was only fifteen of us when I took it, but I had to leave junior year to be in IB. People say, 'why did you do AVID? It's not honors. You should have taken honors.' But I don't regret it. I learned a lot. I met the [school] college coach through AVID and started talking to him. He's the one who gave me reassurance about leaving AVID to join IB. He told me you make changes like that throughout life, and you have to know how to work through them.

Though Promise programs seemed to improve financial aid completion rates, students at all stages lacked understanding of the financial aid system and how it related to the programs. They did not know how to evaluate loan benefits and generally did not have exposure to high school programs that could have helped them.

## 3. College counseling around Promise programs lacks nuance

In neither Tennessee nor Chicago did the Promise Program seem to occupy an integrated part of comprehensive college counseling, in which students became informed about a range of options and their benefits and drawbacks. Students did not have the opportunity to learn about and consider how the Promise programs would fit into their overarching education goals. College counselors in both locations failed to communicate clearly the benefits of attending more competitive colleges.

Research evidence indicates that not every student should begin higher education at community college. Ixiii While community college serves some students perfectly, students are not fungible. In Tennessee, however, instead of tailored counseling, students with academic talent, who would likely have received substantial aid at four-year college through a combination of merit and need, got fast-tracked into the Promise program. Some schools made applying to Tennessee Promise a graduation requirement.

Tennessee students described their high school college counselors pushing them into the Promise program and hyping the fact it was free. According to Yana:

Our college counselor just helped us enroll in Promise, just 'Oh my god, Tennessee Promise, they free money.' That's all our counselor kept saying. 'It's free money. Go ahead and go.' I was like, 'I was going anyway.' . . . They knew University of Memphis was too high. University of Memphis doesn't take the Promise, and I feel like that's wrong because they – their tuition a semester is very, very high. Most other people who go to the University of Memphis got automatically in debt because of that. How can you even decline a scholarship if ya'll prices are that high? Rod, whose high school made applying to the Promise program a graduation requirement, described similar messaging from his college counselor:

All I ever heard about was Southwest because it was free. 'Go to Southwest, go to Southwest.' It was pretty much just Southwest, I guess, because of Tennessee Promise, and it was like free. . .. They were really pressuring us to go. Like, I remember I would say I wanted to go to University of Memphis, and they would say, 'No, you should go to Southwest. The two years for free,' you know? And I'm like, 'Free?' So, I just did it.

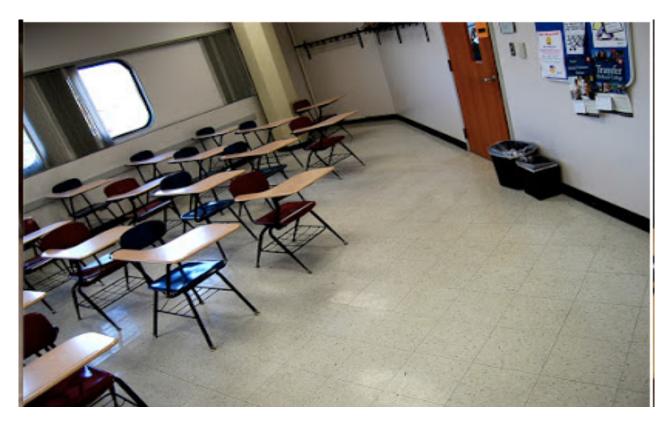
While this bulk approach to counseling seemed to influence more students to go to college, it did not necessarily get more students into the best college for them. Anastasia, a mixed-race student who graduated from a Memphis charter school she had to apply to, where she struggled academically, received a volleyball scholarship to Philander Smith College, an historically black college or university (HBCU) in Little Rock, Arkansas. Absent the messaging around Tennessee Promise, she would have gone. "I wanted to go," she said. "I wanted to learn how to be on my own. I wanted to play volleyball, and I finally had this opportunity." But she would have had to pay \$5,000 a year. "I had to turn that down," she said, "because I could stay here and do two years free."

Many students had misplaced ideas about how Tennessee Promise could further their ambitions. Because they lacked information, they easily became discouraged in community college. Linda, the adult student, planned to use community college to retool her experience as a home health aide and then start her own business to offer elder massage. Not until the end of her first semester of community college, did she learn that it did not offer any major related to elder massage. "I thought I'd get through the first semester and then I'd be in my field doing the geriatric massage stuff," she said. "That was the plan. Now that's over." She scrambled to select a new field and revise her job plans but grew increasingly uncertain. Mia entered community college intending to open her own therapy practice. When she learned from a classmate her first year that in addition to a bachelor's degree, she would need more advanced training, she felt stunned. She decided to try to work as a school counselor instead but seemed dispirited and unmotivated. Yana wanted to launch a series of businesses related to wellness and beauty and hated spending time in unrelated community college classes. She dropped out to focus on her businesses. She said, "My thing with jobs is that nine to fives, they're not that important to me. Me starting my own business. That's what I want to have."

By contrast, the Tennessee student whose career goals were suitable to starting at community college seemed single-minded about passing her coursework. Because of the stable, high-paying jobs available in the field, Anastasia hoped to become a nurse anesthetist. She described her attitude towards anatomy, which she knew she needed to realize her goal:

Right now, anatomy is my main priority. I'm trying to maintain that grade because the medical field is very competitive. I have a gap between classes in the middle of the day, and it gives me time to do anatomy work. I make sure I go to the teacher to say, 'I saw this problem and did it. Is it right?' And I use the free tutor a lot.

Chicago public schools have a significantly higher density of college counselors than Tennessee high schools. Even if it felt difficult to get time with them, all of the Chicago students described at least meeting with their counselor. Using a rubric that encourages students to submit applications to at least five colleges, including one to a private college and one to an out-of-state college, Chicago Public Schools require counselors to certify where graduating seniors apply.



Nevertheless, because they perceived the Star Scholarship as primarily merit aid for middle-class students with other options, most Chicago college counselors appeared not to have mentioned the program to their students. Influenced by research on matching, which suggests that students who enroll in colleges for which they are academically overqualified become less likely to thrive, persist, and graduate, most counselors reported wanting students with grades high enough to qualify for the Star Scholarship to attend a four-year university, regardless of their financial circumstances. lxiv

One Chicago student, Maria, complained that many of her classmates felt pushed into a four-year college, irrespective of their career aspirations. According to her:

They really push the idea of going to college, and not exactly going to community college, but more to a university. . . . They don't take into consideration how these students live, where they come from, how their family situation is. They're just like, 'apply for all these scholarships.' It's like, 'okay, well, where's all these other options?' It's just solely for a university. I think that bothered me a lot. What if people don't want to do that? What if they don't want to spend their life raising money for something that they don't want to do? You're showing people that that's the only way that they can succeed. I mean, my dad, he's successful. He's created a life for himself and he never went to college. He didn't even finish high school.

Consequently, all the Chicago students applied to more than just the Promise program and generally decided to enroll in it to spare their families the costly-seeming financial packages that four-vear colleges offered them. They made the decision without guidance from their high school counselors, often because they felt the counselor would deride them for choosing a community college. "In high school, people think that if you're not going to four-year college, you're not going to college at all," Amanda said.

Rather than learning of Chicago's Promise program from their college counselors, nearly all of the Chicago students discovered it through a less official source – for example, Facebook or a parent's friend. Amanda said:

No one really talked about Star . . . I found out about it from my mom's teacher friend who had a daughter at community college. When I asked my counselor if I could combine my math ACT and reading SAT in order to qualify, she didn't seem to know much about the scholarship. I had to come back the next day after she'd had a chance to look into it.

Amanda was "told by [her] parents that this was what I had to do," she said. Ruby felt pushed by her high school college counselor "to go to a college like Northwestern." She learned about the Promise program from her parents, not from school:

My parents told me about Star. They saw it on the news. They were like, you have to apply to this. That was my junior year. My high school counselor did not tell me about Star, but she had her hands full with so many students. I think it would have been nice if it had been given as an option, to learn about it, and just apply for it, because it's really been a godsend for a lot of students, and it's really saved us from spending unnecessary money on a university.

Ruby enrolled because her "parents wanted this for me," she said. "They wanted me to have a more financially easy life."

Claudia moved into Chicago from an inner suburb and lived with her grandmother during high school. A top student, who served on the student government and took dual enrollment classes, she won acceptance at more than ten colleges before enrolling in the Promise program. She was the only student in her high school class to choose that path:

People have a stigma over community college. They think of it as less than. Lots of my classmates would have qualified for Star, but they went for the college experience. I was the only Star Scholar in my whole graduating class, the only one who took advantage of it. If I had stayed in the suburbs, I probably would have went [sic] to a four year. I probably would have gone ahead to UIC. But there are better ways to do things than debt.

The goals of Chicago's program read as unclear. If it is trying to increase college access, why is the ability to qualify for the scholarship so limited? If it is a gift to long-term residents for staying within the Chicago school system, why is it so comprehensive? Without more clarity, more buy-in from high school college counselors seems unlikely, which will translate into limited student participation. As of spring semester 2021, only 8,400 students had taken advantage of the program since the first cohort started in fall 2015. lxv

In Tennessee and in Chicago, students lacked opportunities to discuss the benefits and drawbacks of Promise programs in relation to other options in a nuanced way.

4. Simplified "free-college" messaging has pros and cons

The simplicity of Promise programs' "free college" messaging cuts both ways. It attracts students into higher education who have little information about how they can afford to

go to college, steering them away from both less desirable and more desirable routes. Streamlined messaging around "free" can operate for good and for ill.

Take for example, Rod, in Memphis. In the absence of the Promise program, he may not have gone to college at all, or he may have enrolled in a for-profit college. In his first year of community college, he regretted that he had not simply stayed at his summer job at a Nike warehouse. If he had, he said, he'd "be able to afford a car and an apartment" - both more immediate goals than a better job he might get with an associate's degree. He considered the salary Nike offered "a lot of money." He said:

To be honest, I'm still kind of conflicted about whether college is really my thing. College is just so hard. All these tests they're giving us and stuff like that. When I was at work, I was making a lot of money. I could have had an apartment and a car. Nike paid \$400 a week, but I could have went [sic] full-time and got \$600-\$700. Every week. That's a lot of money. So, I try not to talk about it so much because I might quit.

During high school, Rod had also seen commercials for for-profit technical colleges that appealed to his sense of himself as someone interested in engineering, who wanted to work with his hands. He also had the misimpression that technical colleges would pay him to attend. "In trade school you get paid," he said. "I would've got paid all my tuition, like they wouldn't have kept a cent." With his high school college counselor pushing Tennessee Promise ahead of all other options, however, he followed the majority of graduates of his high school into it. Absent the high school's messaging, he might have attended a for-profit technical college instead:

I should have went [sic] to ITT Tech. I'd seen it on TV like a long time ago, but they kept telling us, 'Southwest free.' . . . [But at ITT Tech] I would have graduated this year and already had my bachelor's degree [two years after starting]. I would have been in the field actually having a career. That's what the guy told me who I think was an advisor or something . . . I think they even pay for a dorm and all that.

Given the benefits of an associate's degree, and evidence of for-profit colleges driving inequality through often predatory practices, Tennessee Promise seemed to represent a better path for him.lxvi

Promise programs' "free college" message also competed more equitably with the military's platform. At Claudia's Chicago high school, military recruiters roamed the halls and befriended students. As she chose free community college, many of her friends enlisted. She said:

A little before graduating, I considered the military, but I ended up opting out . . . A lot of my classmates went straight to the military. Recruiters try to sell you a story and a dream. You have to figure out the facts for yourself and see if you're willing to do it. I think some days the military probably would have been great.

Mandi described the pull-up bar that military recruiters placed in a prominent position in her high school's hallway, where her fellow classmates showed off their strength. Many of her classmates also enlisted. She considered enlisting, too:

At lunch, the recruiters had a table to themselves, handing out flyers. They bring a high bar where people can do pullups. My friend did it 15 times. We were all

impressed. . .. I thought about the military a little bit. The idea of something that was a challenge and would make me tougher sounded good. But since I was in the IB program, the military didn't seem worth it.

While the military path could subsequently make college free, for veterans the transition into higher education has presented additional challenges. lxvii They have experienced high rates of dropout and stop-out and attained degrees at low rates. lxviii In spite of the financial benefits of their service, most veterans have enrolled at community college, and financial need has continued to impact their persistence. Ixix The gap in education posed by military service has added to their difficulties. 1xx Few colleges have offered transition programs specifically for student veterans. 1xxi

Meanwhile, Tennessee students failed to realize that high economic need made a range of postsecondary options free or low-cost. The Promise's simple "free college" slogan won out over other, potentially better options. College counselors' who pushed students into the program lacked regard for individual students' needs and what Promise programs could offer them compared to other possibilities.

Mia would likely have received generous financial support to attend Vanderbilt or the University of Memphis. As discussed above, her father collected disability assistance, their 800square-foot family house entered foreclosure, and she graduated fifth in her high school class. She did not apply to Vanderbilt University, so she never found out what financial package it would have offered her. She simply assumed that she could not afford it. She said:

Vanderbilt was my dream school, I wanted to go there so bad, I went online and I checked everything out. I even did my research on which was the best schools for psychology, and Vanderbilt's in the top five, next to Princeton and Johns Hopkins, I think . . . . I didn't apply because of the application fee, which I think was \$50 just for the application fee.

Though she applied to the University of Memphis, she could not understand her financial aid package and did not explore that option further or ask for help. She explained, "I got accepted to University of Memphis, but they were giving me the roundabout with my financial aid – no specific information about what I need to do." Instead, she got drawn into community college because it would be "free." As she began her freshman year, she still aspired to transfer to the University of Memphis after she completed her associate's degree. "After my two years, I will transfer to the University of Memphis," she said, "and I will continue my career. I will get a bachelor's degree. I want to be a therapist for teenagers." By her second year of community college, however, her motivation had faded.

Contrast the experience of Maya, a Chicago student who attended an extracurricular college preparation program that her college counselor recommended she apply to her freshman year of high school. In the program she learned about other colleges that pledged debt-free attendance to students with significant financial needs. She also learned how the financial aid system operates and what kind of aid packages she could expect from public four-year universities. Beyond Promise, she saw numerous, more competitive 'free' options. She said:

I went and asked my counselor for a list of schools where, if I made it in, they'd pay for all of it, so I could see which suited me best. If, say, I made it into Dickinson, they'd cover everything because I fall under low income . . . . I knew for a fact if I



were admitted to the University of Chicago, I'd be free because I fell under that low income. I think Northwestern would still have paid all my tuition. They want to be able to bring diversity into their campus. Schools like that, they'd pay 100 percent. If I got in, I'd have free tuition at Urbana and wouldn't have to pay anything. It's cool because my family is low income. These good schools can offer that because they have donors all over the world.

On the other hand, even though it would have cost more, Linda, the adult returning student, probably should have selected a technical college, where she could pursue her established interest in elder massage. "They should have said something," she said. "Tell me upfront, so we can have a game plan. Don't let me get midway." Instead, because she heard it would be free, she chose community college, without a path to the career she aspired to.

The simplicity of the free college message competed with additional strength against other paths, including working at entry-level jobs, enrolling in for-profit colleges, and enlisting in the military, that have significant marketing resources at their disposal. The free college message also drew students away from equally free, more selective options, as well as better options for individual students.

### **Programmatic Effects**

#### 5. Academic eligibility requirements raise the family income of participants

Limiting Chicago's Promise program to students with GPAs above 3.0, in line with several other Promise programs across the country, turned the Star Scholarship primarily into merit aid. In interviews, Chicago college counselors viewed it as an option for filling financial gaps among middle class students who did not receive Pell grant funding (or for undocumented students ineligible for other financial aid). It proved difficult to find documented low-income Chicago Promise students. Most documented program participants already had a toehold in the middle class. Though usually not immediately following high school, and often with some transfers and gaps, their parents had achieved some college. To avoid the threat to their tenuous hold on the middle class that paying college tuition seemed to pose, they pushed their children into the Star Scholarship.

College counselors noted that student from low-income families with high grades had other options to attend a four-year college for free or at low cost. They hesitated to direct students to the Star Scholarship, lest they encourage them to undermatch. In the words of one counselor at a Title 1 Chicago public high school – the designation for schools that receive federal assistance because they have high percentages of students from low-income families:

The Star Scholarship really fits for a couple of demographics because it's a 3.0 GPA, right? It's very high for a community college, right? So, it helps students who do extremely well and who are undocumented because it funds dreamers. So that's good. That means some of my high-achieving undocumented students can go there for free. Another population it serves really well is students who have a 3.0 GPA but don't receive any FAFSA money. Their parents make a little too much for that. That's a good population for Star because you can go there and save and then transfer, and your parents may only have to pay two years for a four-year degree rather than all four years for that four-year degree. But other than that, I don't think it does much.

Another counselor, who also worked at a Title 1 high school, echoed similar views about the Star:

The Star Scholarship is particularly useful for students who are undocumented, as far as assisting them with financial aid. And then I know for our kids who want to stay close to home, that's good for them. Some of my higher-level kids, though, I would try to help them get to a four-year college. Our state schools really pony up a lot of money. They're also really driving for students. They're having problems with enrollment. So, the Star is in competition with schools that maybe didn't used to give as much money out. Like, for example, Northern Illinois [University] gave a ton of scholarship money to my students last year. And they had a special CPS [Chicago Public Schools] scholarship. So maybe some of those kids would have chosen to stay back, but then it was interesting for them that they were given such a high aid package. So, I have kids go to National Louis [University] that maybe would have gone to City Colleges [of Chicago]. National Louis – basically everything's covered by FAFSA there. Students have only very small gaps.

Indeed, Chicago students seemed to fall largely within those characterizations. Most operated within the context of their parents' circumstances and financial goals. Ruby's parents, a math teacher and a banker, for example, held solidly middle-class jobs that brought in too much income for the family to qualify for Pell grant aid. Because it absolved them from paying an expected family contribution at a four-year college, Ruby's parents encouraged her to enroll in the Star Scholarship. Amanda similarly explained, "I applied to 16 colleges, and tuition was expensive. My mom's a teacher so FAFSA doesn't think we would need any help. My mom said, 'Go for the Star." Eleanor's parents recently finished paying off their own student loans. Her mother attended two different, local four-year colleges directly following high school, and her father eventually enrolled in a local four-year college and then completed an online master's degree. Her parents described their need to balance the cost of Eleanor's college attendance with their desire to replace their car and eventually buy their first home. They also needed to ensure that the cost of her education did not prevent them from supporting her two younger brothers when they reached college age. According to her mother:

[Promise] has been a blessing. Eleanor's doing well. She's going to get free education. She'll have the transfer, no matter what, to a four-year college. If nothing else, it cut the cost in half. And then she'll be in a position where she can get loans that we weren't being able to accept at the time. She will be able to get loans and we'll be in a position to help her for two years versus four. And that's the challenge, when we thought about Eleanor and had two more kids. We had to say, 'Can we do four years for two more kids, which is twelve years into our retirement years - you know, twelve years of pain, tens of thousands of dollars year after year?' And because we couldn't do it for the other two, we knew it wouldn't be right for us to make a special situation for her specifically, even though we wanted to. It just wasn't sustainable. And so, helping her last two years – that's sustainable for each kid that we have. So, for us, that Star Scholarship is our floor. If you can do better, get more schools - Amen.

Undocumented students appeared to make up a significant portion of Chicago Promise students. College counselors tried to ensure undocumented students completed the Alternative Application for Illinois Financial Aid, a state source of need-based grant aid available since 2019 for undocumented students. Otherwise, they had few options beyond the Star for financial support to attend college. Tennessee Promise, by contrast, does not fund tuition for non-citizens.

Limiting eligibility negated Promise programs' purpose in providing an accessible pathway into higher education for students who would not otherwise have attended college. On the other hand, however, creating greater economic diversity at institutions like community colleges that have historically attracted predominantly low-income students with little political clout could attract additional political support and further funding, and begin to destignatize community college as an entry point into higher education.

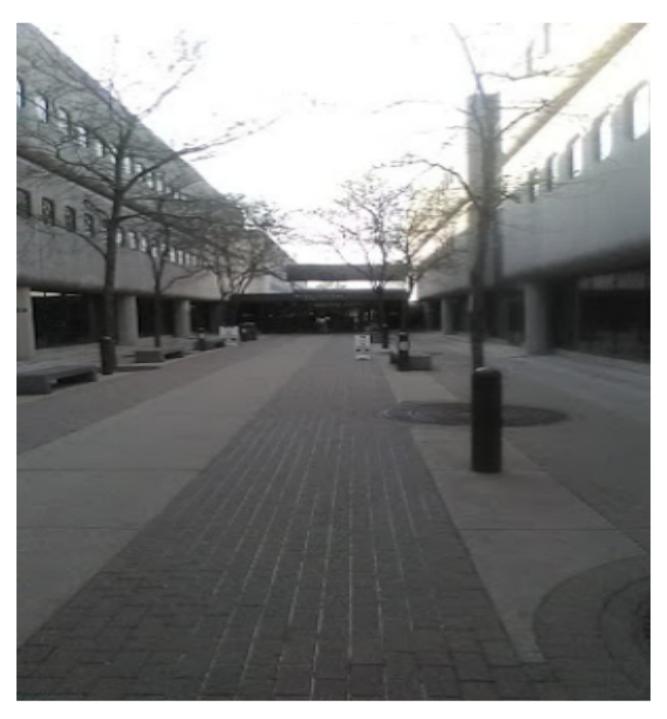
6. Remedial students' understanding of course and degree requirements undercuts persistence.

Tennessee Promise students failed to understand why, in order to graduate, they had to take developmental classes or classes outside their areas of interest. They did not seem to realize that a liberal arts education entailed studying non-job-related subjects, or why broad course requirements would help them over the course of their careers, as the economy evolved and changed. Their lack of knowledge made them more likely to drop out. Because Chicago's Promise program made students who needed remediation ineligible, developmental classes became a moot issue there. Chicago students, who hailed from relatively wealthier families, also did not experience coursework outside their majors as a setback.

Above all, Tennessee students expressed frustration over developmental classes. Yana said, "Those two non-real classes knocked me out. They made me behind." Similarly, when Rod had to take corequisite, developmental English and reading, he complained that "the books we're reading are the exact same books I read in high school. I'm taking college English but we're doing high school stuff." He did not understand why he had to take English and reading at all: "I'm taking all English and reading courses and I'm going into engineering, so shouldn't they be mathematical and scientific?" asked. Yana and Rod both lost motivation and began discussing dropping out.

Even beyond developmental classes, required coursework outside their fields of study vexed students. "This needs to move a little faster," Yana said. "It's playing around. I really need to get into my field now. I need that money." In regard to her precalculus requirement, she said, "we've no need of this." "Besides knowing how to count, when am I in need of all those formulas?" She failed precalculus and other classes and spent increasing amounts of time trying to start businesses, rather than studying. According to Rod, "Community college feels like a waste of time. What do these general courses even count for?" As he grew increasingly unsatisfied, he enrolled in fewer courses and spent more time at his job. Instead of spinning his wheels in requirements, he planned to transfer into a for-profit technical school, where he could focus on "hands-on courses." Mia also did not understand why she had to take required classes unrelated to her psychology degree. Describing her art history and speech classes, she said, "It's like drawing and stuff, and I'm just like, 'Why am I in here? This has nothing to do with my practice of study.' And my speech class, why am I taking a speech class? It's weird." She received her lowest grade in statistics, while protesting that she didn't understand why she needed to take it to become a psychologist.

In Chicago, students who needed developmental classes could not enroll in the Promise Program. There, students did not experience those obstacles, and they tolerated disparate course requirements. Claudia picked all her classes with an eye towards transferring her credits to the University of Illinois at Chicago, with a major in political science. Nevertheless, she said, "my last semester of community college, I took a leap of faith and signed up for a slightly higher-level bio class for that requirement I still needed. It was from 6-8:30 pm two nights a week, and I got an A. I liked the professor." Ruby aspired to teach middle-school mathematics but felt inspired by a political science class. She described how she "learned a lot more than I thought I would in that class. It just opened my eyes to see that our democracy already works in a great way." She enjoyed learning in more of a discussion format than she had in her required math classes: "I feel like it's a very intimate class. We get to talk, discuss. And it's really open. It's very different compared to



my other classes." Amanda found a business class outside her science major potentially useful to her broader life. She explained the benefits of learning about business in this way:

I could see me and my dad looking into buildings to open up a hall [party venue]. Halls make good money. I'd have background on how to start it, or how to do checks, how to look at inventory. In class we're learning how to do transactions, closing statements, balance sheets, trade journals. It's lots of numbers and lots of terminology. If you have a closing, you have to know who the investors are.

Remedial students in Tennessee who grew frustrated in remedial classes and general liberal arts classes had more difficulty persisting in Promise. More advantaged, higherperforming students in Chicago did not encounter the same stumbling blocks.

7. Tuition-only funding and comprehensive funding for higher-income students are both a waste

Promise programs that fund only tuition even for the lowest-income students, along with programs that fund non-tuition costs even for students who don't need help, waste funding. The non-tuition costs of community college attendance reach roughly \$x.\text{lxxii} Tennessee students reported difficulties acquiring textbooks and getting to campus. Chicago students received vouchers for both, though many could have afforded them on their own.

Several Tennessee students expected the Promise program to operate like secondary school with everything included. Mia described her expectations in this way:

I just thought that Tennessee Promise would give us the resources we needed, which would be books. I just thought, like, everything would be paid for, and I would not have to worry about anything except doing my assignments. But that's not it. That's not it at all. I have to actually worry about paying for my books, which isn't what I thought it would be.

Upon arriving on campus, Tracy felt surprised to discover that community college did not provide free lunch. "I thought the community college meals were free," she said. "I thought that it was free because I thought that it was like a regular high school, where the food is free, but it's not."

When students went without textbooks, they negated most of the benefits of their tuition funding. Few Tennessee students, however, felt able to afford them. Without hers, Mia googled class discussion questions to find websites where she could read something approximating her course materials. She said:

What I normally do is surf the web, and I just find shortcuts. Like, social media would tell me different ways to just do things online for free. I copy and paste the questions that the teacher gives me onto the internet and then I just find a passage that works. Like one time I hadn't bought the book for history, and I just copied and pasted the questions, and then I was like, 'Oh, I found it.' Cause I found things that answered the question. But then sometimes it's not that easy. And sometimes it's really hard.

Several times, Mia got in trouble with teachers for not having her textbooks, "Why are they always saying you need a book to pass the class?" she said. "We know we need a book. We're just asking you to give us more time to get the money together to be able to pay for it." Linda borrowed money from her sister, promising to pay it back over years. She said:

The books are killing me. It's the thing I'm struggling with. Those books are so expensive, and Tennessee Promise covers everything but books, and that really sucks. That needs to change. Because if I'm already struggling and can't afford to pay, unless you think I can afford to pay for a \$62 book. My sister lent me the money. So, we have an agreement. I do agreements on everything. And my refund money will go on bills.

Tennessee students also struggled with transportation. Because she had no way to get to campus, Yana repeatedly missed class. She described her circumstances in this way:

I was out of class for a whole three-week period just because I ain't had no transportation. That backfired. I got to the Summer Bridge program by making my family take me, and they got tired real [sic] quick. Then I had to convince school to excuse me. Had to bring doctor's notes. Went to the clinic and went to the doctor. Then I did the white out, you know, and put the days on there. You thinking about kicking me out of class at the last minute, when my grade high? I would do anything just about.

After her mother was in a car accident and totaled the family's car, Tracy lost her ride to community college. After taking the bus to class made him late, Rod began donating plasma to afford a car service. Tennessee Promise rules forbid tardiness. Rod described his situation, saying:

Ever since I started Southwest, I had bus problems. It got to the point of getting really difficult to get there on time - to the point where I couldn't do it. I may have to do it one day again. But I decided to take Uber. But you need money to get an Uber. So, I have to donate plasma just so I can get back and forth to school. And it's draining, it is. The process is terrifying. I hope I don't get used to it. I don't want to go again. It's disappointing that I have to do it. I have a lot of veins, so they just stick it anywhere. Taking the plasma takes a good 30-40 minutes, but just with signing in, waiting to call your name, the entire process takes two to three hours. It's just terrifying really.

Students who gained access to transportation had more attention for their schoolwork and greater likelihood of success. During her first semester of community college, when Anastasia bought her first car, she said, "I'm so excited. I just got a car. I can stay late for tutoring. I can stay late. I have more independence." But when Yana had to pay for car services, she worked more hours at her job and took more time away from school. Early in her first semester, she began working the overnight shift at the Nike warehouse and also frequently worked overtime there. She described her schedule this way: "Monday, I got class at 12:30. I work all night the night before. So, I tend to wake up at one o'clock and after. I can't get to class on time. Tuesday, I got class at 9. So, I need my coffee. At first, I didn't like coffee, but baby . . . . " In order to arrive punctually at her job by bus, Linda left class early every day:

The job works out well with school. I just miss the last 20 minutes every time. I appreciate the teacher letting me leave. We get out 12:20, 12:40. I leave right at twelve to catch my bus. It takes three buses to get to work. A girl in class will take a picture of whatever they do and send it to me, and I just add it to my notes.

The pandemic intensified pressures on Tennessee students who could not afford – or did not prioritize - the tools to succeed in class. Without access to the school computer lab, and without understanding that she qualified for the free laptop lending program, Linda tried to take a statistics class on her cell phone and failed the class. In a house that did not have internet, and with two younger brothers also needing to attend online school, Mia struggled to upload exam papers on her father's cell phone hotspot. Without access to the school's printers, Tracy had difficulty completing school papers. "I don't have printer ink" she said, "so I'm at a disadvantage now when I have to print something."

Even as they said they did not have enough money, some Tennessee students paid for other things. Mia bought herself an X-Box. Rod did not save any of the salary he earned before college at his summer job at the Nike warehouse. To belong to a network involved in foreign exchange trading, Yana contributed a monthly enrollment fee.

Meanwhile, Chicago's Promise program provided blanket funding for textbook vouchers and free public transportation passes, even as the academic eligibility requirements seemed to make the program participants more affluent. Star students whose families made too much money to qualify for Pell grant aid at other colleges seemed capable of paying for their books and transportation. Instead, the items consumed funds that otherwise could have flowed towards supporting lower-income students who would not otherwise attend college.

Amanda, for example, routinely found herself with extra textbook money, and she bought and gave away surplus school supplies she paid for with Star Scholarship vouchers. She said:

After every semester, I resell my books, Even if it cost \$300, the book youcher covers the \$300. Then I resell it for \$20 because I know a lot of people can't afford books. I try to sell it to somebody I know to help them out. No one needs to pay \$300 for a book. This semester, after I purchased everything, I had \$200 left over. So, I ordered thirty-something notebooks and packs of pencils and gave them away. I had my mom let other parents know they could pick up school supplies. Because they'd just take the remaining money back. It's going back to the government, so I might as well purchase something and help others.

Over her spring break, Eleanor mourned the suspension of her free Chicago Metra card, in spite of the fact that she had access to her own car. Amanda eschewed using the free Metra card and instead paid to use a commuter train line more convenient to her house. Ruby's mother dropped her on campus every day on her way to work at a nearby bank branch.

At least, however, the Chicago students did not waste time worrying about affording necessary supports that made their tuition funding worthwhile. Students, like Eleanor, focused solely on academics. Over the summer before fall semester started, she said, "I have all my books for next semester already. As soon as the bookstore opened, I had my voucher. So, I have them all, and it's so good not to have to focus on that.

Why bother funding a Promise program if students lack the resources to pass their classes? The ASAP program, initiated at City University of New York's community colleges and replicated in several Ohio community colleges, demonstrated that offering students intensive wraparound supports, from textbook waivers to subway cards, doubled students' three-year graduation rates and made them 5 percent more likely to transfer to a four-year college. Though ASAP cost around \$300 more per student up front, it helped so many more students graduate that the overall cost per degree in the program was lower than it was for students attending the community colleges normally.lxxiii

While Tennessee students who needed extra supports to graduate did not receive them, relatively wealthier students in Chicago did.

### 8. Mentorship and coaching are good ideas that are failing in practice

In the spring of students' senior year of high school, Tennessee Promise assigns volunteer mentors and a designated professional coach. Tennessee students met their mentors too early, and, too often, the coaching seemed misaligned.

To enroll in Tennessee Promise, high school seniors had to attend mandatory spring meetings where they meet their volunteer mentors for the first time. In interviews, every mentor



reported never hearing from their assigned students again, no matter how many texts and emails he or she sent. No student ever utilized a mentor. It seemed that the program allocated mentors too early in students' college careers. As seniors in high school, they did not yet know what questions they had about college or how a mentor could help them.

The professional coaches ran the spring meetings. At meetings in high-poverty neighborhoods, they seemed to further simplistic messaging around "free college." As one told students, "You can't argue with free. So, unless you are going to take out loans to go to a four-year institution, you should trust the free process. You got it?" They also emphasized the technical programs Tennessee Promise funds and did not talk about nonmonetary benefits to education. At Overton High School in Memphis, a Title 1 high school with a student body 96.4% minority, a coach announced in front of hundreds of students:

If you have an interest in diesel mechanics, cosmetology, welding, you can go to TCAT [Tennessee College of Applied Technology] Memphis tuition free. I'll tell you a story. I'm a few classes away from finishing my master's at University of Memphis. No need to clap for me, I've got student loan debt. My brother barely graduated from high school, failed out of community college after his first semester. I convinced him to enroll in a TCAT program. Now my brother makes about double my salary driving and fixing trucks . . . Listen up. There is money to be made at these TCAT programs . . . If the thought of sitting in a lecture all day makes your flesh crawl, you may want to look at a TCAT program. You can graduate from the welding program and that's 18 months with a guaranteed job, making over \$55,000 a year. You can graduate from the aircraft maintenance program in less than 18 months, with a guaranteed job making upwards of \$75,000 a year. Ladies of color, there are so few ladies of color entering these fields. As soon as you complete your technical certification, you will have a job. And then when you get these great jobs, you can come back and help me pay my student loans.

Chicago's Promise program does not fund technical colleges, and Chicago college counselors seemed broadly skeptical of encouraging students to attend them. Ralph, a college counselor at a Title 1, neighborhood public high school in Chicago, felt that people could too easily tell stories of students who succeeded pursuing trades. The stories demanded more nuance regarding at what age the students actually became successful and what they were doing at age 19. He made a point of educating students on the reality of trade jobs, noting that most required a driver's license, a vehicle, and drug screenings, and often entailed irregular schedules with no

leniency for tardiness. He found that when many of his students took trade jobs, they lacked the maturity to keep their jobs. "Don't just say, 'if they don't want to go to college, go to trade," he said. "If it's that easy at that age, then why isn't that the conversation that's happening at elite schools in the suburbs? If they're not pushing trades, then tell me why in underserved communities, that's what we want our young people to do."

As technology replaces routine tasks, jobs demand higher skills. lxxiv According to the OECD, sub-bachelor's degree level technical skills grow increasingly useful. kxv American media have touted vocational schools as the solutions to America's higher education ills, lxxvi Others have questioned this policy narrative. lxxvii When the status and value of technical skills remain low, technical training can further inequality. lxxviii In the U.S., economically disadvantaged students pursue vocational studies at higher rates than other students. African American and Hispanic students enroll in sub-baccalaureate occupational programs in higher numbers than enroll in academic bachelor's programs. Sub-baccalaureate occupational students are also more likely to be first generation. lxxix The education sector has not positioned technical education as equal to higher-status postsecondary pathways. lxxx In a pan-national study published in 2017, postsecondary vocational training led to a significant earnings gap and a lower probability of being employed than traditional academic education. lxxxi Wage and employment returns to postsecondary technical education were low. lxxxii But the American National Center for Education Statistics found that in 2009 a higher proportion of students who earned occupational credentials were employed than students who earned academic credentials. lxxxiii Nevertheless in 2015, 38% of undergraduate credentials awarded in the U.S. were in sub-baccalaureate occupational education. lxxxiv

Meanwhile, Tennessee students frequently forged close relationships with their Promise program coach and used the coach more than their community college advisors. In doing so, they elevated the importance of the alignment between the coaching and community college completion and transfer goals.

One coach, however, seemed to advise students that in order to ensure that their credits transferred to four-year universities, they should remain in general studies rather than declare a major. Linda described the pressure to stay in general studies in this way:

I saw [the Promise program coach] last week, and she's the one who told me about all of the scholarship money that's out there, and maybe I 'need to look into switching to University of Memphis,' she said. I said to her, 'I figured out what my major's going to be, and I've actually changed.' She said, 'Talk to your counselor and get her to change it back to general studies because general studies, whatever you do, it transfers over, but there's more scholarship money if you're just a general studies major.' And I was like, 'Well, I need to get with you, so you can walk me through this process.' She said, 'Ms. Linda, I've got you.'

Similarly viewing it as necessary for transferring to a four-year college, Tracy also stayed in general studies. She explained:

I'm taking general studies right now, so that I can transfer afterwards. At least I have time to think fully about what I want to do and where I want to go. [The Promise program coach, she told me that I'm better off waiting for, or keeping my general studies right now, because it's more beneficial. Because the credits – they're able to transfer to the four-year university, and I wouldn't waste my classes. If there's a particular class that I may have to take, maybe the transfer

college might not accept it. It won't qualify as an elective or something. So, it's better to wait now. My advisor at Southwest, they haven't really told me a lot about my major. They haven't asked me if there's anything in particular that I want to do for my major. They just pretty much know that I'm a general studies [sic] right now. I'm thinking that they probably believe that once I transfer, I'm going to choose a specific major. For now, I'm just leaving it like that. And that's what [the Promise program coach] told me, so I think it's a good idea.

Throughout her time in community college, Tracy continued to dissuade herself from possible majors in order to remain general studies:

I took lifespan psychology this spring semester. It's really interesting, I'm still thinking about my major. I need to talk to [the Promise program coach] about what she recommends. Like if I should still stick to general studies or have a specific major. Because she mentioned that general studies, like, offers chances for scholarships, so it's best to keep it that way, to keep general studies.

Tracy, however, eventually decided that her interests still lay in interior design, which in high school she planned to study in college. If she transferred to the University of Memphis, the interior architecture major entailed a rigorous program of study over four years, with core courses in "major foundations" required prior to entry into the major. Admission to the major depended on a candidacy review, which included a portfolio evaluation of five representative works. Until the portfolio assessors gave permission, students could not enroll in interior architecture courses. Transfer students had to meet the entrance requirements of the major. Typically, interior architecture students at the University of Memphis followed a course progression that began in the first year with classes including graphics studio, fundamentals of design studio, design visualization, and history of architecture.

Without knowing about University of Memphis's rules, Tracy persisted in general studies. "General studies is the main courses you need," she said. "with those credits you can pretty much qualify for any career you want."

When a volunteer mentor in the Promise program, a professor in the biology department at the University of Memphis, learned about the coach's advice around general studies, she expressed surprise:

That advice is setting them up for failure. Like it's doing the exact opposite of what it should. They're going to be behind if they don't take their major. I can see the idea, but what is the number of generic courses versus the number of major credits you have to fulfill? They're being told not to do the hardcore stuff that's the building blocks of everything. In our department, they have to pass Chem 1 before they can even declare a biology major. And in order to take Chem 1, you have to have the math prerequisite. If you have to take math and then Chem 1, we already don't see them in the biology major until Sophomore year. If that gets pushed back even

further, that's a problem. Where students transfer in the sequence of biology courses matters. Students who transfer right into our upper-level sequence do better because we have it aligned in a certain way. . .. This was before I was here, but the reason they put Chem 1 as a requirement for Bio 1 was that so many people would declare the bio major and not be able to pass chemistry. So, we made it that they had to do Chem first.

Tracy, though, seemed to have a backwards understanding of these realities. "At least I have time to graduate the two-year community college and transfer my general studies and everything, and maybe I can think about or explore more in a four year," she said

While mentorship and coaching could benefit students, in its current structure students did not utilize the mentorship program and coaches gave students advice that may have contradicted academic goals.

#### 9. Underfunded four-year options don't fix undermatching

Promise programs that fund only community college have threatened to exacerbate the problem of undermatching. Presumably, so that students can easily transition into bachelor's programs, Tennessee Promise funds associate's degrees at several four-year colleges. Because it has not provided financial awards for those paths proportionate to financial awards for community colleges, however, associate's degree programs at fourvear colleges have not effectively reduced undermatching.

When Emma, in Nashville, learned about Tennessee Promise's options at four-year colleges, she decided that if her first-choice college, a local private, religious college, did not offer her adequate financial aid, she would use the Promise to attend another local four-year university. Instead, she discovered that the Promise program paid only the amount of tuition it provided for students to attend community college. She could go to community college for free, as she likely would have been able to do anyway given her high financial need, or she could pay a substantial portion of tuition at the four-year college for an associate's degree. Because of her family's very low income, she likely would have received roughly the same grant aid outside Promise, through Pell, if she simply started in the bachelor's program there. For Emma, the incentives to enroll at community college were strong.

Such non-proportional Promise funding has converted the community college option into a vacuum siphoning talented, yet ill-informed students onto a less-competitive track, likely to disserve them. lxxxv At community college, all the Chicago students received top grades with seemingly little effort. Ruby, for example, easily earned straight A's every semester. She rationalized the lack of challenge as also educational, saying, "Sometimes I question whether I'm challenged. I mean, it does seem a little too easy. A lot of students text me with questions about our assignments. They say, 'You're our teacher.' But being there for my classmates is teaching me to prepare for my future as a teacher."

Starting at community college also subjected students to challenges inherent to transferring. Amanda, in Chicago, described the stress of spending time and energy in her first two years of college planning for the following two years:

I'm applying now, which makes it hard to focus on school. A lot of scholarships have a lot of essays, and that's very time consuming. And writing the personal essays for the [transfer] colleges is taking a long time. I feel very overwhelmed. I have a tendency to get frustrated. Things have gotten to a point where it's taking a toll on my academics. I've been stressing about transferring since the moment I entered community college, even though I had two years. I just keep thinking about, like, some schools are very picky about transfer students, and they expect



so much from students in order for them to transfer. It's always been overwhelming. . .. I took community college initially for the fact it was all paid for, in order to help my parents. That's why I did it, so they could save money for when I transferred. But they didn't. And now, no matter how good of an award I can get for us, the possibility of taking on loans is still pretty large.

In 2019, Tennessee introduced a new "UT Promise" program, which, for families with incomes under \$50,000, has begun providing free tuition at public four-year campuses. The \$50,000 eligibility cliff, however, thwarted students whose families earned just slightly more or whose incomes fell subsequent to the information they submitted in FAFSA forms. In Nashville, Sara's father worked in hotel maintenance, earning just under \$50,000. She expected to qualify for UT Promise, then learned that the money she earned at a restaurant hostess job carried her over the eligibility cutoff.

With improvements, programs like the UT Promise could mitigate the incentives Promise programs created for students to undermatch, which made it harder for Promise students to succeed.

## 10. Transfer articulation has pros and cons

Promise programs bill themselves not as an end in themselves, but as pathways into college that make attaining bachelor's degrees lower-cost and more accessible. Chicago's Star Scholarship has articulation agreements with local four-year colleges, many of which guarantee admission and scholarships to students who transfer from the Star program. Such partnerships eased the transfer process, but also risked compounding undermatching.

Every Chicago student chose to transfer to colleges within articulation agreements. Ruby, for example, selected Northeastern University, a partnership college where she took classes during community college. She participated in a joint program organized by Northeastern and City Colleges of Chicago, for students who planned to become teachers in STEM subjects.

Similar joint programs, in particular, and transfer partnerships, to some degree, made transferring more seamless. Because she already navigated Northeastern's systems and protocols, after transferring Ruby won't have to adjust to a new institution. She has, however, found the Northeastern classes more difficult than her community college classes, with a heavier workload. Administrators at the other partnership colleges seemed to understand the community college system, its course credits, and requirements. They also had familiarity with serving the population of students who transferred from community college through Star onto their campuses.

On the other hand, articulation agreements could limit students. Star students, as discussed above, performed well in high school and turned down admissions to four-year colleges to attend community college for free. Having undermatched for community college, the partnerships and associated scholarships incentivized them to undermatch again into four-year colleges with the articulation agreements.

Ruby also participated in a series of transfer workshops for top-performing Star students organized by her community college. The workshop leaders emphasized that students should apply widely, beyond the partnership institutions, and look broadly for scholarship money. Ruby learned about "finding schools with larger endowments because those might give you the most money." But when the workshops concluded, Ruby, like the other participants, indicated in a poll that she would transfer to wherever was cheapest. For Ruby, the guaranteed scholarships provided by partnership institutions seemed preferable to unknown scholarship amounts to attend other colleges. Because "they have fees for the application," she did not even plan to apply to the University of Chicago "That's money that could be used for my tuition," she said. The guaranteed acceptances that partnership institutions offered also attracted her, while higher-tier colleges would not send out admissions decisions and financial award letters until many months later.

Eleanor applied only to colleges within the articulation agreements, and she established a GoFundMe webpage to fundraise for the tuition the partnership transfer scholarships did not cover. In high school she applied to four-year colleges as far away as California. After starting the Promise program, she said, transferring to an out-of-state college "just doesn't seem like a smart decision to me." She continued, "Everything in my head is thinking about money and cost." She still sounded wistful about St. Louis University, her first-choice college out of high school, but she

knew, she said, that "if I try to apply there now, it'll probably be a lot of complications just with the requirements I need, what classes will and will not be accepted."

Colleges within the articulation agreements advertised themselves aggressively to Chicago Promise students. According to the founder of a local college access nonprofit, "these Star Scholars are high-performing, desirable students that local colleges want to attract." When Amanda received recruitment emails from Loyola University, DePaul University, and the University of Illinois at Chicago, Amanda said "it felt good to be noticed by them." She continued. "I've never applied to Loyola, I'm not even on their email list, so then to get an email saying, 'We want you at our school,' I was like, 'Oh my god!" Having initially enrolled in the Star Scholarship to save money, she became agitated when she learned that even with high grades, she had to pay some tuition for the next two years of college. Like Ruby, she transferred to the cheapest partnership college.

In supplemental interviews, students from other colleges who transferred outside articulation agreements found it hard to learn about selective colleges. Sana, a New Jersey community college student who transferred to New York University, said only less-competitive programs visited her community college campus to recruit transfer students:

The community college had colleges come to campus. You know, they each had the table and information session. You could go and ask them questions and stuff. But the thing is they didn't bring the really good colleges. Or they'd come, but not the good parts of them. NYU came but not the College of Arts and Sciences or Stern [College of Business]. Columbia came, but only the general studies, not the Columbia College. It made us feel like you can't get into those. But my community college classmates were smart people. They just didn't have the money to start at those colleges.

Sana wanted to go to law school directly after completing her bachelor's degree, but her college advisor told her to wait at least a year, so that she could apply with more grades from the fourvear college.

In other supplemental interviews, students explained further difficulties of transferring outside articulation agreements. Muneeza transferred from a community college in Marvland to New York University. Because admissions requirements and prerequisites varied greatly among institutions, she found it difficult to apply to more than two transfer colleges, which limited her ability to learn what different colleges would offer her. She said:

Another issue with transferring, that [partnership] school, has something called gateway courses. If you don't take those, they won't consider you. So, there's individualized requirements for each university. You can't apply to ten transfer places. That would be impossible. Each have different requirements. The [partnership] school had four gateways. NYU needed a certain level of math. Purdue wanted other things. There wasn't enough time to get all those things and get all three. So, I could only apply to NYU and that [partnership] school. And if it didn't work out, I don't know what I would have done because for engineering you can only transfer for the fall semester, not for spring.

By transferring outside the articulation agreement, she had to relinquish available aid. Unlike partnership colleges, other college deprioritized transfer students. Muneeza explained:

External transfers are evaluated on a different basis for aid. First year students are given priority. I got less aid because I was not prioritized as a transfer. That's a reason people avoid community college. They knew they'd be a transfer to the fouryear and wouldn't get as much aid there. Community college is to save money, but if you leave and have to spend more than freshman, it's like why? You could have just started at the four-year in the beginning with a better financial aid package.

As Ruby, in Chicago alluded to, colleges outside the partnerships sent Muneeza acceptance decisions later, making if more difficult to plan and register for classes:

It was mid-to-late summer, end of June, beginning of July, something like that, I think. So not very early either. That's another issue. That sort of made me reconsider everything. Because I wasn't sure. First you get accepted, and then you get told financial aid, and then you get told housing, and whatever space is left in classes, etc. and etc. The whole process started later for me as a transfer. That really discouraged me from considering transferring, especially to such a large university. But it did work out. I sat there while everyone was registering and didn't know if I would get in. And since I only applied to two schools, since it's impossible to apply to that many, if one didn't accept me, I would have to go to the other, and if neither did, I'd have no options.

Prior to transferring, Muneeza navigated course selection at community college on her own, trying to maximize the number of credits that transferred. Within the articulation agreements, however, the community college made choosing classes easy. "For the pathway school," she said, "community college had a sheet saying, 'take this course, this course, this

course.' It set out the full schedule, depending on what major you were going toward. If you wanted to go anywhere else, you had to figure that out on your own."

Ultimately, most of Muneeza's credits transferred. After her four-year college accepted the credits for her community college physics class, but not the physics lab, a classmate suggested that she appeal the decision. She did and succeeded. But to avoid spending longer in school, she relinquished her aspiration to minor in international relations. Because Chinese credits from another institution did not transfer, she also had to forego a Chinese designation on her diploma.

A few glitches in transferring credits remained:

I took Calculus 3, which is essentially differential equations. Like, that was the title at my community college. It was Calculus Three: Differential Equations. And then I got to NYU, and, apparently, they combine differential equations, like, a shortened version of differential equations with another class, Linear Algebra. I had already taken linear algebra and, since that didn't exactly line up, I had to take another differential equations course. It was, like, very advanced differential equations because that was the only one that would satisfy that, like weird thing. It was my first semester there and they put me in - like they were graduate kids in that class, and I was just there. So that was difficult initially.

Even within the articulation agreements, Claudia, who transferred from Chicago's Promise program into the University of Illinois at Chicago, found the adjustment challenging. Though at UIC she had a personal success coach, a general education advisor, and a major advisor, and planned to join the federal TRIO program on campus and gain a TRIO advisor, she felt like



she started "in mid-step," and everything from classes to activities seemed "harder to navigate." She had to pick classes carefully because, "say you pick a higher-up class and didn't take the prerequisite for it, they will cancel you out." She felt unprepared for her Spanish class, which unlike her community college class took place entirely in Spanish. Other classes graded her only on term papers, rather than on tests and homework, which felt much more difficult. Professors no longer offered extra credit or gave out chapter study guides. She failed her music midterm, and, with nine political science classes left to take, faced a heavy workload to graduate on time with a bachelor's degree.

Promise programs may sell students on a false message that after attending the first two vears of college for free, they can transfer anywhere they want.

#### Additional Observations

#### 11. Full-time requirements aren't worth it

Research indicates that part-time course work correlates with a higher incidence of dropout. Tennessee and Chicago's Promise programs both require full-time enrollment. Whether they attended full-time or part-time, however, students engaged in the behaviors that increase the risk of dropout. Jobs shortchanged full-time students' schoolwork. Students' family realities made working a necessity.

First-time students who attend community college part-time complete any credential within eight years at half the rate of full-time students. Policy analysts suggest that every Promise program should require full-time enrollment. Even in the summer, Tennessee Promise only covers tuition for students who enroll full-time. In Chicago, by contrast, students can choose to take a summer course or two to make progress towards their degrees.

Most Promise students started working prior to enrolling in community college. In Memphis, Yana began working at fast food restaurants in high school. She regretted not working more, so that she could have bought a car to drive to campus. In Chicago, Decima, a firstgeneration Latinx student with undocumented parents, began a job as a hostess in high school. She wanted to avoid having to ask her parents for anything.

In Chicago, students from more advantaged families worked while enrolled in community college. Regardless of their full-time status, they and their families found earning money important. Amanda's parents did not charge her room and board for living at home, but they had not saved for her to go to college. Before her first year, she took a job at a Mexican popsicle shop, but she wanted more hours. In her second year, she commuted two hours roundtrip to work nearly full-time at a hardware store in Indiana. Her parents expected her to work as much as possible to support herself, and she advised her younger sibling to begin working in high school to save for college. Claudia worked full-time during all of community college.

Even if working threatened their schoolwork, low-income Tennessee students could not afford to stop. According to Linda, the adult Memphis student, the part-time job the Promise program coach found for her didn't pay her enough to stay in school. When she worked in the part-time position, she said that she could not cover her phone bill, so she sought a full-time position. While working at the Nike warehouse, Yana repeatedly missed class or arrived late, in violation of Promise rules. Not until Nike mandated overtime during her exams, did she quit, but she still had to earn enough money to pay for transportation and a place to live, and keep up with other bills:

I wish I had kicked into adulting a little bit earlier. . .. I should have saved up at least \$3,000-\$5,000 for myself, and not just for a car. . .. Bills are real. I'm having to fix on the car again now, so it's like less of a [sic] open window for me to save any money, and having to get everything done at once. My momma, she got her own place to live, and [all my siblings], everybody has to get their own spot. So, I kinda gotta secure my transportation and fix on the car and get my apartment, too. So that's what I'm doing.

Tracy described the necessity of contributing to her household, with her mother unemployed and supporting seven children, five of them the offspring of a deported relative:

I'm glad I chose Southwest because they've helped me, and I haven't had to ask my mom for anything, so. Especially considering that she had her accident, just bills to pay or the lights or anything like that. It's hard with nine people in the house. Another thing that's been helping, is [work study]. I've been using that to help with payments, last-minute payments that my family needs to make. So that's been helping out a little. Hopefully I can help them more. With working, I can help out. I help pay for whatever we need, like household materials, and I also save for a family emergency or for car issues. I helped with the expenses of my cousin's funeral. I paid for a flight for his mother to come from Mexico.

Many first-generation students' families had no understanding of college. For example, in her first year, Yana lived with her siblings, none of whom had pursued postsecondary education. Her older sister made her pay an equal portion of the rent. She had to share equally in caring for the twin babies of an incarcerated sibling.

For Tennessee Promise students, affording a car seemed more of an aspiration than completing an associate's degree. When he bought his first car, used, for \$1,400 that he characterized as "needing paint" he appeared prouder than he did about starting college. His mother also acted more pleased. She hadn't wanted him to go to college. He said:

My mom felt like I wasn't handling my business because I wasn't getting the money for school [in financial aid refund checks] I was supposed to, but now she really

trust [sic] me. In my family, the tradition is to get a car. That's what everybody did. I'm the youngest person to get a car in my family and the first person to do it by myself. Now she trust me. She did so much for me. She got my blinkers fixed. She bought me some air freshener things, somewhere to put my phone. Everything just came together once I got the car. It was like, everything was okay. You could see there's good happening there. Once I got the car, everybody started getting happier. Everybody was congratulating me, like 'You made it.' I guess cars change you. Because it was my one goal.

During a brief period when a used car she bought from her sister ran, Yana earned money working for a restaurant food delivery platform.

Only Ruby, one of the best-off Chicago students, attended college without outside work. In fact, to focus on school, in her second year she dropped her extracurricular dance program. She described the decision in this way:

It's time for me to give school a priority. I didn't get that last year because I was doing dance and school, as well. It's been nice to focus on my career, developing the skills that I need to achieve it. It's been nice to do that, spend more time with my family. I want to see what I can get done next semester. Join more clubs.

Meanwhile, when courses transitioned online during the Covid-19 pandemic, many other students began working more. Rod resumed working at the Nike warehouse. Yana added a waitressing shift at a hookah lounge. Linda trained for various home healthcare certificates and a Covid testing certification. Then she took double shifts at a nursing home. Every evening, she arrived home from work and began watching her lectures and completing coursework until she fell asleep.

To help students, the Tennessee Student Assistance Corporation, which administers the Tennessee Promise, eventually granted a pandemic exception and allowed students to enroll parttime. Tracy, Yana, and Rod took advantage of the relaxed rules. Taking fewer classes did not detract from their performance. In fact, for Yana and Rod, who had not earned high grades, the lighter course loads seemed to improve their grades and help them get back on track while continuing to work.

If students must work anyway, absent more generous financial aid, then Promise programs that gave students flexibility to tailor their course schedule to their needs would more accurately reflect reality.

# 12. High-need students don't use existing supports

Community college websites list helpful resources and opportunities that would expand peer networks facilitate completion and transfer. Low-income Tennessee students, however, did not take advantage of networks and supports. lxxxvii Even though social networks and transfer planning remained difficult for less disadvantaged students in Chicago, with their above average high school GPAs and second-generation status, they accessed services better. Tennessee students failed to seek out advising, information about transferring, or work-study positions.

Students in both Promise programs lacked mechanisms for getting to know their peers. "I don't know when it is that we find the true friends," Tracy, the Memphis student, said with sadness. "I don't know if that's after college or going to college on campus that's where you make the best friends." Anastasia said that she'd never "hung out" with anyone from community college "outside of school." Faced with a similar lack of campus community in Chicago, Eleanor's favorite class assigned small group projects where she could actually meet classmates. She said:

With community college, a lot of people are here to take classes and then go. I get that, but I liked my biology class especially because they sat us in groups, and we did group projects, and it was easier to get to know those people. We stayed at the same table for the whole semester. That was the only class I built relationships in. Otherwise, people come in and go. A lot of students in all my classes work a lot when they aren't in school.

She described her family's church as "definitely my college social life."

Disadvantaged Tennessee students, however, differed from Chicago students in their ability to take advantage of campus resources and support staff. Organization may have mattered: Not until the summer before her second year of community college did Tracy begin setting out her schedule in a planner. "I just actually got a journal where there's like a little calendar," she said. "Now I write down day by day, so that I can complete it. If I'm going to head out, I know that I have to do it, or before, you know."

Compare Ruby's descriptions of how the pandemic affected her organization systems:

Over the break, I cleaned out all my folders because towards the end of the semester it got sloppy. I need to keep to a new way of organizing my things. Because for every class, if we were in person, I'd have a way of organizing all my handouts because they would give us handouts in person . . .. Now all the assignments are online and have pdf attachments, so it's harder to keep track of where everything is.

Even when Tennessee students knew about resources, they didn't use them. Tracy said, "Now that I think about, I think they have a career services. I haven't thought about it." She seemed to wait for resources to come to her. "Hopefully they can transfer my scholarships and everything when I transfer to my university to get the bachelor's," she said. "Hopefully they can

assist me with my plans and getting an internship because I know that internships are different from work study, right?"

In Chicago, by contrast, students had the knowhow to take advantage of campus resources. For example, Ruby, regularly shopped papers to the writing center. She said:

There's a writing center that we have available, where they proofread, and they help us with any small things that we can get points off for. Like grammar. You don't want to get points off grammar. So, I started taking my essays there. And it's a really good tool to just take before you are sending in the final draft, just to make sure that it's proofread by someone other than you or the professor. So, you just show up. Usually, you can easily get an appointment for any day of the week. They have a teacher or a tutor there to read things and they help you with it.



Tennessee students did not utilize their advisors. They characterized them as unhelpful or did not know how to consult them. After Yana failed two classes, she switched from studying radiation technology to studying dance, without discussing the change with anyone. She described her lack of relationship with her advisor in this way:

I never felt connected with the advisor. Just scheduled my classes. There was a man in advising I met first semester, but I never talked to him afterwards. I never seen him around campus or nothing. Maybe he transferred to another campus. He name was Konrad Davis. But he would have been the person I would have talked to. He was trying to tell me more about the medical field and how I should play that. But after I wasn't interested in it, I just never saw him no more. He made me more comfortable than anybody else.

The online campus directory lists a phone number and email address for Konrad Davis.

Tracy seemed to use research interviews as opportunities to ask for advice she needed. Some of her questions included:

What do you think about communications? Is that something you like? . . . What is your tip for your first business class? . . . What do you recommend, for those that have a more narrow idea of what I want to do? Like, do the [personality] tests actually help? . . . Do you know if school offers for us to have trips sometimes, out of the city?... In interior design, I wish I knew someone to talk to about it. Do you have recommendations on that?

In Chicago, however, Claudia made use of the federal TRIO program on campus for firstgeneration students with financial need. She described what TRIO offered her:

TRIO has separate individual tutors within school. You can make appointments for essay writing, or math, or science tutors. There's all types of help from TRIO. I got in there and continue to utilize them greatly. They even have a laptop loaner program that's only for TRIO students. And they have special TRIO advisors. They only have TRIO students and it's those specific advisors. Mine kind of knows everything. I really don't even have to go to her office. Like I could email her and ask a question, or ask her what classes I need to take, and she'd email back pretty fast to tell me.

Tennessee students floated from semester to semester without seeking a plan for how their associate's degree could progress. Not only did they wait to be told what classes they needed to take, they also waited to be told whether they had enough credits to graduate.

When asked in the fall of her second year of community college whether she was on track to graduate, Linda assumed that if she wasn't on track to graduate, someone would have told her. She said, "I ain't hearing nothing about it. And I guess it's a lot going on with Covid. So, I don't know if they're just behind, or they just slow. I don't know." Thinking about the question further, she decided she would ask her adviser a few weeks before her last semester ended. She said:

By April, I'll reach out to ask those questions, uh, 'What is required? What do I need to do?' Because actually I think that there's some essay or something, an application that we have to do. Something said something about a graduation application. I never clicked on it. I never looked in there. So, I need to know all of that.

April seemed too late for her to adjust her coursework to meet any outstanding graduation requirements.

In Chicago, the less disadvantaged students worked with their advisors to plan all their classes for both years of community college. From the moment she enrolled, Amanda had arranged her two-year course schedule. "This summer I'll take two classes," she said her first semester. "I've planned that so that I won't have to take bio and chem together. I feel like that would get confusing." Looking back during her last semester of community college, she explained how she plotted everything out:

My classes have never been overbearing. Each semester I've taken three of four. I planned it out to know exactly what I wanted to take and when I wanted to take it. My first semester I already had the classes I was going to take in mind. I put it all in my planner. I knew exactly what I was going to take and exactly during what semester. I took the summer courses because I'm a person who likes to stay within a time frame. So, if it's like a two-year thing I want to finish in two years. And I already knew I didn't want to stress myself out my last semester. Which is another reason I took the summer courses.

Tennessee and Chicago Promise students also differed from each other in how they approached finding out about transfer. To become a dental hygienist, Tracy considered transferring into a for-profit college, but she never researched the requirements. She simply applied to where the Promise program coach suggested. "She told me to apply to University of Memphis, so I did," she said. I never really looked into Concord['s dental hygiene program]." Tracy did not know what transferring to the University of Memphis would actually entail. After she applied, she said, "I'm not sure if the University of Memphis will require me to get students loans or what its tuition will be, if it will be expensive."

Mia described feeling frustrated that no one was telling her or her classmates about transferring. She said:

This is my last year being at Southwest, and I'm a bit confused on what I should do because I'm getting emails about - like Southwest is saying, like they keep wanting me to do the Tennessee Promise thing or something. I don't know what's going on. I don't know how to transfer or anything. I don't know, like when am I going to get my degree? I don't know when I'm going to graduate. I don't even know what's going on. I'm just confused. I'm just going with the flow, and the flow is not so great. They just didn't give us any information. I also found out that if I want to transfer to the University of Memphis, the Southwest credits don't really transfer to University of Memphis. The credits that I'm doing now, the classes that I'm doing now, won't be counted when I go to University of Memphis. I would have to start all over again, like take Spanish 1 all over again. I don't know why it doesn't count. I'm not sure. But the credits just don't go over there. So, I feel like I'm just doing this for nothing. It's like I'm doing these classes, and then I go to the University of Memphis to deal with them all over again. I asked my advisor. We had a conversation. She was like, it's most likely most of the credits won't transfer over. She just thinks they won't. I don't even think she's sure. I haven't talked to the advisor about transferring yet. I wanted to wait until I get closer to my graduation date before I talk to them about transferring, but I don't know, do you think I should talk to them about transferring now? Because no one's been telling anyone. I haven't been getting any emails about contacting your advisor about transferring or anything yet. I haven't. I don't know. I'm stuck, and I feel like I don't have a clear direction of what I want to do or what I'm going to do... It's very scary because I just feel like I can't see the future anymore. Maybe if I had a bit more of a clear path of what's the next step, like if I knew what I needed to do after I graduate from Southwest, and if I knew exactly what scholarships I need to get, and I knew exactly what I needed to do to get them, I'd feel more secure.

As soon as she arrived for her first semester at community college in Chicago, Eleanor asked her advisor about transfer. "My mom was definitely on me like the first week about talking to the advisor about how many credits transfer, what I should take," Eleanor said. She also began meeting with a transfer counselor and "talking to different schools where I want to transfer to make sure these are the classes I should take for my major, that most will transfer."

She tried to ensure that the four-year colleges she considered would accept her community college credits and called administrators at the four-year campuses. For her top transfer choice, the Illinois Institute of Technology (IIT), she took the following steps:

I've been in contact with their transfer officer since October of my first year. I've been emailing him questions I have. He got me in contact with a computer science professor to help me figure out what classes I need to get done before I transfer and what classes to take once I'm there.

Through her efforts, she discovered that if she transferred into the computer science program at IIT, which had an articulation agreement with the Star Scholarship, it would nevertheless take her three additional years to complete her bachelor's degree, rather than the two years she expected. She and her mother, therefore, began meeting with Eleanor's community college advisor to work out a plan to reduce her time at IIT. Together they determined that if she briefly switched her community college to general studies, so that she could take more classes that would count towards IIT's computer science major for free at community college, and then paid for two additional community college classes that the Promise program would not cover, before switching her major back to computer science in time to graduate with the degree, she could graduate from IIT with a bachelor's in computer science within in two years. She worried that if she only took community college classes that counted in IIT and did not fulfill all her associate's degree requirements, it could "cause complications in deciding what I have to pay for and what I don't have to pay for" in regard to the Promise Program.

While more advantaged Chicago students, like Eleanor, did not qualify for federal work study, disadvantaged students in Tennessee generally failed to take advantage of the program. Rod found work study on his college "dashboard." Though he attended a mandatory meeting, he still did not know how to use it. Mia attended the same mandatory meeting but thought she heard that Promise students were ineligible for the program. Throughout her community college career, Yana fantasized about the work study positions she could have, but never figured out how to get one. It appeared that she hadn't accepted the award on time. "That's messed up, y'all not going to give me my money," she said. Emma seemed not even to have heard of work-study. Only Tracy navigated the process to secure a job. It paid her well, was convenient to campus, and fit seamlessly around her class schedule.

Completing community college and positioning oneself to transfer are complicated processes, and more disadvantaged Tennessee students did not demonstrate the wherewithal to proactively seek out information to successfully move through those benchmarks.

### 13. High-need students need more supports

Students also needed more support than their programs made available. Increased advising and tutoring support would have benefited them. The pandemic heightened the shortcomings.

Though it does not currently exist on Tennessee campuses, Claudia's descriptions of advising through the federal TRIO program at her Chicago community college suggested that equivalent resources would serve Tennessee students well. Nevertheless, Chicago students also complained of scarce advising resources. Amanda had a difficult time arranging time with hers. She also described administrators with insufficient time to talk casually with students. She said, "If I go to the transfer center, I have to be very specific," she said, "and for a person who still isn't sure, I don't want to go in there." She continued, "If I don't have specific answers, I don't want to go in there."



In the absence of ready advising, students found advice where they could. Though Tracy had interests in interior design, for a time she considered becoming a dental hygienist. Her pastor in Tennessee told her about ample opportunities in medical fields:

My pastor said that you can always find a job in the medical field. He said that's always a good job that secures you a good career for years to come. Everyone needs medical attention. So, I've been thinking about it, and I thought that the environment at a small dental office would be very calm and quiet, and I just through about how it would be good to work from an office like that.

During the pandemic, existing advising resources suffered greatly. Students waited a long time for their advisors to respond to messages. In Tennessee, Mia described the obstacles she encountered trying to find help choosing classes the summer before her second year, sayin

My advisor has this auto-reply email, so when you would email her, the auto-reply would say, 'Sorry, I'm out of the office. I'm not gonna be back from May 1st to June 27th' or something.' And I'm like, 'No, I need to sign up for my classes.' And then I went to almost every advisor, and every advisor had that auto-reply. And I'm, like 'How am I supposed to sign up for my classes?' So, I emailed my advisor anyway, and it took her a while to finally answer me. She finally did, but that was tough. I didn't like that at all.

Even before the pandemic, students reported tutoring shortfalls. For example, Amanda, in Chicago complained about the difficulty of scheduling a tutor, particularly in math:

I haven't gotten a tutor vet because nobody can accommodate my time. City Colleges offers tutoring, but it's harder to find an actual tutor. They have lots of people, but a lot of them are students. Finding someone who's good and willing to dedicate time is hard. There's also four different calculus classes with 30 students in each, so a lot of students are looking for a tutor for that. If there's only one or two, and they can only do certain times, it's very hard.

Math caused persistent problems and, though embedded tutoring helped, it seemed limited. In Chicago, all of Claudia's community college classes transferred except for math. In Tennessee, Tracy said: "I'm nervous about statistics. I haven't really understood statistics sometimes. I'm glad it's the last math I have to take. I've never been very good with math." In her upper-level math course, found the embedded tutor useful. She explained:

The embedded tutor is super helpful. I see her all the time. I've been able to connect more with her. She understands more where we're coming from. In the past, I was working with the regular tutor every week, even if it was just doing homework problems together or asking her questions that I had. But we only got so much time. We got a two-hour work period each week, and in that we probably got to two questions. Those two hours were the only time I had available that she was also available.

Tutoring difficulties increased in the pandemic. In Tennessee, Linda gave up on seeking out tutoring. According to her:

There was tutoring offered. You had to set up an appointment and all of this stuff. And I was like, 'Look, I'm going to tough it through. I'm going to do what I can and not worry about what I can't.' I just got to the point where I'm not going to worry about it because the emailing system, with everything that was going on, it was tedious because people weren't replying right back. I'm sitting up trying to get the answers to a problem, and I can't go to the next part until I answer that problem. And days later you answer me back, and I miss it because I'm doing something else. And everybody's doing tutoring. So, if you've got 30 people and 30 people are emailing you, you get back to those people in the order – it's just like if you call AT&T and there's a large fluctuation of phone calls. They're going to answer the calls in the order they was [sic] received. So, if you've got 300 people before you, and you [sic] 200 and something, once they get to you, it's like I've moved on to another subject.

Students struggled to persist in the face of insufficient advising and tutoring.

### 14. Promise programs keep students local

In line with their roots as a tool for local economic development, Promise programs acted on students as a localizing force. Tennessee students did not consider it possible to leave home and didn't. In Chicago, the Promise program and its associated articulation agreements incentivized students to stay local for all four years of college.

In high school, the Tennessee students did not consider options outside their city. Emma described her feelings about leaving Nashville: "I know I can apply for scholarships and stuff, we can get help, but to be sure that I won't have to worry about too much, it would just be better to stay home, to stay near," she said. Though she visited out-of-state campuses with the federal Upward Bound program, she said, "It was just interesting to see them. I never saw myself applying for anything out of state because they're very expensive. They were just nice to visit, just to see the different types of places." Because without cars they physically had no way to get there, Yana and Tracy both concluded they could not manage starting college outside Memphis, even if they stayed in Tennessee. Initially, Tracy hoped she could attend a small, private college across the state that offered significant grant aid and, unlike community college, a major in interior design, her primary interest. The distance posed an impossible obstacle:

I wanted to go because they did cover most of my tuition. But they were six hours away, I believe. And obviously it would've been hard because I don't have transportation or anything. I didn't really know how I would get there in the first place. Like I wasn't sure cause I didn't have my own car, and my mom, well my mom doesn't really drive. Oh well, she'd never been out of the city, not like further from there. I really wanted to go, but I guess I couldn't really go.... Maybe next time - everything happens for a reason, I guess.

For many Tennessee students, the local community college already felt foreign. Prior to enrolling, no one in Memphis had visited the community college campus. Tracy never visited any college campuses, even within Memphis. "I think I didn't have the time or the car to drive," she said. "When mom stopped working, she didn't really have a car or anything to move around as much." Mia characterized the free college readiness Summer Bridge course she participated in as helpful "in finding out where the school was."

In Chicago, the opportunity to attend community college for free encouraged students who knew they could attend out-of-state colleges, to remain at home for their first two years. During community college, every Chicago student lived at home to save money.

For every Tennessee student in the study, transferring meant enrolling in the local, public four-year college, or a local for-profit college or technical school; all the Chicago students planned to attend local partnership colleges. Claudia considered transferring out of state, she decided not to. In addition to being cheaper to attend, because it had a consistent presence on the community college campus, UIC felt more familiar to her. Having applied in high school to colleges as far away as California, in her second year of community college Eleanor said, "I just decided to stick with applying to transfer with Chicago or Illinois schools period because City Colleges has good, effortless scholarship opportunities for those. You get more opportunities with Star if you stay here."

All the students but Yana planned to continue living at home to save money. For example, Eleanor said, "The point is trying to save money. That means hopefully not having to pay for housing. I'm going to stay in Chicago, staying with my parents, and not paying for an apartment."

Ruby said that "going somewhere else" would be "harder" because "then you have to think about housing, the meal plan, other costs coming aside from tuition. You have to find a scholarship for those, too. It's so overwhelming to think about." Yana, however, had no family home to live in, and during community college she found herself a cheap apartment.

Students who enrolled in Promise programs appreciated the opportunity to stay home and save money, and they planned to continue staying home after they transferred.



### Towards A Better Promise

#### General Enrollment

1. Involve parents in the college counseling process

Students whose parents attended college become more likely to enter education.lxxxviii postsecondary The beliefs of all parents – whether or not they completed a college degree influence college planning.lxxxix Yet few parents of low-income students involve themselves in the college process.xc Schools must do more to educate them about the financial aspects of college decision making.

For low-income, minority parents, Latino immigrants especially without English language fluency, college knowledge appears particularly limited.xci Nevertheless, the education finance system makes debt, risk, and loans family issues.xcii Parents shape students' perceptions of loans in additional ways.xciii

Bevond simply helping them complete the FAFSA form, as many secondary schools now only do, schools must invite family members into counseling discussions and workshops.xciv Maria, in Chicago, encouraged her father to meet with her high school college counselor. As he learned that college could truly be possible for students from families like his, he stopped discouraging his daughters' aspirations to attend college and began supporting her. Yet other students' schools did not communicate with their parents at all.

In interviews, high school college counselors indicated that they did not know

how best to engage parents in the college process. Schools must be deliberate in determining effective ways to do so.xcv When families remain unaware of generous aid policies and tuition discounts, they benefit fewer students.xcvi Parent centers that provide college resources and access to technology sites, xcvii at school communicating directly with parents with information tailored to their children, and leveraging technologies to sidestep irregular parental work hours, are some of the many ways in which parents have been encouraged to become more engaged in students' college going.xcviii

### 2. Change the rhetoric around student debt

Even though for all but the wealthiest families, financial success in America still often depends on undertaking some national debt. the conversation surrounding a student debt "crisis," and the many stories of students saddled with decades of college loan payments, has convinced many low-wealth families to avoid educational debt at all costs.xcix Improvements in areas including student loan oversight, loan forgiveness, and the treatment of defaulted borrowers would increase students' and their families' trust in using loan packages to attend more selective postsecondary institutions. The student loan system has mechanisms for progressive, incomebased payments and debt cancellation, but they are both badly implemented and underutilized.c

Because she overheard her teachers talk about how they were still paying off student loans, to avoid having to fill small

financial gaps with a modest amount of debt Eleanor, in Chicago, chose not to attend competitive four-year colleges. Stories of students following poorly informed loan servicers into costly mistakes, encountering difficulty enrolling and staying in incomedriven repayment plans, failing to meet the requirements of Public Service Loan Forgiveness programs, or winding up saddled with education debt even after exacerbate income-based bankruptcy, educational inequalities and harm lowincome students most.ci Even after selecting Chicago's Promise program, and at the same time her father borrowed money to buy her a car. Amanda hesitated to undertake loans to transfer to the four-year colleges that accepted her. Existing innovations in loan repayment and forgiveness, such as incomedriven repayment plans (IDR plans), insurance models, and income-share agreements require improvements to ensure that students like Amanda participate in higher education at levels that truly move the needle on economic mobility.

To protect borrowers more rigorously, oversight of loan servicers must increase.cii Under the authorization of the Department of Education, loan servicers collect payment on debt and advise borrowers in managing their repayment obligations.ciii Evidence of servicers failing to advise borrowers in their best interests is mounting.civ By failing to give servicers a stake in loan performance, their perborrower compensation scheme, which varies depending on a borrower's repayment status, disincentivizes servicers to work with individual borrowers to improve borrowers' outcomes.cv While at the state level, student borrower bills of rights are expanding oversight of loan servicers and enabling attorneys general to bring cases on students' behalf, the federal government must also act to increase transparency and accountability among loan servicers.cvi Federal measures could improve procedures to support borrowers, adjust servicer compensation to induce better performance and borrower outcomes, and enhance monitoring. Earlier,

under the Obama Administration, the Consumer Financial Protection Bureau collected student borrower complaints.cvii With its expertise and knowledge of borrower needs, the agency could exercise renewed oversight of the Office of Federal Student Aid, which oversees federal students aid programs. cviii Or, more extensive changes could occur, with the IRS gaining power to collect from borrowers on the basis of the withholding and tax return filings that already exist within the current tax system, thereby replacing the private loan servicers currently contracted with the Department of Education.

To alleviate problems with student loans, loan forgiveness programs must also improve and expand.cix By cancelling education debt, the Public Service Loan Forgiveness program should help incentivize students to borrow to pursue careers that benefit the country, but program eligibility requirements and complexity has made it nearly impossible for borrowers to qualify for it.<sup>cx</sup> Olivia's mother, in Nashville, tried to enter a loan-forgiveness program for teachers but had not entered a qualifying repayment plan. Because she did not make enough qualifying payments, subsequently failed to cure the problem through retroactively the Temporary Expanded Public Serve Loan Forgiveness (TEPSLF) program. Few borrowers who made payments under the wrong repayment plan have been able to solve their problems using TEPSLF.cxi The process must be simplified, and borrowers who have tried in good faith to meet the tenets of the program should be extended safe harbors. States, moreover, could also begin to supplement the all-or-nothing federal program with incremental forgiveness that would help graduates who work less than ten years in prioritized sectors.cxii In New York, for example, Get On Your Feet makes two years of payments for students who enroll in a federal income-driven repayment plan and less than \$50,000 a year.cxiii Alternatively, the current Public Service Loan Forgiveness system

could be absorbed into IDR plans, and policymakers could focus on improvements to those plans.

Under current IDR (income-driven repayment) plans, too few borrowers have achieved loan forgiveness. exiv The plans tie borrowers' monthly payments to their income, and, at the end of a set term, forgive remaining loan balances.cxv The federal government absorbs the cost of unrepaid loans. cxvi In this way, the plans should operate as insurance for borrowers against poor employment outcomes.cxvii **Studies** using data extracted from the National Student Loan Data System suggest that the programs primarily help students with high loan balances, who attended expensive schools and graduate programs. exviii Those students tend to more easily pay off their debt with their subsequent earnings.cxix Enrollment into IDR plans appears difficult to navigate and remaining enrolled appears harder.cxx Numerous IDR plans currently exist and could be streamlined into one unified option.cxxi Marginal repayment rates could cut through current debates over the correct percentage of income for repayment and make default far less likely.cxxii Rather than requiring borrowers to opt in, participation could become the default, so long as the government could adequately accommodate resulting loan forgiveness. cxxiii Through wage withholding, payments could be collected seamlessly, as they have been in Australia and the United Kingdom.exxiv While American borrowers must currently recertify their enrollment every year, automated communication with the IRS would obviate the need for borrowers to do that. exxv Forgiven balances should be explicitly designated nontaxable income. exxvi Furthermore, by allowing some discharge outside of bankruptcy, improved IDR plans could obviate some of the need to discharge student debt in bankruptcy, as discussed below.

Insurance models could solve some of the problems with IDR, with further consumer protections for borrowers.cxxvii By paying a one-time premium, students could acquire insurance against failure to complete college in the form of full or partial loan forgiveness. By contrast, in such cases, IDR merely reduces the burden of repayment. Increasing the option value of college outweighs the moral hazard of potentially inducing students not to try hard to pass their classes.cxxviii If the risk of failure is eliminated, new students will enroll in higher education.cxxix Many of the new enrollees will earn degrees.cxxx

Though they bring no new money to the challenge of making college affordable, income-share agreements could also help to shift the payment burden. cxxxi These privatesector financial products, in which borrowers agree to pay a certain percentage of their earnings for a fixed period, function as loans with built-in insurance policies.cxxxii Purdue University, for example, offers income-share agreements in which payment terms adjust depending borrowers' on academic majors.exxiii Purdue's agreements give the university a financial stake in the success of its students, but rather than replace student loans they merely supplement them. exxxiv Public income-share agreements would function more like taxes. exxv The terms of the agreements would matter and would have to ensure that borrowers do not owe a high percentage of their income for a very long time. Any months when they owed nothing should count as payment. It should be noted that if income-share agreements broadened into a substitute for existing loans and skimmed off the best borrowers, then defaults for traditional federal loans would rise, leading to higher interest rates. A twotiered borrowing system could result. exxxvi

Another way to alleviate some risk is to make it possible for borrowers to discharge their student debts in bankruptcy. Until student 1976, loans dischargeable, but fear that students abused the bankruptcy system led to restrictions. cxxxvii Over the ensuing decades. the restrictions tightened.cxxxviii By 2005, not all qualified education loans could be

discharged.exxix To become eligible to discharge their debt, students have had to meet an "undue hardship" exception.cxl Congress never defined the term, leaving courts discretion in when they could provide relief. exli Recently, some courts have offered borrowers broader latitude than statutory language would suggest, but piecemeal decision making has introduced uncertainty and discouraged borrowers from seeking relief from student debt in bankruptcy. exlii A February 2021 proposal, the Medical Bankruptcy Fairness Act, would allow students to discharge education loans, and could point the way towards more expansive forgiveness.cxliii The availability of student loan debt discharge could obviate some of the need for IDR plans.

Above all, punitive policies for defaulters must end. Policies that inflict long-term damage to students' future economic prospects include high collection fees, ruined credit, and termination of further federal financial aid.cxliv Students who drop out become the most likely to default.cxlv Under current policies, even though achieving a degree would make it easier for defaulted borrowers to repay their loans and move up the economic ladder, they experience more difficulty returning to school following their default. The system penalizes low-income and first-generation students hardest. exlvi Instead, policies should enable borrowers to re-enroll in school, with access to financial aid, and should include enhanced practices to curb low-value educational programs.cxlvii Many defaulted borrowers attended for-profit schools. exlviii States could also act to alleviate some punitive consequences for borrowers who default. For example, they could cancel termination of professional and driving licenses due to default, and institute more productive programs. exlix

# 3. Enhance college counseling

The decision to attend college, where to go, and how to finance it entails intensely personal choices, ideally based on copious technical information and family needs. While a critical density of college counselors is necessary to inform the more individualized aspects of students' decision making, required high school seminar courses can provide a means for college counselors to batch and transmit less personal guidance. So long as they have expertise and aligned goals, not all counselors need to be traditional school guidance counselors.

The notion of student "choice" may itself connote a privilege that many lowincome students do not share.cl Because Promise programs most typically restrict eligibility to recent high school graduates who attend community college full-time, this White Paper focuses on students' trajectories directly out of high school, but the average college student today is more than 26 years old.cli Too often, low-income high school students face informational asymmetries about what colleges are available, how to apply for admission and financial aid, and how to prepare. clii Students with few collegegoing family members or peers and few college counseling resources face the most severe information deficits.cliii No matter their personal experience, families greatly students' college-going influence ideas.cliv Credible information, therefore, appears crucial for reducing persistent inequalities.clv

Required senior seminars can help students through the application, selection, and enrollment process.clvi In Chicago, for example, Kelly High School implemented a senior seminar addressing the social-emotional aspects of the transition out of high school. The dedicated seminar freed Kelly High School's college counselors to use one-on-one time with students on more individualized aspects of the process. Senior seminars, approaches used in other existing seminars like the Advancement Via Individual Determination (AVID) program, should be expanded to inform all students.clvii Nikki, in

Chicago, completed the AVID course, and its lessons made her appear far knowledgeable in navigating college-going decisions than other students. She knew, for example, that her family's high economic need would likely make several four-year colleges free or extremely low cost and that private colleges would potentially offer her the greatest financial support. She expressed frustration and disbelief over how few classmates participated with her in the course. If college is for everybody, college preparation resources must be made available for everybody, too.

Students guided bv effective counselors become more likely to attend college and persist.clviii Caseloads and quality matter. Tennessee's 335-to-1 high school counselor-to-student ratio currently exceeds the American School Counselors Association recommendation of 250-to-1.clix Chicago's at 296-to-1, also exceeds the recommendation.clx

Teacher residencies offer a model for how to bring in additional, traditional counselors at low cost. Students preparing to become college counselors could participate in rigorous full-year apprenticeships, honing their skills. Tennessee and Chicago already have successful teacher residency programs in place.clxi

Other programs, groups, and voices can also provide supplementary collegegoing guidance. For example, external volunteers local from nonprofit organizations can share the counseling burden, so long as their vision and values align with school and research-based practices. clxii Maria, in Chicago, met with volunteers to her school's postsecondary leadership team and learned about the availability of college scholarships she qualified for. Delegation must be carefully pursued, however: An external counselor from a local nonprofit operating in a Nashville public high school pushed Emma towards TN Promise and community college, when, based on her academic credentials,

performance, and reputation within the school, her school college counselor believed she should aspire to a four-year college. Within a school, teachers can also play a larger role in lay counseling and referring. clxiii Mandi, in Chicago, credited her IB English teacher with convincing her that she could continue her education at the postsecondary level and making her feel comfortable visiting the high school "college room." When schools galvanize around collegegoing messaging, students hear it more widely.clxiv Without sufficient programs and individuals to turn to for advice, students like Caleb, in Nashville, have faced a vacuum and listened to any available source – in his case his manager at a fast-food restaurant job, who told him to avoid educational debt at all costs.

# 4. Add nuance to counseling around Promise programs

Promise programs function best when they encourage two-year enrollment among students who would not have entered into higher education.clxv Rather than either warehousing students in Promise programs or failing to mention programs as options, counselors must continue to tailor advice to individual students. Many Tennessee students described high school requirements to apply to Tennessee and encouragement from Promise counselors to enroll in community college because Tennessee Promise made it free. In Chicago, by contrast, students who enrolled in the Star Scholarship overwhelming heard about it on their own and enrolled to avoid small loans to attend four-year colleges.

All students need help understanding the costs and benefits of attending various postsecondary institutions and the financing options available to do so.clxvi Generally, loans to attend the most selective institutions prove worthwhile investments.clxvii High



schools must teach students about returns to college competitiveness and encourage them to apply to safety, match, and reach schools, clxviii

Even though roughly 60 percent of low-income students pay nothing at fouryear public colleges, most low-income students attend community college.clxix Biases among high school college counselors influence low-income students to attend community colleges over more selective institutions, especially when the students hail from racial and ethnic minorities.clxx Promise Programs further shift low-income students from four-year colleges and to twoyear colleges.clxxi At community college, they find themselves less likely to graduate, and less likely to attain bachelor's degrees.clxxii While a typical last-dollar Promise program increases community college enrollment by 10 percent and degree completions by 10 percent, it achieves no benefits for lowincome students.clxxiii

Meanwhile, middle-income students who attend last-dollar Promise programs enjoy compelling savings. Why hasn't the

Star Scholarship gained greater buy-in from high school college counselors? If academic under-preparation or extreme economic need explained low rates of bachelor's degree completions by students who start at community colleges, then it would make sense to encourage more middle-income students to enroll in Promise programs. But when they begin their postsecondary education at four-year colleges, academically qualified moderate- and middle-income students attain bachelor's degree far more frequently.clxxiv When middle-income students begin higher education at a community college, they have roughly equal chances of moving up the economic ladder as moving down it.clxxv Upon transferring to a four-year college, their odds of moving up the economic ladder improve.clxxvi

Promise programs offer a clear message of "free college," potentially compelling to students who wouldn't otherwise pursue higher education; however, when Promise **Programs** encourage undermatching, they fail to benefit students.clxxvii Diverting students from highperforming four-year colleges is the worst

way to try to boost college completion, and relatively little additional funding has made students willing to substitute performing colleges, even as increased access to four-vear colleges improves degree completion rates for students who would have otherwise gone to community college.clxxviii

## **Programmatic Effects**

### 5. Remove eligibility limits

While Tennessee Promise extends benefits to all U.S. citizens in the state, the Chicago Star Scholarship restricts participation to students with grade point averages above 3.0 and no remedial needs. Research shows that Promise programs with the greatest simplicity have the most effectiveness.clxxix To college going promote populations who would not have enrolled in the absence of the aid. Promise programs must take the broadest form possible.clxxx

Undocumented students deserve a path to an affordable education and the ability to contribute more to the American economy. Currently, about 2.8 percent of children in grades 6-12 are undocumented.clxxxi While 65,000 undocumented students graduate high school every year, another 12,000 or so drop out.clxxxii Eligibility for federal financial aid depends on citizenship, and two thirds of Promise Programs restrict participation to citizens. The difficult path to college likely encourages high school dropout.clxxxiii

Merit-based aid also threatens inequitable impacts.clxxxiv Roughly half of Promise programs require students to meet testing, or course-level thresholds.clxxxv These programs resemble earlier merit-based aid programs for state residents who meet significant performance metrics, like the Georgia HOPE program and Florida Bright Future.clxxxvi While such

programs seek to compel students to worker harder in high school, they simultaneously penalize students who must work at outside jobs, care for family members, or who began high school academically behind or attend high schools without rigorous curricula. clxxxvii Although they may encourage students to avoid subjects perceived as difficult, they also benefit better-off students who, in the absence of the scholarship, would have attended college rigorous.clxxxviii Schools with more affluent students have less rigorous grading.clxxxix

Universal programs like Social Security and Medicare have persisted in part because of their broad applicability. exc Needbased grants have the greatest ability to increase college-success for low-income students.cxci Where budget limitations demand restrictions on participation in Promise programs, income caps appear better candidates than GPA.

# 6. Better connect high school curricula

Closer alignment between secondary school systems and local community colleges could improve student success in Promise programs. excii Most incoming Promise students score below collegeready in at least one subject area, but remedial coursework has made students more likely to drop out.cxciii New programs have experimented with new ways to prepare students for college coursework.cxciv High school assessments aligned with the expectations of local institutions should be used as indicators prior to beginning college, so that preparation gaps can be completed in high school.excv Secondary schools need resources develop students' to preparation before they graduate.

A stated goal of Promise programs has been to seed improvements at the secondary level. The programs are intended to build a college-going culture in the school district and increase college

preparedness. cxcvi Given how many students move from the local school system into the local community college system, increasing alignment for preparedness at the secondary level should be possible.

Obviating remedial education seems crucial. As Yana explained, "Those two support classes knocked me out. Made me behind. That's why I failed." Just 16 percent of students who place into remedial courses earned a certificate or degree in six years.cxcvii

As recently as 2016, 80 percent of incoming community college students enrolled in at least one remedial course, but changes to remediation have enabled students to take remediation courses alongside credit courses or even avoid altogether.cxcviii remediation In Tennessee became the first state to move to corequisite remediation systemwide. cxcix The succeeded experiment in improving students' completion of lower-level courses, but it did not help them with overall completion of their degrees.cc Chicago has also moved to corequisite courses, and considered doing away with remediation altogether, as states like California and Florida have. cci Beginning in 2014, Florida's elimination of placement exams and remedial college courses increased the number of students who passed college-level English and math courses, but the changes with enhanced advising improvements to academic support services, which also helped students, and overall passage rates remain low.ccii Students who chose to enroll in retooled developmental education courses failed them at similar rates as before the changes took place. cciii In California, too, even as more students enroll directly in higher-level courses and pass, many students still end up opting into remedial courses.cciv Other jurisdictions have experimented more broadly, by requiring students to attend office hours once a week (El Paso) or sign in at a writing center to work with tutors (Dallas).ccv

None of this negates the problem of one in four students arriving on campus illprepared.ccvi In Tennessee, for example, only 17 percent of public high school students test college-ready in English, math, reading, or science. ccvii Chicago's statistics look as bad remedial students just aren't allowed to participate in the Star Scholarship, City Colleges of Chicago reported that in 2013 only 10 percent of students arriving on campus did not need remediation in a core subject.ccviii Of students entering in 2013, only 11 percent of those needing remediation graduated in three years.ccix

The Common Core State Standards implement were supposed to high, standardized academic benchmarks in high schools.ccx These could be integrated more closely with community college coursework create curricular continuity.ccxi Washington, high school and community college teachers have jointly used the Common Core to identify learning goals and assemble courses.cexii The Bridge to College course in English, for example, draws from the Southern Regional Education Board's Literacy Ready class, materials created by New York state, and California State University's expository-writing course. ccxiii Nevertheless, definitions of college readiness vary by state, and not every state has adopted or implemented the Common Core.ccxiv

Following the example of a handful of successful programs, more work can be done to align curricula and match student progression. In Long Beach, the Early Assessment Program measured college readiness among 11th graders to allow students time to improve their skills in courses jointly designed by district and postsecondary faculty.ccxv Long Community College accepted the courses for placement.ccxvi The Gates Foundation College Readiness and Success Working Group studied the relationship between specific parts of the high school experience and college performance.ccxvii To change writing instruction to better meet college expectations, Philadelphia high schools

partnered with college writing instructors.ccxviii So that the students would qualify for credit-bearing college coursework when they enrolled, on behalf of the New York City school system, the communitybased organization LINCT to Success had high school seniors take CUNY placement tests and used the results in individualized learning plans.ccxix In California, the Fourth Year Math Initiative offered a curriculum designed by secondary and postsecondary teachers more advanced than Algebra II but less rigorous than calculus.cexx

Not every program, however, has succeeded. In a program called Seamless Alignment and Integrated Learning Support (SAILS), Tennessee tried to move remedial math coursework into high school.ccxxi The program placed students into remedial math classes during senior year of high school on the basis of high school juniors' ACT scores.ccxxii Students who completed the classes did not have to take remedial math at community college.ccxxiii Participants in the program became much more likely to enroll in college math; however, they passed those classes at the same rate as traditional remedial students.ccxxiv Nevertheless, the SAILS students were more likely to report their math content useful and to describe themselves as better prepared for college math and interested in math.ccxxv

The SAILS program warrants further study, with particular focus on starting math remediation programs earlier in high school. In Chicago, for example, a double-period algebra class in the ninth grade boosted students' algebra grades and test scores.ccxxvi In addition, though students with lower levels of academic preparation perform less well in online courses, SAILS took the form of a self-paced, online course. ccxxvii

Other states have tried similar measures with mixed success. It has become increasingly common for high schools to use college placements tests to track students' skills acquisition and consider 12th grade a transition year, in which colleges should have curricular input.ccxxviii Eleven states offer math transition classes. ccxxix The Florida College and Career Readiness Initiative, which requires participation by some students in Math for College Readiness, resulted in higher enrollment in college-level classes but no proof of more success in them.ccxxx With similar programs, West Virginia did not achieve progress, but Arkansas and Mississippi did.ccxxxi In New York, City University of New York developed the At Home in College program.ccxxxii Its English and math transition courses made a small, but meaningful difference in course passage rates in college. ccxxxiii

Many high schools, however, do not offer courses sufficiently high-level to prepare students to meet college expectations. In high-minority high schools, this holds especially true.ccxxxiv Only 57 percent of African American students attend schools with the necessary classes to be deemed college ready.ccxxxv Even where the classes are available, African American students too-frequently choose not to take them. ccxxxvi Schools must develop not only effective courses, but also effective educators and effective systems for sharing and interpreting data from community colleges.

## 7. Adjust funding formulas

Promise programs must provide funding beyond tuition for low-income students to spend on items such as textbooks and transportation passes; students from more middle-class families, however, don't need it. For high-need students, research demonstrates a clear relationship between improved performance and increased levels of resources and supports.ccxxxvii For them. access without support is not sufficient. First-dollar funding models would generate additional money for lowincome students that they could use in the ways they deem most useful.ccxxxviii

Tuition makes up a small percent of student expenses.ccxxxix On average, expenses beyond tuition account for 60-80 percent of the cost of attending higher education.ccxl Students must cover living expenses and and balance supplies family responsibilities. ccxli Paying for students to attend community college, while leaving them to struggle through classes without textbooks they could not afford and turn to measures like selling their blood plasma to pay for intermittent transportation to campus, makes little sense. Nor does paying for books and school supplies for families that can easily afford to buy them.

highest-risk students have The further needs that pose even greater barriers to their success. ccxlii A majority of community college students struggle with food or housing insecurity. ccxliii More than 25 percent of African American, Hispanic, and Native American students say they struggle to complete homework because of unstable childcare. ccxliv Other barriers include working in low-wage jobs with nonstandard work hours, undependable transportation, and inadequate access to health care.ccxlv

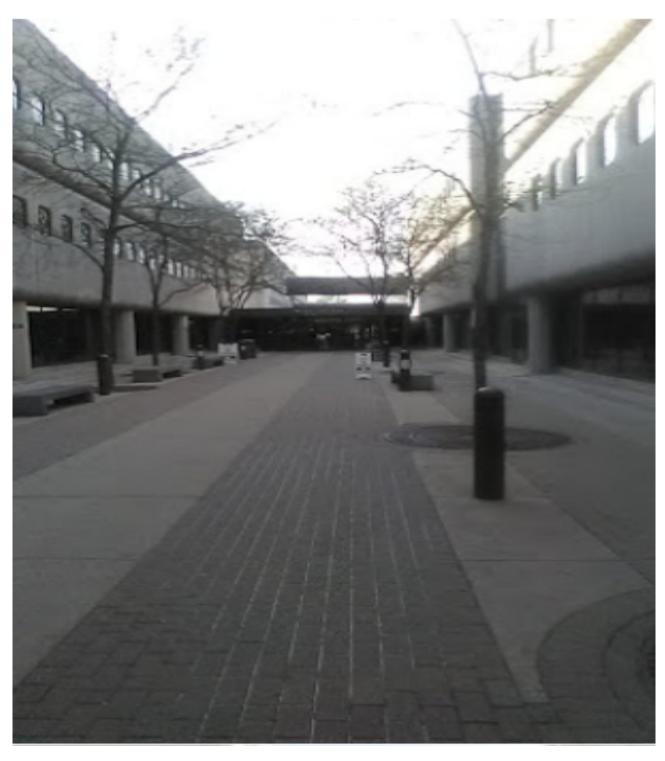
At community colleges, additional support seems to facilitate student success by replicating the services provided by betterresources colleges. ccxlvi The ASAP program at City University of New York's community colleges doubled three-year graduation rates providing free textbooks and transportation stipends, along with advising, additional counseling, tutoring.ccxlvii At the secondary level, most state funding formulas and the federal Title I program meet greater student need at schools with high-poverty populations, and free and reduced-priced meals help ensure that hunger does not interfere with learning.ccxlviii At the four-year level, Georgia State has increased graduation rates through the provision of emergency financial aid, and additional advising and mentoring for at-risk students.ccxlix

Though they have fewer resources. community colleges have begun experimenting with new strategies for increasing students' access to resources. Community colleges typically receive less than 25 percent of a state's higher education funding and therefore have fewer resources to spend on students.ccl Private research universities spend five times as much per student and public research universities spend three times as much. ccli Community college students generally have greater, not fewer, needs.cclii One-stop centers community college campuses that reduce transportation barriers students would otherwise face in finding help and enable coordination between community services and college staff have improved student access to resources. ccliii Nevertheless, studies show that most students have difficulty taking advantage of college services. ccliv

First-dollar Promise programs award Promise funding to students before applying other financial aid grants and awards.cclv In this way, the lowest-income students receive surplus Promise money that they can use to meet their own needs as they choose. In lastdollar programs, by contrast, students draw upon other available funding before Promise funds are applied. The Pell grant covers lowstudents' community college income tuitions, and low-income students receive few if any Promise funds. Currently, without more comprehensive supports, last-dollar Promise programs provide very little to the highest-need students.

# 8. Enhance in-college mentorship

For students with less college going knowhow, access to high-quality advice is crucial. Mentorship can build a sense of belonging and skills for navigating unfamiliar institutions.cclvi For reason, Tennessee Promise integrates a mentorship component to its program that begins during the application



process.cclvii At that stage, however, students do not seem to understand why they will need a mentor at college. By the time they encounter the need for advice and assistance, they have already let their relationship with the mentor lapse. Comprehensive mentorship structures that take effect later, once students have arrived on campus appear more useful.

In the spring of their senior years of high school, students remain focused on high school, rather than on anticipating questions they will have about choosing a community college major, selecting courses, positioning themselves for transfer to fouryear colleges. In interviews, no students described taking advantage of their Tennessee Promise mentors. After

volunteering to advise students, mentors became frustrated when no students sought them out. Meanwhile, recruiting, training, and coordinating volunteers consumed resources.

Shifting the investment forward in time could achieve better outcomes.cclviii Once on campus, students become aware of questions and needs. A closely tailored and well-explained program could help provide a facsimile of a social network and could alleviate some of the difficulties that firstgeneration students face. cclix Mentorship can students' increase determination persist. cclx When Emma, in Nashville, had to spend time in hospital, she met a volunteer for a community-based organization that mentors low-income students through creative writing groups and enthusiastically joined a group. Indiana's "Scholar Coaching Initiative" pairs community college students with mentors and has appeared to boost retention rates by more than 12 percent. cclxi Peer mentorship, and incentives for students to meet with their mentors, have also benefitted students.cclxii

# 9. At least proportionally fund four-year Promise programs

Promise programs must not incentivize undermatching that disserves lowincome students. Promise funds for fouryear colleges must become at least truly proportional, and the Promise label should be taken off programs that grant more limited funding grants to four-year colleges. Other institutions committed to providing significant need-based grant aid, such as private colleges where lowincome students attend loan-free, could be presented to students under a "likely Promise program" label. With increased funding, Promise programs could also begin to enable more students to begin higher education at four-year colleges.

About 65 percent of Promise programs found attendance at community colleges only. cclxiii Targeting efforts at the two-year level keeps program costs low, while accelerating enrollments quickly or emphasizing workforce preparation.cclxiv Community college students also already tend to be lower-income and in most need of support.cclxv Yet, by diverting students who could have started at a four-year college to a two-vear college, as discussed above, limiting funding to community college may in some reduce bachelor's degree attainment.cclxvi Because low-income students already more frequently enroll in two-year colleges, funding that can only be used at community colleges reinforces an existing class-based divide. cclxvii Promise programs that fund only two-year colleges affect what kind of institution students attend more than they increase whether students attend any institution at all. cclxviii

Currently, four-year colleges enroll a greater proportion of well-off students.cclxix Many of the Promise Programs that allow enrollment at four-year colleges fund attendance there in a more limited way.cclxx Emma. in Nashville. example. considered using the Tennessee Promise at Trevecca Nazarene University, participating local four-year college. Then she learned that the program provides aid equal to a last-dollar award to attend a community college.cclxxi Because she would face a significant funding gap to attend Trevecca Nazarene, she focused attention on community college instead.

Tennessee's UT Promise, which funds full tuition and fees at public, in-state four-year colleges for students from families earning less than \$50,000, helps more, but the all-or-nothing formulation of income eligibility for the program makes little sense. cclxxii Sara, in Nashville, lost eligibility for the program the summer before her freshman year. Because she worked as a restaurant hostess to save money for college, her family had earned \$1,000 too much. The following year, however, her father lost his job. Other states including Illinois also have programs with all-or-nothing income

eligibility to local, public four-year colleges. At the University of Illinois, students must have an Expected Family Contribution of zero.cclxxiii

It's possible that proportionally funding four-year colleges more broadly would entail funding on a scale that only the federal government could support. cclxxiv The four-year colleges that meet full financial need with no loans include some of the country's wealthiest institutions, including Harvard, Princeton, Yale, and the like.cclxxv But even funding for four-year colleges with all-or-nothing income thresholds allows for better student outcomes than programs that strongly divert students more community colleges. Making four-year colleges free for students from families with incomes below \$60,000 a year would raise the percent of low-income students earning bachelor's degrees from 25 percent to 28 percent.cclxxvi Under Tennessee Promise in 2015, by comparison, enrollment in fouryear colleges dipped by just over that amount, or 3.8 percent. cclxxvii

With transfer difficult, does orienting Promise programs at the community college level over the long term make sense? Should funding for high-need students require them to adjust to college not once, but twice? With more funding, Promise programs could begin to support tuition-free attendance at four-year colleges. Expanding Pell grants would also enable more low-income students to start higher education directly at four-year colleges for free.

Because the Pell Grant exceeds the average cost of community college tuition and fees, the majority of low-income students could already attend community college for free. cclxxviii In simulations, Promise programs currently attract equal numbers of students who would not otherwise have gone to college as students who downshift from four-year to two-year institutions. cclxxix Since Tennessee Promise took effect, 2.5 percent more Tennessee high school graduates have chosen to enroll in community college. But

another 2.5 percent of Tennessee high school graduates have changed from attending fouryear colleges into attending community college.cclxxx Promise programs do not seem to bring enough students into higher education to make a difference. cclxxxi

Bachelor's degrees move the needle of economic mobility more strongly than associate's degrees.cclxxxii When students who aspire to earn bachelor's degrees begin higher education at community college, however, they become less likely to attain them. cclxxxiii In interviews, students serious about transferring described the great deal of time and energy they expended on planning and worrying about their transfer plans and applications. Navigating a new institution posed challenges. In their first year, twenty percent of low-income transfer students consider dropping out.cclxxxiv The problem of efficiently transferring credits lacks effective solutions, cclxxxvcclxxxvi

10. Enhance articulation partnerships while also broadening matched pathways.

Given the importance of a bachelor's degree for true financial mobility, improving transfer and bachelor's completion rates is essential to the success of Promise programs. While closer coordination between community colleges and local four-year colleges would transitions for many ease students, other students who performed very well in community college need support aspiring to and applying to more competitive four-year Otherwise, Promise programs must market themselves more honestly as a specific onramp to the four-year colleges that have forged partnerships with community colleges, rather than as two free years of education on a broad path to a bachelor's degree.

Though more than 80 percent of first-year community college students intend to transfer to four-year colleges, within six years only a third of them do.cclxxxvii Among the students who transfer, within six years only 13 percent earn bachelor's degrees. cclxxxviii Low-income transfer students have even lower completion rates: Within six years, only one in ten low-income students who start at community college earn bachelor's degrees.cclxxxix African American students fare slightly worse, and Latinx students fare slightly better.ccxc For America to compete in the global knowledge economy, improving the success rates seems critically important. cexci

Too many students, however, have a difficult time transferring their credits, costing them additional time in four-year colleges. ccxcii Currently, fewer than 60 percent of community college students successfully transfer most of credits.ccxciii About 15 percent transfer almost no credits.cexciv Credit loss makes degree attainment less likely.ccxcv In fact, the largest barrier for transfer students to completing bachelor's degrees appears to be loss of community college credits.ccxcvi

In interviews, most students said they were operating within a narrow geographic range. Tennessee Promise students only considered transferring to local, four-year colleges or local for-profit colleges; Chicago Star Scholars considered only local colleges with articulation agreements with the City Colleges of Chicago.

To help students for whom the localized pathways make sense, Promise programs should invite local four-year faculty to help design community college classes that would better prepare transfer coursework.ccxcvii students college for Currently, differences in faculty interactions, examining, and expectations of independent learning stymie students.ccxcviii Community college professors must teach to a level sufficient to prepare students for the expectations of the four-year college.ccxcix Holvoke Community College Massachusetts has encouraged instructors who teach at both the community college and four-year colleges to identify teaching practices that promote student transfer success.ccc

Four-year college faculty can also help community colleges better align their curricula. ccci The earlier the determinations of how credits transfer, the better students can plan. Local four-year colleges could standardize course numbering community colleges and the credit approval process.cccii In tandem with transfer some community college institutions, systems have also developed transfer program maps to highlight course sequences and extracurricular activities that ease the way to successful achievement of bachelor's degrees. ccciii Similar collaboration would solve the problem the University of Memphis professor noted in interviews, in which to enter the University of Memphis biology major, students must have already taken college-level chemistry. Few aspiring biology majors have transferred from community college to the University of Memphis with the correct prerequisites.

Clearer pathways, however, cannot help students who do not select a field of study early.ccciv To increase on-time completion bachelor's degrees. of community college advising must help students focus their interests and choose courses aligned to their majors at transfer institutions.cccv Otherwise, students risk spending more time completing their bachelor's degree or even dropping out. cccvi

Several states have begun offering financial incentives to encourage four-year colleges to admit transfer students early and allow them to begin using campus resources<sup>cccvii</sup>. Through programs Connect4Success in Florida and the Ragin' Cajun Bridge Program in Louisiana, fouryear colleges have admitted students contingent on success in their associate-

degree programs and provided them with campus ID's, invitations to campus activities, and support for navigating the transfer transition.cccviii In California, Long Beach College Promise students in some majors may use California State University's campus participate library and in student organizations.cccix Though few students have taken advantage of the program, the numbers are growing.cccx To enable more students to start community college knowing they will attend California State University in two years, the governor has proposed expanding aspects of the program statewide, with an earlier lock-in.cccxi

For other students, closer integration of Promise programs with local four-year colleges can lower the aspirations of highachieving students. Claudia described how the University of Illinois at Chicago felt like the most comfortable, familiar transfer option because representatives of the campus seemed ever-present at City Colleges of Chicago. Ruby participated in a workshop for the highest-achieving students at City Colleges that seemed designed to encourage students to apply to transfer to Ivy League schools. Nevertheless, she and many of her classmates preferred to stay local. During community college she already took classes at Northeastern University, and it seemed easiest and cheapest to transfer there.

For students who have already undermatched and easily earned high grades in community college, seamless pathways into less-competitive four-year colleges risk again diverting transfer students from more selective institutions. Currently, the more selective the four-year college, the less likely it is to enroll community college transfer students. cccxii A mere 9 percent of community college transfers enter selective institutions. This compares with 21 percent of students enrolling directly into a selective four-year college out of high school.cccxiii

Not all students are alike. Promise programs must prepare community college students to transfer successfully to the most appropriate destination. Four-year colleges help must also facilitate students' transitions.

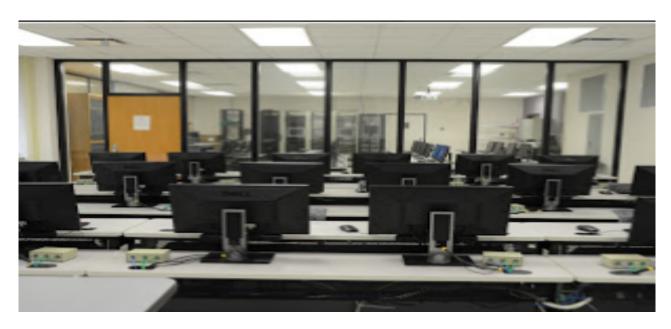
#### Additional Observations

## 11. Study effective ways of presenting information to high-need students

Students lack information about the supports that are available on their community college campuses, along with other opportunities that would help them gain leadership experience and build social networks. As described above, Tennessee and Chicago Promise students wanted for time to explore their campuses and also seemed to miss information communicated on campus websites or in campus emails. A growing body of evidence is shedding light on how best to capture students' attention.

Most students fail to make use of services available on campus. Linda rushed from school to work, without learning about programs that could help her succeed on campus. When she tried to take advantage of a free laptop program, she did not understand how it worked.

For students who lack time to spend on campus outside of class, programs must conduct outreach to students where they are, which is in the classroom. cccxiv Only after his academic support professor class demonstrated how to use it, did Rod learn about a computer program to help students select a major. Professors could be more deliberate in inviting representatives of campus programs into the classroom and requiring students to participate in support services. Class assignments could also facilitate student engagement with campus resources, and writing assignments could be geared around investigating and analyzing particular supports.



South one Texas college, administrators have started presenting student services within lower-level math classes that attract particularly high-risk students.cccxv They have also recruited professors from those classes to proactively direct struggling students towards help.cccxvi The program has increased the number of students accessing tutoring resources. cccxvii California colleges have also integrated student services into academic coursework.cccxviii

Beyond the classroom, as discussed above, students spoke frequently about their social isolation. Their campuses offered numerous student groups and activities, but the students did not seem to know about them. Increasing their awareness could enable them to build broader social networks that would provide them with additional information, guidance, and emotional support, and help them to pass classes more easily.cccxix Campus leadership experiences could help them in transferring

Evidence is developing to shed light on how students best access and retain information.cccxx Pop-up questions and promote engagement.cccxxi gamification Videos with embedded quiz questions have shown results. cccxxii Small group assignments also create a feeling of community.cccxxiii The lessons learned could inform effective presentation further of information, currently opaque – but useful –to students,

such as what courses they needed to fulfill graduation requirements.

12. Equalize funding to community colleges to enhance student supports including innovating tutoring and campus jobs

Though community colleges educate about half the Americans enrolled in higher education and about half the students who eventually earn bachelor's degrees, community colleges receive less money than four-year colleges.cccxxiv Because resources correlate with student success, for too many students the unequal funding risks a crucial on-ramp to higher education ending poorly.cccxxv Yet rather than closing the financial gap, have implemented many states performance-based funding schemes, revoking further funding from the institutions who serve the highest-need students.cccxxvi Instead, additional, direct investment could provide them with more resources to address structural inequalities, for example through the provision of innovative tutoring and flexible, high-paying campus jobs.

Community colleges receive little more than half the revenues of public fouryear colleges, depriving their students of \$78

billion in support each year.cccxxvii Even leaving aside the research function of universities and accounting for the lower cost of the first two years of college, the inequality persists. cccxxviii In fact, the disparity has continued to grow. cccxxix

Four-year colleges bring in more funding, not only through higher tuition and fees, but also through larger appropriations.cccxxx Many states explicitly fund community colleges less than four-year colleges. In Maryland, for example, state law mandates funding for community college students at 25 percent the amount it provides for four-year college students.cccxxxi

During the Covid-19 outbreak, the divergence has continued. The \$14 billion in aid for higher education included in the CARES Act was distributed on the basis of the number of full-time equivalent students.cccxxxii Community colleges, which are more likely to enroll part-time students, received roughly half as much financial help.

Funding community college proportionally less is both ineffective and inefficient.cccxxxiii Students from the quartile wealthiest socioeconomic predominate at four-year colleges; twice as disadvantaged students many attend college community than wealthy students.cccxxxiv Already saddled by lowerquality secondary schools, food insecurity, and less access to enrichment activities, at community college the disadvantaged find their difficulties students exacerbated.cccxxxv Community colleges have lower graduation rates than four-year colleges (38 percent compared to 77 percent). cccxxxvi Better-resourced community colleges have higher completion rates than others.cccxxxvii Increasing resources has larger positive effects on students at two-year colleges than at four-year colleges, and returns to spending at community colleges overshadow academic preparation.cccxxxviii Conversely, when community colleges make cuts to save money, such as by pushing

students into online classes. student persistence rates fall.cccxxxix

Some state lawmakers have experimented with tying higher education funding to institutional outcomes, and this seems a poor choice.ccxl Thirty-two states now operate under performance-based schemes with scant positive impact.cccxli Often, given students' starting position, the performance metrics are ill-matched to the factors that would actually help them succeed.cccxlii Already under-resourced institutions may lack the tools necessary to meet the benchmarks. cccxliii Further penalties on institutions that fail to meet them harm the institutions a second time, while withholding the means to improve. cccxliv

Instead, institutions, especially those serving the poorest, highest-need students, need more funding to build capacity.cccxlv Federal policy could adapt Title 1-style programs, which currently provide extra funding to K-12 schools based on the prevalence of low-income students, to target the resources poorest-resourced institutions. cccxlvi The Biden campaign proposed a similar approach. cccxlvii Among states, increased transparency is needed to bring attention to spending per student, state appropriations across institutions, and existing inequities. The resulting data could inform equivalent state equalization efforts. In twenty-four states, increasing local tax collections by 10 percent or less would close the funding gap between four-year colleges and two-year, so long as the states distributed the new revenues equitably. cccxlviii

## A) Invest more in innovative training

Similar to mentoring, effective tutoring can increase persistence, retention. and student success.cccxlix In addition to providing knowledge and skills, tutoring connects students to their colleges and to individuals invested in their success.cccl should prioritize Promise programs investment in tutoring.cccli

Tutoring is adaptive. Tutors can fill in gaps, even for skills students should have learned at the secondary level and that are beyond the scope of a college class. ccclii Components of effective tutoring include structured sessions, ongoing training of tutors, monitoring of student progress, and frequent tutoring sessions. cccliii

Embedded tutoring seems more effective than peer tutoring and can provide a source of core emotional and social support. Embedded tutors attend class and work with instructors in order to lead discussions of concepts.cccliv Embedded tutoring builds community among participants that contributes to persistence and success.ccclv It also enables tutors to model positive behaviors and tie study sessions to class material. ccclvi Eleanor found the embedded tutor in her Algebra 3 class crucial in mediating between students and the professor. The embedded tutor had direct knowledge of the areas in which the students were struggling.

Peer tutoring can also take various beneficial forms. ccclvii In 2015, for example, supported by a \$5 tutoring fee, Central Washington University instituted peerassisted learning programs. ccclviii Students who had already completed difficult courses with high grades led twice weekly tutoring groups. For guidance, the tutors met with faculty once a week.ccclix Other institutions draw from principles of peer-led team learning, developed at City University of New York, that offer avenues for support, discussion, and teamwork.ccclx

### B) Make federal work-study more available

Improvements are needed in all areas of the federal work-study program, a crucial gap filler in need-based aid.ccclxi Problems occur on both the institutional side and the student side. Distribution of the federal money among institutions must be retooled, and procedures for students to qualify must be streamlined. Better means of supporting high-need students should also be explored.

The federal work-study program must meet financial need more directly, with more support for institutions that educate the greatest share of low-income students. program is structured so institutions rather than students receive the funding. ccclxii Under current formulas, elite private colleges receive more than their fair share.ccclxiii Although they enroll far fewer low-income students than regional state schools and community colleges, they are rewarded for higher tuition costs and longer histories in the program. ccclxiv

Once in possession of the funding, institutions are supposed to target it to lowincome students, but the process appears too cumbersome. Very few colleges award work-study to every eligible student.ccclxv In interviews, eligible Promise students in Tennessee described difficulty of navigating the system to a workstudy job. Yana, in Memphis, repeatedly tried to sign up, and always seemed to do something wrong. Rod attended a required meeting but seemed not to know what to do next. In 2014, only 16 percent of students from families making less than \$20,000 a year received work-study aid. ccclxvi Though few financial aid offices collect data related to federal work-study, in one survey a third of financial aid staff reported that less than half of students awarded federal work-study had actually taken a federal work study job. ccclxvii Only 3 percent of financial aid staff thought that students in work-study jobs were on track to earn their full awards. ccclxviii Eighteen percent of responding institutions reported returning unspent federal work-study money.ccclxix

Supporting high-need students in better ways appears both crucial and possible. The 2019 College Affordability Act would have phased out the current formulas and substituted an allocation based on the number of low-income students on campus, with a bonus for institutions with high rates

of Pell student enrollments and success. ccclxx Alternatively, the money could flow towards increasing maximum Pell grant awards, which students in first-dollar Promise programs would retain. Work-study funds could reward institutions that implement new interventions that improve the success of Pell-eligible students. Or, the money could be recast as emergency aid that colleges could use to help students with unexpected expenses or small obstacles to finishing their degrees. States including Kentucky have successfully experimented with Temporary Assistance for Needy Families funds to support an expansion of available work-study positions.ccclxxi

## 13. Design federal partnerships to increase need-based aid at four-year colleges

State funding of public postsecondary institutions has decreased, leaving students to pay more.ccclxxii The federal government can incentivize states to regain their historic role in funding higher education. ccclxxiii Matching grants crafted to encourage state spending on need-based financial aid particularly efficient way to boost college enrollment of low-income students.ccclxxiv Matching programs appear beneficial than simply subsidizing institutions that educate low-income students.ccclxxv

State support of higher education postsecondary influences completion rates.ccclxxvi However, state funding for public two- and four-year colleges in 2018 fell \$6.6 billion below 2008 expenditures, adjusted for inflation.ccclxxvii In response, colleges have raised tuition, cut faculty, reduced course offerings, and even closed campuses. ccclxxviii Renewed state investment has not yet restored higher education to 2008 funding levels, ccclxxix

States have also increasingly shifted aid from need-based to merit-focused programs.ccclxxx The Georgia **HOPE** scholarship, a merit-based scholarship for state residents funded through the state lottery, offers a prime example, replicated across the country. ccclxxxi Due to the quality of students' preparatory education, however, merit-based aid, tends to rise with income level, and merit-aid scholarships have therefore appeared regressive.ccclxxxii The spending largely flows to students who already planned to attend college and does little to boost college attainment rates of lowincome students.ccclxxxiii

Though direct subsidies to institutions could lower costs for low-income students, the subsidies risk inducing states to cut their own funding still further. Higher rates of spending per student make students more likely to graduate. ccclxxxiv Nevertheless, when states balance their budgets, higher education offers an attractive target for cuts, ccclxxxv

In place of such unilateral transfer, the federal government can premise matching funds on states committing to maintain low or free tuition.ccclxxxvi Such a program would encourage states to make further investments in public institutions, instead of raising tuitions and balancing the cutting higher education budget by funding.ccclxxxvii The federal investment would help make it possible for states to lower tuition and offer more need-based student aid.ccclxxxviii In this way, the Debt-Free College Act of 2019, introduced by Senator Schatz (D-HI), would direct federal money to public institutions and HBCUs that made college debt-free for low-income students.ccclxxxix Other variations on this type of federal incentive structure for states could entail a Pell bonus for colleges enrolling and successfully graduating large numbers of low-income students (New America) or federal block grants to states that guaranteed low-income students would only pay below a threshold amount to attend state public colleges.cccxc

## 14. Increase the federal role in Promise programs to sustain support

High-need students who would not otherwise enter higher education need sustained aid. Administering Promise programs at the state and local level, rather than the federal, introduces budgetary constraints and inefficiencies. Rethinking the delivery of existing federal funding could potentially outcomes for low-income improve students.

State and local Promise programs rely on restrictions to lower costs, including focusing programs at community colleges. Because state and local governments remain subject to balanced budget requirements, the programs also risk funding particularly during economic downturns when more people may rely on the funding to enter higher education.cccxci Eligibility restrictions help meet state and local budget constraints but can make it more difficult to access the populations that the programs should be helping.

Already, the federal government spends a great deal on financial aid programs. To improve outcomes for the highest-needs students. the federal government can take further actions:

# A) Combine financial aid and Promise applications

Currently, students who wish to enroll in a Promise program must fill out multiple applications: an application for federal financial aid and an application to the program itself. **Duplicating** applications adds unnecessary layers of administration and creates inefficiencies. Last-dollar programs make the application process particularly complex, as students apply for federal aid that Promise programs redirect towards tuition under "free college" branding. If the two systems became unified,

students could more easily submit a single, streamlined application.

## B) Provide federal financial aid directly to institutions

The federal government provides financial aid to low-income students. Yet low-income students complete the FAFSA at low rates, and they cannot learn how much Pell money they will receive until after they have decided to apply to college. cccxcii Instead, the federal government could provide federal financial aid funds directly to institutions that pledged to drop their tuitions. "Free college" would truly become "free college," which students could access in a more seamless way.

### C) Match state and local expenditures with federal funds

The federal government could also intervene to incentivize state funding. The bill introduced by Senator Schatz of Hawaii, discussed above, would match state funding for free-college programs with equal federal government funding. States would enjoy increased returns on their investments into higher education. Capping the matched amount would direct funding to needier institutions and dissuade states from cutting education funding.

#### D) Mimic Title 1 funds at the K-12 level

supplement existing expenditures, the Title I approach, discussed above, would offer another way for the federal government to transfer "compensatory" funding to community colleges that educate high concentrations of impoverished students.

## **Endnotes**

<sup>1</sup> Yuen, V. (2019). New insights into attainment for low-income students. Center for American Progress.

- ii Hershbein, B. & Kearney, M.S. (2014). Major decisions: What graduates earn over their lifetimes. Report for the Hamilton Project, Washington, DC.
- iii Bartik, T.J., Hershbein, B. & Lachowska, M. (2021). The effects of the Kalamazoo Promise Scholarship on college enrollment and completion. Journal of Human Resources.
- iv Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. W.E. Upjohn Institute.
- v Willard, J., Vasquez, A. & Lepe, M. (2019). Designing for Success: The early implementation of College Promise programs. MDRC.
- vi Carnevale, A.P., Javasundera, T. & Gulish, A. (2016), America's divided recovery; College haves and have-nots, Georgetown University Center on Education and the Workforce.
- vii Bifulco, R., Rubenstein, R., & Sohn, H. (2017). Using synthetic controls to evaluate the effect of unique interventions: The case of Say Yes to Education. Evaluation Review.
- viii Saul, S. & Goldstein, D. (2021). Biden directs education funding to community colleges, a key lifeline. New York Times.
- ix Harrison, L.M. & Drice, M.H. (2017). Interrupting class inequality in higher education: Leadership for an equitable future. New York: Routledge.
- x Bok, D. (2015). Higher education in America (Rev. ed.). Princeton, NJ: Princeton University Press; Ma. J., Baum, S., Pender, M. & Welch, M. (2016). Trends in college pricing 2016. New York, NY: The College Board: Pell Institute. (2017). Indicators of higher education equity in the United States: 2017 Historical trend report.
- xi (2018). Indicators of higher education equity in the United States: 2018 Historical trend report. Pell Institute. xii Harrison, L.M. & Price, M.H. (2017). Interrupting class inequality in higher education: Leadership for an equitable future. New York: Routledge.
- xiii Bailey, M.J. & Dynarski, S.M. (2011). Inequality in post-secondary education. In G.J. Duncan & R.J. Murnane (Eds.), Whither opportunity? Rising inequality, schools, and children's life chances. New York, NY: Russell Sage; Institute for Higher Education Policy. (2011). Initial college attendance of low-income young adults. Washington, D.C.: Institute for Higher Education Policy.
- xiv Glynn, J. (2017). Opening doors: How selective colleges and universities are expanding access for high-achieving, low-income students. Jack Kent Cooke Foundation.
- xv Li, A.Y. & Gándara, D. (2020). Program design matters: A difference-in-differences analysis of "promise" impacts on first-time college enrollment. In L. W. Perna, & E. J. Smith (Eds.), Improving research-based knowledge of college promise programs. American Educational Research Association.
- xvi Bartik, T., Hershbein, B. & Deck amp; Lachowska, M. (2015). Longer-term effects of the Kalamazoo Promise Scholarship on college enrollment, persistence, and completion. Presented at the American education finance and policy annual conference, Washington, DC; Gonzalez, G.C., Bozick, R., Daugherty, L., Scherer, E., Singh, R., Suarez, M. & Samp; Ryan, S. (2014). Transforming an urban school system: Progress of New Haven School Change and New Haven Promise education reforms (2010-2013). RAND Corporation.
- xvii Bartik, T.J., Hershbein, B. & Lachowska, M. (2017). The effects of the Kalamazoo Promise Scholarship on college enrollment, persistence, and completion (Working Paper No. 15-229). W. E. Upjohn Institute for Employment Research; Swanson, E., Watson, A. & Ritter, G.W. (2020). Promises fulfilled? A systematic review of the impacts of college promise programs. In L. W. Perna, & E. J. Smith (Eds.), Improving research-based knowledge of college promise programs. American Educational Research Association.
- xviii Goldrick-Rab, S., Kelchen, R., Harris, D.N. & Benson, J. (2015). Reducing income inequality in educational attainment: Experimental evidence on the impact of financial aid on college completion (IRP Discussion Paper No. 1393-12rev). Wisconsin Institute for Research on Poverty; Mendoza, P., Mendez, J.P & Malcolm, Z. (2009). Financial aid anad persistence in community colleges: Assessing the effects of federal and state financial aid programs in Oklahoma. Community College Review.
- xix Coria, E. & Deffman, J.L. (2015). Financial aid tipping points: An analysis of aid and academic achievement at a California community college. Community College
- Journal of Research and Practice. 40(2): 160-170; Long, M. (2010). Changes in the returns to education and college quality. Economics of Education Review. 29(3): 338-347; Bettinger, E.P. (2011). Financial Aid: A blunt instrument for increasing degree attainment. Washington, D.C.: American Enterprise Institute; Kelly, A. & Goldrick-Rab, S. (2014). Reinventing financial aid: Charting a new course to college affordability. Cambridge, Mass.: Harvard Education; Lederman, D. (2011, March 15). Is Pell too big? Inside Higher Ed; Sawhill, I. (2013). Higher education and the opportunity gap. Washington, D.C.: Brookings.

- xx Conchas, G.O. (2006). The color of success. New York: Teachers College Press.
- xxi Karp, M.M. (2011). How non-academic supports work: Four mechanisms for improving student outcomes. New York: Community College Research Center working paper 28.
- xxii Ma, J. & Baum, S. 2016. Trends in community colleges: Enrollment, prices, student debt, and completion. College Board Research Brief.
- xxiiiBell, A., Rowan-Kenyon, H., & Perna, L. (2009). College knowledge of 9th and 11th grade students: Variation by school and state context. Journal of Higher Education; Perna, L. (2006). Understanding the relationship between information about college prices and financial aid and students' college-related behaviors. American Behavioral Scientist; Tierney, W. & Venegas, K. (2006). Fictive kin and social capital: The role of peer groups in applying and paying for college. American Behavioral Scientist; Venezia, A., Kirst, M. & Antonio, A. (2004). Betraying the college dream. Final policy report from the Stanford University Bridge Project. Palo Alto, CA: The Stanford Institute for Higher Education Research.
- xxiv Dougherty, K.J., & Kienzl, G.S. (2006). It's not enough to get through the open door: Inequalities by social background in transfer from community colleges to four-year colleges. Teachers College Record, 108(3): 452-487; Doyle, W.R. (2009). Impact of increased academic intensity on transfer rates: An application of matching estimators to student-unit record data. Research in Higher Education, 50(1): 52-72; Horn, L. (2009). On track to complete? A taxonomy of beginning community college students and their outcomes 3 years after enrolling: 2003-04 through 2006 (NCES Publication No. 2009–152). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- xxv Hasak, J. (2018, July 3). Free community college is not enough. Real Clear Education.
- xxvi Dynarski, S., Libassi, C.J., Michemore, K. & Owen, S. (2018). Closing the gap: The effect of a targeted, tuition-free promise on college choices of high-achieving, low-income students (NBER Working Paper No. 25349). National Bureau of Economic Research; Dynarski, S. Wiederspan, M. (2012). Student aid simplification: Looking back and looking ahead. (NBER Working Paper No. 17834). National Bureau of Economic Research.
- xxvii Institute for Higher Education Policy, (2011). Initial college attendance of low-income young adults. Washington, D.C.: Institute for Higher Education Policy.
- xxviii Jenkins, D. & Fink, S. (2016). Tracking transfer: New measures of institutional and state effectiveness in helping community college students attain bachelor's degrees. Community College Research Center, Teachers College Columbia University, Aspen Institute and National Student Clearinghouse Research Center.
- xxix Harrison, L.M. & Drice, M.H. (2017). Interrupting class inequality in higher education:
- Leadership for an equitable future. New York: Routledge.
- xxx Billings, M. (2018). Understanding the design of college promise programs, and where to go from here. Brookings Institute; Kauffman Foundation. (2017). States are making college free: Why that won't ensure students are prepared for the economy of tomorrow; Smith, A. A. & Lederman, D. (2017). Enrollment declines, transfer barriers: Community college presidents' survey. Inside Higher Ed. April 21, 2017.
- xxxi Berman, J. (2017). Why making college free is so difficult. Marketwatch. March 5, 2017; Coker, C. & Glynn, J. (2017). Making college affordable: Providing Low-income students with the knowledge and resources needed to pay for college. Jack Kent Cooke Foundation; Poutre, A. & Voight, M. (2018). The state of free college: Tennessee Promise and New York's Excelsior Scholarship. Institute for Higher Education Policy.
- xxxii Bartik, T.J., Hershbein, B. & Lachowska, M. (2017). The effects of the Kalamazoo Promise Scholarship on college enrollment, persistence, and completion (Working Paper No. 15-229). W. E. Upjohn Institute for Employment Research; Swanson, E., Watson, A. & Ritter, G.W. (2020). Promises fulfilled? A systematic review of the impacts of college promise programs. In L. W. Perna, & E. J. Smith (Eds.), Improving research-based knowledge of college promise programs (pp. 33–68). American Educational Research Association.
- xxxiii Gonzalez, G.C., Bozick, R., Daugherty, L., Scherer, E., Singh, R., Suarez, M. & Damp; Ryan, S. (2014). Transforming an urban school system: Progress of New Haven School Change and New Haven Promise education reforms (2010-2013). RAND Corporation.
- xxxiv Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. Kalamazoo, MI: W.E. Upjohn Institute Press.
- xxxv Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. Kalamazoo, MI: W.E. Upjohn Institute Press.
- xxxvi Perna, L.W., Wright-Kim, J. & Leigh, E.W. (2020). Is a college Promise program an effective use of resources? Understanding the implications of program design and Resource investments for equity and efficiency. AERA Open. xxxvii Dowd, A.C., Rosinger, K.O. & Castro, M.F. (2020). Trends and perspectives on finance equity and the promise of community colleges. In L. Perna (Ed.), Higher education: Handbook of theory and research; Perna, L.W. & Leigh, E.W. (2018). Understanding the promise: A typology of state and local college promise programs. Educational Researcher; Perna, L.W. & Smith, E.J. (2020). Introduction. In L.W. Perna & E.J. Smith (Eds.), Improving researchbased knowledge of college promise programs. American Educational Research Association.
- xxxviii Bartik, T.J., Hershbein, B. & Lachowska, M. (2016). The merits of universal scholarships: Benefit-cost evidence from the Kalamazoo Promise. Journal of Benefit Cost Analysis.
- xxxix Kelchen, R. (2017). A review of College Promise programs: Evidence from the Midwest. Minneapolis, MN: Midwestern Higher Education Compact.

- xl Perna, L.W. & Leigh, E.W. (2018). Understanding the promise: A typology of state and local college promise programs. Educational Researcher.
- xii Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. Kalamazoo, MI: W.E. Upjohn Institute Press.
- xlii Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. Kalamazoo, MI: W.E. Upjohn Institute Press.
- xiiii Meehan, K., Hagood, S., Callahan, M.K. & Kent, D.C. (2019). The case of Tennessee Promise: A uniquely comprehensive program. Research for Action; Larnell, G.V., Larnell, T.B. & Bragelman, J. (2017). Toward reframing the open door: Policy, pedagogy, and developmental dducation in the urban community college. In M. Pagano (Ed.), The Urban Agenda. University of Illinois Press.
- xliv Kelchen, R. (2017). A review of College Promise programs: Evidence from the Midwest. Minneapolis, MN: Midwestern Higher Education Compact.
- xlv PennAhead. A comprehensive catalog of College promise programs in the United States. https://aheadpenn.org/creating-knowledge/college-promise/search
- xivi Iriti, J., Page, L.C. & Bickel, W.E. (2018). Place-based scholarships: Catalysts for systems reform to improve postsecondary attainment. International Journal of Educational Development; Perna, L.W. & Leigh, E.W. (2018). Understanding the promise: A typology of state and local college promise programs. Educational Researcher. xivii Bifulco, R., Rubenstein, R. & Sohn, H. (2017). Using synthetic controls to evaluate the effect of unique interventions: The case of Say Yes to Education. Evaluation Review.
- xiviii Tennessee College Access and Success Network. (2020). Bridge to completion 2020: Understanding the college access and success ecosystem for Metro Nashville Public Schools students; Tennessee College Access and Success Network. (2020). Building Pathways: Ensuring college access for Shelby County students.
- xlix Tennessee Higher Education Commission. (2016). Profiles and trends in Tennessee Higher education.
- <sup>1</sup> Tennessee College Access and Success Network. (2020). Bridge to completion 2020: Understanding the college access and success ecosystem for Metro Nashville Public Schools students; Tennessee College Access and Success Network. (2020). Building Pathways: Ensuring college access for Shelby County students.
- li Nagaoka, J. & Seeskin, A. (2018). The education attainment of Chicago Public Schools students. University of Chicago Consortium on School Research.
- lii Bertrand, M., Hallberg, K., Hofmeister, K., Morgan, B. & Shirey, E. (2019). Increasing academic progress among low-income community college students: Early evidence from a randomized controlled trial. University of Chicago Urban Poverty Lab.
- liii Jenkins, D. & Fink, J. (2016). Tracking transfer: New measures of institutional and state effectiveness in helping community college students attain bachelor's degrees. Community College Research Center, Teachers College, Columbia University.
- liv Jenkins, D. & Fink, J. (2016). Tracking transfer: New measures of institutional and state effectiveness in helping community college students attain bachelor's degrees. Community College Research Center, Teachers College, Columbia University.
- ly College Promise Campaign. (2017). Annual report; Perna, L.W. (2016). Understanding college promise programs. https://www.collegepromise.org/wp-content/uploads/2016/10/Laura-Perna-Understanding-College-Promise-Progs-FinalReport-6-28-2016.pdf.
- lvi Tennessee Higher Education Commission. (2021). Tennessee Promise annual report.
- lvii Tennessee Higher Education Commission. (2021). Tennessee Promise annual report.
- lviii City Colleges of Chicago. Chicago Star Scholarship. https://pages.ccc.edu/apply/star/.
- lix Bifulco, R., Rubenstein, R., Sohn, H. & Murchie, J. (2017). Third-year report: Evaluating the effects of the Say Yes to Education program in Buffalo, NY. Say Yes to Education Foundation; Bozick, R., Gonzalez, G. & Engberg, J. (2015). Using a merit-based scholarship program to increase rates of college enrollment in an urban school district: The case of the Pittsburgh Promise, Journal of Student Financial Aid; Daugherty, L. & Gonzalez, G.C. (2016). The impact of the New Haven Promise program on college enrollment, choice, and persistence (RAND Working Paper WR-1146); Gonzalez, G.C., Bozick, R., Daugherty, L., Scherer, E., Singh, R., Suarez, M.J. & Ryan, S. (2014). Transforming an urban school system: Progress of New Haven school change and New Haven Promise education reforms (2010-2013). Rand Corporation; Gonzalez, G.C., Bozick, R., Tharp-Taylor, S. & Phillips, A. (2011). Fulfilling the Pittsburgh Promise: Early progress of Pittsburgh's postsecondary scholarship program. Rand Corporation; Page, L.C., Iriti, J.E., Lowry, D.J. & Anthony, A.M. (2017). The promise of place-based investment in college access and success: Investigating the impact of the Pittsburgh Promise: Swanson, E. & Ritter, G. (2018). Start to finish: Examining the impact of the El Dorado Promise on postsecondary outcomes (EDRE Working Paper 2018-02).
- lx Chen, X. & Nunnery, A. (2019). Profile of very low- and low-Income undergraduates in 2015-16. National Center for **Education Statistics.**
- lxi On debt aversion, see Boatman, A., Evans, B.J. & Soliz, A. (2017). Understanding loan aversion in education: Evidence from high School seniors, community college students, and adults. AERA Open; Burdman, P. (2015). The student debt dilemma: Debt aversion as a barrier to college access. Center for Studies in Higher Education; Elengold, K.S., Dorrance, J. & Agans, R. (2020). Debt, doubt, and dreams: Understanding the Latino college completion gap. University of North Carolina at Chapel Hill; Goldrick-Rab, S. & Kelchen, R. (2015). Making sense of loan aversion:

Evidence from Wisconsin. In Student loans and the dynamics of debt. W.E. Upjohn Institute for Employment Research, Kalamazoo, MI.

lxii Avery, C. & Turner, S. (2012) Student loans: Do college students borrow too much – or not enough?. Journal of Economic Perspectives; Baum, S. (2017). Student debt: Good, bad, and misunderstood. Change: The Magazine of Higher Learning; Dwyer, R.E., Hodson, R. & McCloud, L. (2013). Gender, debt, and Dropping out of College. Gender & Society; Looney, A., Wessel, D. & Yilla, K. (2020). Who owes all that student debt? And who'd benefit if it were forgiven?. Brookings. But see Lobo, B.J. & Burke-Smalley, L.A. (2018). An empirical investigation of the financial value of a college degree. Education Economics; Meschede, T., Taylor, J., Mann, A. & Shapiro, T. (2017). 'Family achievements?': How a college degree accumulates wealth for whites and not for blacks. Federal Reserve Bank of St.

lxiii Bahr, P.R., Jackson, G., McNaughtan, J., Oster, M. & Gross, J. (2017). Unrealized potential: Community college pathways to STEM baccalaureate degrees. Journal of Higher Education; Lichtenberger, E. & Dietrich, C. (2017). The community college penalty? Examining the bachelor's completion rates of community college transfer students as a function of time. Community College Review; Smith, J., Pender, M. & Howell, J. (2013). The full extent of academic under-match. Economics of Education Review.

kiv Aquino, R.P. & Hudes, K.C. (2020) Improving postsecondary choice and pathways: Student access and college match, New York: Routledge; Byndloss, D.C. & Reid, C. (2013). Promoting college match for low-income students: lessons for practitioners. MDRC; Dillon, E.W. & Smith, J.A. (2020). The consequences of academic match between students and colleges. Journal of Human Resources; Lee, J., Weis, L., Liu, K. & Kang, C. (2017). Which type of high school maximized students' college match? Unequal pathways to postsecondary destinations for students from varying high school settings. Journal of Higher Education; Handel, S.J. (2014). Under match and the community college students. Change: The Magazine of Higher Learning; Ovink, S., Kalogrides, D., Nanney, M. & Delaney, P. (2018). College match and undermatch: Assessing student preferences, college proximity, and inequality in postcollege outcomes. Research in Higher Education.

lxy City Colleges of Chicago. Become a Star Scholar and earn your college education tuition-free. https://pages.ccc.edu/apply/star/.

lxvi Angulo, A.J. (2016) Diploma mills: How for-profit colleges stiff students, taxpayers, and the American dream. Baltimore: Johns Hopkins University Press; Armona, L., Chakrabarti, R. & Lovenheim, M.F. (2020). Student debt and default: The role of for-profit colleges. Federal Reserve Bank of New York; Baird, A.F., Roos, J.M. & Carter, J.S. (2019). Selling a better future for profit: Examining the prospects of 'good jobs' for graduates of for-profit colleges. Journal of Public and Professional Sociology; Boykin, T.F. (2017). For profit, for success, for black men: A review of literature on urban for-profit colleges and universities. Urban Education; Campbell, C.A., Deil-Amen, R. & Gjerde, J. (2020). Capitalizing on fear and failure: For-profit colleges selling themselves to the poor. Research Square; Cellini, S.R. & Koedel, C. (2017). The case for limiting federal student aid to for-profit colleges. Journal of Policy Analysis and Management; Cottam, T.M. (2017) Lower ed: The troubling rise of for-profit colleges in the new economy. New York: The New Press; Goldstein, A. & Eaton, C. (2020). Asymmetry by design? Identity, obfuscation, reputational pressure, and consumer predation in U.S. for-profit higher education. Center for Studies in Higher Education.

lxvii Jenner, B. (2017). Student veterans and the transition to higher education: Integrating existing literatures. Journal of Veterans Studies; Lieber, R. (2021). The price you pay for college. New York: HarperCollins.

lxviii Cate, C.A. (2013). Exploring student veterans' post-secondary completion rates with two national surveys. Washington, D.C.: Student Veterans of America; Kappell, J., Boersma, K. DeVita, J. & Parker, M. (2017). Student veterans' participation in high-impact practices: Veterans' experiences at three institutions of higher education in southeastern North Carolina. Journal of Veterans studies.

lxix McBain, L., Kim, Y.M., Cook, B. & Snead, K. (2012). From soldier to student, II: Assessing campus programs for veterans and service members. Washington D.C.: American Council on Education; Schiavone, V. & Gentry, D. (2014). Veteran-students in transition at a midwestern university. Journal of Continuing Higher Education; Wheeler, H.A. (2012). Veterans' transitions to community college: A case study. Community college Journal of Research and

lxx Jenner, B. (2017). Student veterans and the transition to higher education: Integrating existing literatures. Journal of Veterans Studies.

lxxi Accamando, D. (2017). Determining the specific transition needs of military and veteran students, A qualitative/mixed methods study. Duquesne University; Cook, B.J. & Kim, Y. (2009). From soldier to student: Easing the transition of service members on campus. Washington, D.C.: American Council on Education.

lxxii Goldrick-Rab, S. (2016). Paying the price: College costs, financial aid, and the betrayal of the American dream. Chicago: University of Chicago Press; Peters, E.A., Roberson, A.J. & Voight, M. (2019). The cost of opportunity: Student stories of college Affordability. Institute for Higher Education Policy; Poutre, A. & Voight, M. (2018). Do Tennessee Promise and New York's Excelsior Scholarship help students with limited means afford college? A resource from Institute for Higher Education Policy. Institute for Higher Education Policy; Jones, T. & Berger, K. (2018). A promise fulfilled: A framework for equitable free college programs. Education Trust.

İxxiii Kolenovic, Z., Linderman, D. & Karp, M.M. (2013). Improving student outcomes via comprehensive supports: Three-year outcomes from CUNY's Accelerated Study in Associate Programs (ASAP). Community College Review; Levin, H.M. & Gardia, E. (2012). Cost-effectiveness of Accelerated Study in Associate Programs (ASAP) of the City University of New York (CUNY). Economics of Education Foundation; Linderman, D. & Kolenovic, Z. (2013). Moving

the completion needle at community colleges: CUNY's Accelerated Study in Associate Programs (ASAP). Change: The Magazine of Higher Learning; Scrivener, S. & Weiss, M.J. (2014). More graduates: Two-year results from an evaluation of Accelerated Study in Associate Programs (ASAP for developmental education students. MDRC; Sommo, C., Cullinan, D., Manno, M., Blake, S. & Alonzo, E. (2018). Doubling graduation rates in a New State: Two-year findings from the ASAP Ohio demonstration. MDRC.

- lxxiv CEDEFOP (European Centre for the Development of Vocational Training). (2016). Sectoral trends: The next decade.
- lxxv Bathmaker, A.M. (2017). Post-secondary education and training, new vocational and hybrid pathways and questions of equity, inequality and social mobility. Journal of Vocational Education and Training.

lixvi Thompson, C. (2019). The state of American trade schools. Popular Mechanics.

- lxxvii Stiglitz, J.E. (2012). The price of inequality: How today's divided society endangers our future. New York: Norton. lxxviii Bathmaker, A.M., Ingram, I., Abrahams, J., Hoare, T., Waller, R. & Bradley, H. (2016). Higher education, social class and social mobility: The degree generation. London: Palgrave Macmillan; Vignoles, A. & Crawford, C. (2010). Access, participation and diversity questions in relation to different forms of post-compulsory further and higher education: The importance of prior educational experiences. In M. David (ed.) Improving learning by widening participation in higher education. London: Routledge.
- lxxix Zhang, J. & Oymak, C. (2018). Participants in Subbaccalaureate occupational education: 2012. National Center for Education Statistics. Statistics in Brief.
- lxxx Bathmaker, A.M. (2017). Post-secondary education and training, new vocational and hybrid pathways and questions of equity, inequality and social mobility. Journal of Vocational Education and Training.
- lxxxi Brunello, G. & Rocco, L. (2017). The effects of vocational education on adult skills, employment and wages: What can we learn from PIAAC? SERIEs.
- lxxxii Brunello, G. & Rocco, L. (2017). The effects of vocational education on adult skills, employment and wages: What can we learn from PIAAC? SERIEs.; Caplan, B. (2018). The case against education: Why the education system is a waste of time and money. Princeton: Princeton University Press.
- lxxxiii Zhang, J. & Oymak, C. (2018). Participants in Subbaccalaureate occupational education: 2012. National Center for Education Statistics. Statistics in Brief.
- lxxxiv Zhang, J. & Oymak, C. (2018). Participants in Subbaccalaureate occupational education: 2012. National Center for Education Statistics. Statistics in Brief.
- lxxxv Giancola, J. & Davidson, E. (2015). Breaking down walls: Increasing access to four-year colleges for highachieving community college students, Jack Kent Cooke Foundation; Handel, S.J. (2014). Under match and the community college student. Change: The Magazine of Higher Learning; Johnson, S. (2018). Elite colleges' 'blind spot': Low-income and high-achieving community college students. EdSurge; Laviolet, T., Fresquez, B., Maxson, M. & Wyner, J. (2018). The talent blind spot. Aspen Institute.
- lxxxvi Campbell, C. & Bombarieri, M. (2017). New data highlight how higher education is failing part-time students. Center for American Progress.
- lxxxvii Almeida, D.J., Byrne, A.M. & Smith, R.M. (2019). How relevant is grit? The importance of social capital in firstgeneration college students' academic success. Journal of College Student Retention: Research, Theory, and Practice; Berthelon, M. Bettinger, E., Kruger, D.I. & Montecinos-Pearce, A. (2019). The structure of peers: The impact of peer support networks on academic achievement, Research in Higher Education; Pumell, R. & Blank, S. (2004), Support success: Services that may help low-income students succeed in community college. MDRC; Tover, E. (2015). The role of faculty, counselors, and support programs on Latino/a community college students' success and intent to persist. Community College Review.
- lxxxviii Bergerson, A.A. (2009). College choice and access to college: Moving policy, research, and practice to the 21st century. ASHE Higher Education Report; Choy, S.P. (2001). Students whose parents did not go to college: Postsecondary access, persistence, and attainment. National Center for Education Statistics; Horn, L. & Nunez, A.M. (2000). Mapping the road to college: First-generation students' math track, planning strategies, and context of support. National Center for Education Statistics.
- bxxxxx Carey, R.L. (2017). What am I gonna be losing? School culture and the family-based college dilemmas of Black and Latino adolescent boys. Education and Urban society; Mitchall, A.M. & Jaeger, A.J. (2016). Parental influences on low-income, first-generation students' motivation on the path to college. The Journal of Higher Education. xc College Board (2011). Few parents of low-income students involve themselves in the college process
- xci Tornatzky, L.G., Cutler, R. & Lee, J. (2002). College knowledge: What Latino parents need to know and why they don't know it. Tomas Rivera Policy Institute.
- xcii Chudry, F. Foxall, G. & Pallister, J. (2011). Exploring attitudes and predicting intentions: Profiling student debtors using an extended theory of planned behavior. Journal of Applied Social Psychology; Zaloom, C. (2019). Indebted: How families make college work at any cost. Princeton: Princeton University Press.
- xeiii Perna, L.W. (2008). Understanding high school students' willingness to borrow to pay college prices. Research in Higher Education.
- xciv Carey, J. & Dimmittt, C. (2018). School counseling and student outcomes: Summary of six statewide studies. Professional School Counseling; Engberg, M.E. & Gilbert, A.J. (2014). The counseling opportunity structure: Examining correlates of four-year college-going rates. Research in Higher Education.

- xcv On ways to encourage involvement see Reynolds, A.D., Crea, T.M., Medina, J., Degnan, E. & McRoy, R. (2015). A mixed-methods case study of parent involvement in an urban high school serving minority students. Urban Education; Williams, T.T. & Sanchez, B. (2011). Identifying and decreasing barriers to parent involvement for innercity parents. Youth & Society.
- xcvi Grodsky, E. & Jones, M.T. (2007). Real and imagined barriers to college entry: Perceptions of cost. Social Science
- xevii Macdonald, M.F. & Dorr, A. (2008). Engaging parents as partners in creating college going cultures: Developing parent centers with a strong academic, college focus. Building Education Success Through Collaboration in Los Angeles County.
- xcviii Bodenhausen, N. & Birge, M. (2017). Family engagement toolkit: continuous improvement through an equity lens, California Department of Education; National Collaborative on Workforce and Disability. (2014). Families and college and career readiness: What schools can do to engage families in the individualized learning plan process. xcix Kirshner, J.A. (2021). Student Debt Fears Lower the Bar for Low-Income Students. The Hill.
- <sup>c</sup> Brooks, J.R. & Levitin, A.J. (2020). Redesigning education finance: How student loans outgrew the 'debt' paradigm. Georgetown Law Journal.
- ci For example, Consumer Financial Protection Bureau. (2017). CFPB monthly snapshot spotlights student loan complaints: Report also looks at consumer complaints from Nevada; Thompson, M. (2016). Why student loan debt harms low-income students the most. Talk Poverty.
- cii Office of Inspector General. (2019). Federal student aid: Additional actions needed to mitigate the risk of servicer noncompliance with requirements for servicing federally held student loans. U.S. Department of Education.
- ciii Federal Student Aid. (2017). Loan servicing contracts. U.S. Department of Education; Jackson, V. (2017). Student borrowers: Prey for predatory loan servicers. Policy Matters Ohio; Office of Federal Student Aid. (2009). Attachment A-1 to solicitation/contract/order for commercial items. U.S. Department of Education; Office of Inspector General. (2019). Federal student aid: Additional actions needed to mitigate the risk of servicer noncompliance with requirements for servicing federally held student loans. U.S. Department of Education.
- civ U.S. Government Accountability Office. (2016). Federal student loans: Education could improve direct loan program customer service and oversight.
- w Hearing before the Senate Committee on Health, Education, Labor, & Pensions, 113th Cong. (2014). Strengthening the federal student loan program for borrowers. Statement of Deanne Loonin, Attorney, National Consumer Law
- cvi Frotman, S. (2019). The student loan market is broken: Preempting state law would make it worse. Administrative and Regulatory Legal News; Lewis, K.M. & Vanatko, N. (2019). Federal and state regulation of student loan servicers: A legal overview. Congressional Research Service.
- cvii Consumer Financial Protection Bureau. (2017). Annual report of the CFPB student loan ombudsman: Strategies for consumer-driven reform; Rhode, S. (2018). Student loan ombudsman at CFPB can't take the BS anymore. Quits in scathing letter telling Director Mulvaney he sucks. Condemned to Debt.
- cviii Hegji, A. & Hogue, H.B. (2019). The Office of Federal Student Aid as a performance-based organization. Congressional Research Service.
- cix Frotman, S. (2019). The student loan market is broken: Preempting state law would make it worse. Administrative and Regulatory Legal News; Lewis, K.M. & Vanatko, N. (2019). Federal and state regulation of student loan servicers: A legal overview. Congressional Research Service.
- <sup>cx</sup> Cowley, S. (2018). 28,000 public servants sought student loan forgiveness. 96 got it. New York Times; Office of Federal Student Aid. Public service loan forgiveness. https://studentaid.ed.gov/sa/repay-loans/forgivenesscancellation/public-service.
- exi Curtis, T. & White, A. (2019). What's wrong with public service loan forgiveness and how to fix it. Association of American Law Schools.
- cxii Grangaard, L. (2014). Programs for loan repayment and forgiveness: A list for rural providers. Rural Health Information Hub.
- cxiii New York State Higher Education Services Corporation. NYS get on your feet loan forgiveness program. https://www.hesc.ny.gov/repay-your-loans/repayment-options-assistance/loan-forgiveness-cancellation-anddischarge/nys-get-on-your-feet-loan-forgiveness-program.html.
- exiv National Consumer Law Center. (2021). Education Department's decades-old debt trap: How the mismanagement of income-driven repayment locked millions in debt.
- exy Plumb, W.T. (1971.) The federal income tax significance of corporate debt: A critical analysis and a proposal. Tax Law Review.
- cxvi Blagg, K. (2018). Who uses income-driven student loan repayment?. Urban Institute.
- cxvii Dynarski, S.M. & Kreisman, D. (2013). Loans for educational opportunity: Making borrowing work for today's students. The Hamilton Project. Brookings; Lochner, L. & Monge-Naranjo, A. (2016). Student loans and repayment: Theory, evidence and policy. National Bureau of Economic Research; Salerno, C. (2016). Solving the college affordability problem with student loans insurance. Forbes.
- exviii Dynarski, S.M. & Kreisman, D. (2013). Loans for educational opportunity: Making borrowing work for today's students. The Hamilton Project. Brookings; Lochner, L. & Monge-Naranjo, A. (2016). Student loans and repayment:

- Theory, evidence and policy. National Bureau of Economic Research; Salerno, C. (2016). Solving the college affordability problem with student loans insurance. Forbes.
- exix Lacy, A., Conzelmann, J.G. & Smith, N.D. (2018). Federal income-driven repayment plans and short-term student loan outcomes. Educational Researcher.
- cxx Daugherty, O. (2021). National Association of Student Financial Aid Administrators.
- exxi Cheng, D. & Thompson, J. (2017). Make it simple, keep it fair: A proposal to streamline and improve incomedriven repayment of federal student loans. Institute for College Access & Success.
- exxii IBRInfo. Summary of income-driven repayment plans. http://www.ibrinfo.org/existingidr.vp.html.
- exxiii Nikalexi, K. & Yannelis, C. (2019). How to lower student loan defaults: Simplify enrollment in income-driven repayment plans. Solutions from Beyond the Beltway.
- exxiv Delisle, J. & Usher, A. (2018). Australia's student loan problem is a teachable moment for the U.S. Brookings. exx Streeter, M. (2019). A popular student loan fix has been stalled for years: It's time to act. The Institute for College Access & Success.
- exxi Crespi, G. (2019). Should we defuse the 'tax bomb' facing lawyers who are enrolled in income-based student loan repayment plans. Southern Methodist University Dedman School of Law. Legal Studies. Research Paper No. 225; Minsky, A.S. Congress makes big change to income-based repayment: What student loan borrowers should know.
- exxvii Salerno, C. (2016). Solving the college affordability problem with student loans insurance. Forbes.
- cxxviii Chatterjee, S. & Ionescu, F. (2012). Insuring student loans against the financial risk of failing to complete college. Quantitative Economics.
- cxxix Chatterjee, S. & Ionescu, F. (2012). Insuring student loans against the financial risk of failing to complete college. Quantitative Economics.
- exxx Chatterjee, S. & Ionescu, F. (2012). Insuring student loans against the financial risk of failing to complete college. **Ouantitative Economics.**
- exxxi Carey, K. (2019). New kind of student loan gains major support. Is there a downside?. New York Times. The
- exxii Carey, K. (2019). New kind of student loan gains major support. Is there a downside?. New York Times. The Upshot.
- exxiii Purdue University. Back a boiler program overview. https://www.purdue.edu/backaboiler/ overview/index.html.
- exxxiv Bair, S. & Cooper, P. (2019). The future of income-share agreements: Policy and politics. Manhattan Institute. cxxxv Delisle, J. (2019). How to make student debt affordable and equitable. Solutions from Beyond the Beltway. exxxvi Harris, M. (2019). What's scarier than student loans? Welcome to the world of subprime children. New York Times.
- exxxvii Education Amendments of 1976, Pub. L. No. 94-482, sec. 127(a), § 439A, 90 Stat. 2081, 2141 (codified as amended at 11 U.S.C. § 523(a)(8) (2018)).
- exxxviii Act of Aug. 14, 1979, Pub. L. No. 96-56, sec. 1, § 17(a), 93 Stat. 387, 387 (excluding forbearance and deferment periods from the five-year nondischargeability period); Bankruptcy Amendments and Federal Judgeship Act of 1984, Pub. L. No. 98-353, § 454(a)(1)(A)(2), 98 Stat. 333, 376; Crime Control Act of 1990, Pub. L. No. 101-647, § 3621(1)-(2), 104 Stat. 4789, 4965; Higher Education Amendments of 1998, Pub. L. No. 105-244, § 971, 112 Stat. 1581, 1837.
- exxxviii Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, § 220, 119 Stat. 23, 59. exxxix Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, § 220, 119 Stat. 23, 59.
- ext Office of Postsecondary Education. (2018). Request for information on evaluating undue hardship claims in adversary actions seeking student loan discharge in bankruptcy proceedings. Department of Education.
- exii Brunner v New York State Higher Educ. Servs. Corp., 831 F.2d 395 (2d Cir. 1987); Iuliano, J. (2012). An empirical assessment of student loan discharges and the undue hardship standard. American Bankruptcy Law Journal.
- exiii Iuliano, J. (2012). An empirical assessment of student loan discharges and the undue hardship standard. American Bankruptcy Law Journal; Kevin Jared Rosenberg v N.Y. State Higher Education Services Corp., et. al. (Bankr. SDNY 2020). Memorandum decision and order granting summary judgment in favor of plaintiff and discharging debtor's student loan under 11. U.S.C. § 523(a)(8).
- cxliii S. 146: Medical Bankruptcy Fairness Act of 2021.
- cxliv See 34 C.F.R. § 685.204(a)(3) (2019) (defaulted loans not eligible for deferment); id. § 685.209(a) (ii) (defaulted loans not eligible for Pay As You Earn plans); id. § 685.209(c)(ii) (defaulted loans not eligible for Revised Pay As You Earn plans); id. § 685.210(b)(1) (defaulted borrowers restricted from changing repayment plans); id. § 685.219(c)(1)(i) (defaulted loans not eligible for Public Service Loan Forgiveness); id. § 685.220 (defaulted loans typically not eligible for consolidation); id. § 685.221(a)(2) (defaulted loans not eligible for income-based repayment
- <sup>exty</sup> The Institute for College Access & Success. (2018). Students at greatest risk of loan default. Fact Sheet. extvi The Institute for College Access & Success. (2019). Casualties of college debt: What data show and experts say about who defaults and why.
- exivii The Institute for College Access & Success. (2018). TICAS detailed comments on the gainful employment rule. extriii The Institute for College Access & Success. (2019). Casualties of college debt: What data show and experts say about who defaults and why.

- cxlix The Institute for College Access & Success. (2018). The self-defeating consequences of student loan default; Wagner, A. (2018). The debate over suspending licenses for student loan defaulters. National Conference of State Legislatures. Legislative Brief No. 40.
- d Iloh, C. (2019). An alternative to college 'choice' models and frameworks: The Iloh model of college-going decisions and trajectories. College and University.
- cli Billings, M. (2018). Understanding the design of college promise programs, and where to go from here. Brookings; Mishory, J. (2018). The future of statewide college promise programs. The Century Foundation; National Center for Education Statistics. (2020). The condition of education. https://nces.ed.gov/programs/coe/indicator\_csb.asp; New America. (2017). Perception vs. reality: The typical college students. https://www.newamerica.org/in-depth/varyingdegrees/perception-vs-reality-typical-college-student/.
- clii Horn, L.J. Chen, X & Chapman, C. (2003). Getting ready to pay for college: What students and their parents know about the cost of college tuition and what they are doing to find out. National Center for Education Statistics. cliii Avery, C. & Kane, T. (2004). Student perceptions of college opportunities. National Bureau of Economic Research; Page, L.C. & Scott-Clayton, J. (2016). Improving college access in the United States: Barriers and policy responses. cliv Auerbach, S. (2007). From moral supporters to struggling advocates: Reconceptualizing parent roles in education through the experience of working-class families of colors, Urban Education; Brooms, D.R. (2017), Being Black, being male on campus: Understanding and confronting Black male collegiate experiences. Albany, NY: State University of New York Press; Brown, B.A., Brown, C.A. & Jayakumar, U.M. (2009). When cultures clash: Transposing a collegegoing culture in an urban school. In Allen, W.R., Kimura-Walsh, E. & Griffin, K.A. (Eds.), Towards a brighter tomorrow: College barriers, hopes and plans of Black, Latino/a and Asian American students in California. Charlotte, NC: Information Age; Carey, R.L. (2016). 'Keep that in mind ... You're gonna go to college': Family influence on the college going processes of Black and Latino high school boys. The Urban Review; Ceja, M. (2006). Understanding the role of parents and siblings as information sources in the college choice process of Chicana students. Journal of College Student Development; Freeman, K. (2005). African Americans and college choice: The influence of family and school, Albany: State University of New York Press; Hossler, D. & Stage, F.K. (1992). Family and high school experience influences on the post secondary educational plans of ninth-grade students. American Education Research Journal; Kiyama, J.M. (2010). Family lessons and funds of knowledge: College-going paths in Mexican American families. Journal of Latinos and Education; Martinez, M.A. (2013). (Re) considering the role 'familismo' plays in Latina/o high school students' college choices. The High School Journal.
- cly Iloh, C. (2018) Toward a new model of college 'choice' for a twenty-first-century context. Harvard Educational
- clvi Network for College Success. (Undated). College success seminar for seniors.
- https://ncs.uchicago.edu/sites/ncs.uchicago.edu/files/uploads/tools/NCS PS Toolkit BST SetD ThriveCurriculu m.pdf.
- clvii Bleakley, D.A. (2013). An analysis of the efficacy of the Advancement Via Individual Determination (AVID) intervention program. Rutgers; Kobe, T., Kinsley, P., Feldman, R.D. & Goldrick-Rab, S. (2018). From the (academic) middle to the top: An evaluation of the AVID/TOPS college access program. Journal of Education for Students Placed at Risk.
- clviii Bryan, J., Moore-Thomas, C., Day-Vines, N.L. & Holcomb-McCoy, C. (2011). School counselors as social capital: The effects of high school college counseling on college application rates. Journal of Counseling & Development; Lapan, R.T. Gysbers, N.D., Bragg, S. & Pierce, M.E. (2012). Missouri professional school counselors: Ratios matter, especially in high-poverty schools. Professional School Counseling; B. Stanley, et al., "Missouri Professional School Counselors: Ratios Matter, Especially in High-Poverty Schools," Prof. School Counseling, 2018.
- McKillip, M.E.M, Rawls, A. & Barry, C. (2018). Improving college access: A review of research on the role of high school counselors. Professional School Counseling; Mulhern, C. (2020). Better school counselors, better outcomes. Education Next; Woods, C.S. & Domina, T. (2015). The school counselor caseload and the high school-to-college pipeline. Teachers College Record.
- dix Patel, P. & Clinedinst, M. (2019). State-by-state student-to-counselor ratio maps by school district. National Association for College Admission Counseling.
- clx Karp, S. (2017). Few college counselors at CPS add uncertainty to post-grad push. WBEZ Chicago Public Radio. clxi State Collaborative on Reforming Education. (2016). Prepared for day one: Improving the effectiveness of earlycareer teaching. https://view.joomag.com/prepared-for-day-one/0061262001476730043?short; Chicago Public Schools. CPS teacher Residency Program. https://lead.cps.edu/opportunities/cps-teacher-residency-program/. Tennessee's program is one of only eight in 2019 receiving funding through the National Center for Teacher Residencies' Black Educator Initiative.
- clxii Stephan, J.L. & Rosenbaum, J.E. (2013). Can high schools reduce college enrollment gaps with a new counseling model?. Educational Evaluation and Policy Analysis.
- clxiii Athanases, S.Z., Achinstein, B., Curry, M.W. & Ogawa, R.T. (2016). The promise and limitations of a college-going culture: Toward cultures of engaged learning for low-SES Latina/o youth," Teachers College Record; Bryan, J., Farmer-Hinton, R., Rawls, A. & Woods, C.S. (2018). Social capital and college-going culture in high schools: The effects of college expectations and college talks on students' postsecondary attendance. Professional School Counseling; Knight-Manuel, M.G., Marciano, J.E., Wilson, M., Jackson, I., Vernikoff, L., Zuckerman, K.G. & Watson,

- V.W.M. (2016). It's all possible: Urban educators' perspectives on creating a culturally relevant, schoolwide, collegegoing culture for Black and Latino male students. Urban Education.
- dxiv Johnson, D.W. (2014). College-going culture in urban high schools: Building relational infrastructure to support postsecondary attainment, University of Chicago.
- clay Mountjoy, J. (2019). Community colleges and upward mobility. American Economic Review.
- clxvi Jaggars, S. S. (2020). A broken 'promise'? How college Promise programs can impact high-achieving, middleincome students. Third Way.
- clxvii Akers, B. & Chingos, M.M. (2016). Game of loans: The rhetoric and reality of student debt. Princeton, NJ: Princeton University Press; Baum, S. (2016). Student debt: Rhetoric and realities of higher education. New York: Palgrave Pivot.
- clxviii Hoxby, C.M. & Turner, S. (2015). What high-achieving low-income students know about college. American Economic Review; McDonough, P.M. & Calderone, S. (2006). The meaning of money: Perceptual differences between college counselor and low-income families about college costs and financial aid. American Behavioral Scientist; Roderick, M. Nagaoka, J., Coca, V. & Moeller, E. (2008). From high school to the future: potholes on the road to college. Chicago, IL: Consortium on Chicago School Research.
- clxix Grinder, S.A., Kelly-Reid, J.E. & Mann, F.B. (2018). Postsecondary institutions and cost of attendance in 2016-2017; Degree and other awards conferred, 2015-2016; and 12-month enrollment, 2015-2016. U.S. Department of Education/National Center for Educational Statistics; Wyner, J.S. Bridgeland, J.M. & Diulio, J.J. (2018). Achievement trap: How America is failing millions of high-achieving students from lower-income families. clxx McDonough, P.M. & Calderone, S. (2006). The meaning of money: Perceptual differences between college
- counselors and low-income families about college costs and financial aid. American Behavioral Scientist. clxxi Perna, L.W., Leigh, E.W., Carrol, S. (2018). Free college: A new and improved state approach to increasing educational attainment?. American Behavioral Scientist.
- clxxii Institute for Higher Education Policy. (2011). Initial college attendance of low-income young adults. Washington, D.C.: Institute for Higher Education Policy. But see Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity; National Center for Education Statistics. (2012). Beginning postsecondary students.
- classiii Lau, C.V. (2020). The effect of tuition-free community college. Federal Trade Commission.
- clxxiv Advisory Committee on Student Financial Assistance. (2010). The rising price of inequality: How inadequate grant aid limits college access and persistence. Report to Congress and the Secretary of Education.
- clxxv Chetty, R., Friedman, J.F., Saez, E., Turner, N. & Yagan, D. (2017). Mobility report cards: The role of colleges in intergenerational mobility, Human Capital and Economic Opportunity Working Group, Working Paper 2017-059, clxxvi Jaggers, S.S. (2020). A broken 'promise'? How college promise programs can impact high-achieving, middleincome students. Third Way.
- clxxvii Whistle, W. & Hiler, T. (2019). Why free college could increase inequality. Third Way.
- clxxviii Avery, C., Howell, J., Pender, M. & Sacerdote, B. (2019). Policies and payoffs to addressing America's college graduation deficit. Brookings Papers on Economic Activity; Cohodes, S.R. & Goodman, J.S. (2014). Merit aid, college quality, and college completion: Massachusetts' Adams Scholarship as an in-kind subsidy. American Economic Journal; Goodman, J., Hurwitz, M. & Smith, J. (2017). Access to 4-year public colleges and degree completion. Journal of Labor Economics; Perna, L.W., Leigh, E.W. & Carrol, S. (2018). 'Free college: A new and improved state approach to increasing educational attainment? American Behavioral Scientist.
- cłxxix Dynarski, S. & Scott-Clayton, J. (2013). Financial aid policy: Lessons from Research. National Bureau of Economic Research. Working Paper No. 18710; Mishory, J. (2018). The future of statewide college Promise programs. The Century Foundation.
- dxxx Groen, J.A. (2011) Do merit-aid programs help states build skilled workforces? Change: The Magazine of Higher Learning: Heller, D.E. (2006). Merit aid and college access. Symposium on the Consequences of Merit-Based Student Aid. Wisconsin Center for the Advancement of Postsecondary Education. University of Wisconsin, Madison. clxxxi Taylor, S. & Pilar, W.D. (2018). Can undocumented students access free college programs? EdTrust.
- clxxxii College Board. Advising undocumented students. https://professionals.collegeboard.org/guidance/financialaid/undocumented-students.
- clxxxiii Flores, A. (2015). Undocumented students deserve greater access to higher education. Center for American Progress.
- clxxxiv Dynarski, S. & Scott-Clayton, J. (2002). The consequences of merit aid. National Bureau of Economics Research. Working Paper 9400; Heller, D.E., Marin, P. & Orfield, G. (2004). State merit scholarship programs and racial inequality. The Civil Rights Project. Harvard University, Massachusetts, 2004; Scott-Clayton, J. (2017). Undergraduate financial aid in the United States. American Academy of Arts & Sciences.
- clxxxv Billings, M. (2018). Understanding the design of college Promise programs, and where to go from here. Brookings.
- clxxxvi Mishory, J. (2018). The future of statewide college Promise programs. The Century Foundation. clxxxvii Dynarski, S. (2004). The new merit aid. In C.M. Hoxby (Ed.) College choices: The economics of where to go, when to go, and how to pay for it. Chicago: University of Chicago Press; Perna, L.W. (2010). Toward a more complete understanding of the role of financial aid in promoting college enrollment: The importance of context. In J.C. Smart

- (Ed.), Higher education: Handbook of theory and research. New York, NY: Springer. But see Andrews, R.J., DesJardins, S., & Ranchhod, V. (2010). The effects of the Kalamazoo Promise on college choice. Economics of Education Review; United States Government Accountability Office. (2018). Public high schools with more students in poverty and smaller schools provide fewer academic offerings to prepare for college. Report to the Ranking Member, Committee on Education and the Workforce, House of Representatives.
- clxxxviii Billings, M. (2018). Understanding the design of college promise programs, and where to go from here. Brookings Institute.
- clxxxix Billings, M. (2018). Understanding the design of college promise programs, and where to go from here. Brookings Institute; Mishory, J. (2018). The future of statewide college Promise programs. The Century Foundation; United States Government Accountability Office. (2018). Public high schools with more students in poverty and smaller schools provide fewer academic offerings to prepare for college. Report to the Ranking Member, Committee on Education and the Workforce, House of Representatives.
- exc Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity.
- exci Castleman, B.L. & Long, B.T. (2013). Looking beyond enrollment: The causal effect of need-based grants on college access, persistence, and graduation. National Bureau of Economic Research. Working Paper 19306; Goldrick-Rab, S., Kelchen, R., Harris, D.N. & Benson, J. (2015). Reducing income inequality in educational attainment: Experimental evidence on the impact of financial aid on college completion. Wisconsin Institute for Research on Poverty. IRP Discussion Paper 1393-12.
- excii The Research & Planning Group for California Community Colleges. (2010). Promoting the transition of high school students to college. https://rpgroup.org/Portals/o/Documents/Projects/Effective%20PracticesHS/High-School-Transition-Brief\_o.pdf.
- exciii Rodriguez, O. Mejia, M.C. & Johnson, H. (2016). Determining college readiness in California community colleges: A survey of assessment and placement policies. Public Policy Institute of California.
- exciv Asera, R., Gabriner, R. & Hemphill, D. (2017). Partnerships: Two case studies of intersegmental innovation in California. College Futures Foundation.
- exev Education Strategy Group. Rigorous K-12 assessments help reduce remediation, increase student success. https://edstrategy.org/resource/rigorous-k-12-assessments-help-reduce-remediation-increase-student-success/ exevi Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. Kalamazoo, MI: W.E. Upjohn Institute Press.
- exevii Rodriguez, O. Mejia, M.C. & Johnson, H. (2016). Determining college readiness in California community colleges: A survey of assessment and placement policies. Public Policy Institute of California.
- exeviii Rodriguez, O. Mejia, M.C. & Johnson, H. (2016). Determining college readiness in California community colleges: A survey of assessment and placement policies. Public Policy Institute of California; Scott-Clayton, J. (2018). Evidence-based reforms in college remediation are gaining steam – and so far living up to the hype. Brookings.
- excix Ran, F.X. & Lin, Y. (2019). The effects of corequisite remediation: Evidence from a statewide reform in Tennessee. Community College Research Center. Teachers College. Columbia University.
- cc Ran, F.X. & Lin, Y. (2019). The effects of corequisite remediation: Evidence from a statewide reform in Tennessee. Community College Research Center. Teachers College. Columbia University.
- cci Association of Certified College Funding Specialists. (2018). How to help students avoid the remedial education trap. https://www.accfs.com/blog/how-to-help-students-avoid-the-remedial-ed-trap.
- ceii Center for Postsecondary Success. (2019). Florida's development education reform improves student success, equity in Florida college system.
- cciii Scott-Clayton, J. (2018). Evidence-based reforms in college remediation are gaining steam and so far living up to the hype. Brookings.
- cciv Campaign for College Opportunity. (2019). Getting there II: Are California Community Colleges maximizing student completion of transfer-level math and English?; Zinshteyn, M. (2021). Tens of thousands of community college students still taking unnecessary remedial classes. CalMatters.
- ccv Association of Certified College Funding Specialists. (2018). How to help students avoid the remedial education trap. https://www.accfs.com/blog/how-to-help-students-avoid-the-remedial-ed-trap.
- ccvi Marcus, J. (2016). A solution as obvious as it is rare: Making high school graduates ready for college. Hechinger Report.
- cevii Southern, K. (2015). ACT update: indicators of college readiness in Tennessee. State Collaborative on Reforming Education.
- ccviii City Colleges of Chicago, Reinvention: Foundation for success.
- https://www.ccc.edu/menu/Documents/Reinvention/Reinvention%20chap%202%20FOR%20WEB.pdfhttps://www .ccc.edu/menu/Documents/Reinvention/Reinvention%20chap%202%20FOR%20WEB.pdf
- ccix McGee, K. (2020). Starting college behind. WBEZ Chicago Public Radio.
- ccx Jeffrey, A. & Jimenez, L. (2019). Math pathways: The way forward. Center for American Progress.
- cexi Jimenez, L., Sargrad, S., Morales, J. & Thompson, J. (2016). Remedial education: The cost of catching up; Center for American Progress; Marchitello, M. & Brown, C. (2015). Math matters: How the Common Core will help the United States bring up its grade on mathematics education. Center for American Progress.
- cexii Gewertz, C. (2016). H.S. classes offer bypass to remedial courses. EducationWeek.
- cexiii Gewertz, C. (2016). H.S. classes offer bypass to remedial courses. EducationWeek.

```
ccxiv Jeffrey, A. & Jimenez, L. (2019). Math pathways: The way forward. Center for American Progress.
```

- ccx Rodriguez, O. Mejia, M.C. & Johnson, H. (2016). Determining college readiness in California community colleges: A survey of assessment and placement policies. Public Policy Institute of California.
- cexvi Asera, R. Gabriner, R. & Hemphill, D. (2017). Partnerships: Two case studies of intersegmental innovation in California. College Futures Foundation.
- cexvii Barnett, E. (2016). Building student momentum from high school into college: Ready or not, it's time to rethink the 12th grade. Jobs for the Future.
- cexviii Barnett, E. (2016). Building student momentum from high school into college: Ready or not, it's time to rethink the 12th grade. Jobs for the Future; Grady, M. (2016). How high schools and colleges can team up to use data and improve student success. Jobs for the Future.
- cexix Grady, M. (2016). How high schools and colleges can team up to use data and improve student success. Jobs for
- cexx Asera, R. Gabriner, R. & Hemphill, D. (2017). Partnerships: Two case studies of intersegmental innovation in California. College Futures Foundation.
- cexxi Kane, T.J., Boatman, A., Kazokowski, W., Bennett, C., Hitch, R. & Weisenfeld. (2018). Remedial math goes to high school: The impact of the Tennessee SAILS program, Harvard University, Center for Education Policy,
- cexxii Kane, T.J., Boatman, A., Kazokowski, W., Bennett, C., Hitch, R. & Weisenfeld. (2018). Remedial math goes to high school: The impact of the Tennessee SAILS program. Harvard University. Center for Education Policy.
- cexxiii Kane, T.J., Boatman, A., Kazokowski, W., Bennett, C., Hitch, R. & Weisenfeld. (2018). Remedial math goes to high school: The impact of the Tennessee SAILS program. Harvard University. Center for Education Policy.
- cexxiv Kane, T.J., Boatman, A., Kazokowski, W., Bennett, C., Hitch, R. & Weisenfeld. (2018). Remedial math goes to high school: The impact of the Tennessee SAILS program. Harvard University. Center for Education Policy.
- cexxv Kane, T.J., Boatman, A., Kazokowski, W., Bennett, C., Hitch, R. & Weisenfeld. (2018). Remedial math goes to high school: The impact of the Tennessee SAILS program. Harvard University. Center for Education Policy. cexxvi Cortes, K. Goodman, J. & Normi, T. (2013). A double dose of Algebra. Education Next.
- ccxxvii Loewenberg, D. (2020). A digital path to a diploma: Online credit-recovery classes are a lifeline and ripe for abuse. Education Next; Xu, D. & Jaggars, S.S. (2013). Adaptability to online learning: Differences across types of students and academic subject areas. Community College Research Center. Working Paper No. 54. Teachers College. Columbia University.
- cexxviii Community College Research Center. (2012-3018). Reshaping the college transition: Study of early assessment and curricular interventions. Teachers College. Columbia University.
- cexxix Barnett, E.A., Chavarin, O. & Griffin, S. (2018). Math transition courses in context: Preparing students for college success. Community College Research Center. Teachers College. Columbia University.
- cexxx Mokher, C.G., Leeds, D.M. & Harris, J.C. (2017). Adding it up: How the Florida college and career readiness initiative impacted developmental education. Educational Evaluation and Policy Analyses.
- cexxxi Pheatt, L, Trimble, M.J. & Barnett, E. (2016). Improving the transition to college: Estimating the impact of high school transition courses on short-term college outcomes. Community College Research Center. Teachers College. Columbia University; Southern Regional Education Board. (2017). Readiness courses: Preparing students for college and careers. https://www.sreb.org/sites/main/files/file-attachments/17v05\_ readinesscourses\_preparing\_final.pdf. ccxxxii Trimble, M.J., Pheatt, L. Papikyan, T. & Barnett, E.A. (2017). Can high school transition courses help students avoid college remediation? Estimating the impact of a transition program in a large urban district. Community College Research Center. Teachers College. Columbia University.
- cexxxiii Barnett, E., Fay, M.P., Trimble, M.J. & Pheatt, L. (2013). Reshaping the college transition: Early college readiness assessments and transition curricula in four states. Community College Research Center. Teachers College. Columbia University; Trimble, M.J., Pheatt, L. Papikyan, T. & Barnett, E.A. (2017). Can high school transition courses help students avoid college remediation? Estimating the impact of a transition program in a large urban district. Community College Research Center. Teachers College. Columbia University.
- cexxxiv Bryant, R.T. (2015). College preparation for African American students: Gaps in the high school educational experience. CLASP.
- cexxxv Bryant, R.T. (2015). College preparation for African American students: Gaps in the high school educational experience. CLASP.
- cexxxvi Moore, G.W., Slate, J.R., Edmonson, S.L., Combs, J.P., Bustamante, R, & Onwuegbuzie, A.J. (2010). High school students and their lack of preparedness for college: A statewide study. Education and Urban Society.
- cexxxvii Kahlenberg, R.D., Shireman, R., Quick, K. & Habash, T. (2018). Policy strategies for pursuing adequate funding of community colleges. The Century Foundation.
- cexxxviii Huelsman, M. (2018). A blueprint for college without debt: A policy and messaging guide for states to make higher education affordable again. Demos.
- cexxix Cannon, B. & Joyalle, J. (2016). Rethinking the federal-state partnership for free community college: Early indicators from Oregon. Education Commission of the States.
- cexi Association of Community College Trustees. (2021). First-dollar vs. last-dollar Promise models: Methods of funding for college Promise programs. https://www.acct.org/page/first-dollar-vs-last-dollar-promise-models. cexli Rath, B., Rock, K. & Laferriere, A. (2013). Pathways through college: Strategies for improving community college student success. One Piece of the Pie.

- cexlii Kahlenberg, R.D., Shireman, R., Quick, K. & Habash, T. (2018). Policy strategies for pursuing adequate funding of community colleges. The Century Foundation; Revealing Institutional Strengths and Challenges. (2019). What challenges to success do community college students face?. https://www.risc.college/sites/default/files/2019-01/RISC 2019 report natl.pdf.
- cexiiii Goldrick-Rab, S. & Cady, C. (2018). Supporting community college completion with a culture of caring: A case study of Amarillo College. Temple University & Wisconsin Hope Lab.
- cexliv Burt, C. (2021). The \$3T questions: Is help coming for community college students? University Business. cextv McDonnell, R.P. & Soricone, L. (2014). Promoting persistence through comprehensive student supports. Jobs for the Future.
- ccxlvi Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity.
- cextvii CUNY. What is ASAP?. https://www1.cuny.edu/sites/asap/about/; Gupta, H. (2017). The power of fully supporting community college students. MDRC; Napolitano, M. & Wu, A. (2010). The Accelerated Study in Associate Programs: A successful academic advising model. The Mentor: An Academic Advising Journal.
- ccxlviii Rios-Aguilar, C. & Dell-Amen, R. (2019). Taking history, funding, and current challenges into account when discussing race, ethnicity, and completion in community colleges. American Council on Education. Race and Ethnicity in Higher Education: The Century Foundation Task Force on Preventing Community Colleges from Becoming Separate and Unequal. (2013). Bridging the higher education divide: Strengthening community colleges and restoring the American dream. New York: The Century Foundation Press.
- cexlix McCurtrie, B. (2018). Georgia State U. made its graduation rate jump. How?. Chronicle of Higher Education. ccl Glenn, L. (2020). How are community college students different?. Community College Daily.
- celi Kahlenberg, R.D. (2015). How higher education funding shortchanges community colleges. The Century Foundation.
- celii Kahlenberg, R.D. (2015). How higher education funding shortchanges community colleges. The Century Foundation.
- ccliii McDonnell, R.P. & Soricone, L. (2014). Promoting persistence through comprehensive student supports, Jobs for the Future.
- ccliv Center for Community College Student Engagement. (2013). A matter of degrees: Engaging practices, engaging students (High impact practices for community college student engagement). Community College Leadership Program. The University of Texas at Austin.
- cely Association of Community College Trustees. (2021). First-dollar vs. last-dollar Promise models: Methods of funding for college Promise programs. https://www.acct.org/page/first-dollar-vs-last-dollar-promise-models. celvi State Collaborative on Reforming Education. (2020). State of education in Tennessee: Expanding student success. cclvii Tennessee Achieves. Mentors. https://tnachieves.org/mentors/.
- cclviii Paulus, E. 2015). Student mentoring in community colleges. League for Innovation in the Community College. celix Dahlburg, M.L. & Byars-Winston, A. (2019). Why does mentoring matter?. In M.L. Dahlburg & A. Byars-Winston (Eds.). The science of effective mentorship. Washington, D.C.: National Academies Press.?
- cclx Crisp. G. (2010). The impact of mentoring on the success of community college students. The Review of Higher Education.
- celxi Fishman, T., Ludgate, A. & Tutak, J. (2017). Success by design. Improving outcomes in American higher education. Deloitte.
- cclxii Chen, G. (2021). Mentoring at community college: Helping students succeed. Community College Review; Collier, P. (2017). Why peer mentoring is an effective approach for promoting college student success. Metropolitan Universities; Paulus, E. (2015). Student mentoring in community colleges. League for Innovation in the Community College.
- celxiii Billings, M. (2018). Understanding the design of college promise programs, and where we go from here.
- celxiv Boggs, B.G. (2019). A promise is a promise: Free tuition programs and how they work. National Conference of State Legislatures; Allen, S.G. (2018). Foundation report advises on college 'Promise' programs. Diverse Issues in Higher Education.
- celxy Allen, S.G. (2018). Foundation report advises on college 'Promise' programs. Diverse Issues in Higher Education. celxvi Carruthers, C.K., Fox, W.F. & Jepsen, C. (2018). Promise kept? Free community college and attainment in Tennessee.
- celxvii Boggs, B.G. (2019). A promise is a promise: Free tuition programs and how they work. National Conference of State Legislatures.
- celxviii Cohodes, S. R. & Goodman, J.S. (2014). Merit aid, college quality, and college completion: Massachusetts' Adams Scholarship as an in-kind subsidy. American Economic Journal: Applied Economics. But see Brand, J.E., Pfeffer, F.T. & Goldrick-Rab, S. (2014). The community college effect revisited: The importance of attending to heterogeneity and complex counterfactuals. Sociological Science; Miller, M.T. & Kissinger, D.B. (2007). Connecting rural community colleges to their communities. New Directions for Community Colleges.
- cclxix Baum, S. & Turner, S. (2019). Free tuition is the opposite of progressive policymaking. The Washington Post.
- cclxx College Promise. (2020). Catalog of local and state college Promise programs.
- cclxxi The Ayers Foundation. (2019-2020). Tennessee Promise student handbook.
- celexii The University of Tennessee System. UT Promise. https://tennessee.edu/ut-promise/.

- cclxxiii University of Illinois Office of Student Financial Aid. Illinois Promise. https://osfa.illinois.edu/types-ofaid/other-aid/illinois-promise/.
- celxxiv Winograd, M. & Lubin, M. (2020). Tuition-free college is critical to our economy. EdSource.
- cclxxv Powell, F. & Kerr, E. (2020). Schools that meet full financial aid with no loans. U.S. News.
- celxxvi Sacerdote, B. (2020). Here's what happens when community college is made free. The Conversation.
- celxxvii Carruthers, C. (2019). Five things to know about the Tennessee Promise scholarship. Brookings.
- celxxviii Sacerdote, B. (2020). Here's the downside of making community college free. The Conversation.
- celxxix Avery, C., Howell, J. Pender, M. & Sacerdote, B. (2019). Policies and payoffs to addressing America's college graduation deficit. Brookings.
- celxxx Sacerdote, B. (2020). Here's the downside of making community college free. The Conversation.
- cclxxxi Barshay, J. (2019). Economists find free community college can backfire. Hechinger Report.
- cclxxxii Goodman, J. Hurwitz, M. & Smith, J. (2017). Access to four-year public colleges and degree completion. Journal of Labor Economics.
- cclxxxiii Akers, B. (2021). You want free community college do it with a Pell grant expansion. The Hill.
- cclxxxiv Giancola, J. & Davidson, E. (2015). Breaking down walls: Increasing access to four-year colleges for highachieving community college students. Jack Kent Cooke Foundation.
- celxxxv Monaghan, D.V. & Attewell, P. (2015). The community college route to the bachelor's degree. Education Evaluation and Policy Analysis; Quilantan, B. (2019). The potential disaster of free community college. Politico.
- celxxxvii Zarling, P. (2018). How to improve transfer outcomes for community college students. Higher Ed Dive. celxxxviii Shapiro, D., Dundar, A., Huie, F., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2017). Tracking transfer: Measures of effectiveness in helping community college students to complete bachelor's degrees. Signature Report No. 13. Herndon, VA: National Student Clearinghouse Research Center.
- celexixix Zarling, P. (2018). How to improve transfer outcomes for community college students. Higher Ed Dive.
- cexc Zarling, P. (2018). How to improve transfer outcomes for community college students. Higher Ed Dive.
- cexci Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- cexcii Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and four-year colleges. The Aspen Institute & Community College Research Center.
- cexciii Monaghan, D.B. & Attewell, P. (2014). The community college route to the bachelor degree. Educational Evaluation and Policy Analysis.
- cexciv Monaghan, D.B. & Attewell, P. (2014). The community college route to the bachelor degree, Educational Evaluation and Policy Analysis.
- cexev Monaghan, D.B. & Attewell, P. (2014). The community college route to the bachelor degree. Educational Evaluation and Policy Analysis.
- cexevi Monaghan, D.B. & Attewell, P. (2014). The community college route to the bachelor degree. Educational Evaluation and Policy Analysis.
- ccxcvii Zarling, P. (2018). How to improve transfer outcomes for community college students, Higher Ed Dive.
- cexcyiii Elliott, D.C. & Lakin, J.M. (2020). Unparallel pathways: Exploring how divergent academic norms contribute to the transfer shock of STEM students. Community College Journal of Research and Practice.
- cexcix Community College Research Center. (2015). What we know about transfer. Teachers College. Columbia University.
- ccc Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- cci Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- ccii Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook; Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- cciii Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- ccciv Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- cccv Xu, D., Ran, F.X., Fink, J. Jenkins, D. & Dundar, A. (2017). Strengthening transfer paths to a bachelor's degree: Identifying effective two-year to four-year college partnerships. Community College Research Center. Teachers College. Columbia University.
- cccvi Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and fouryear colleges. The Aspen Institute & Community College Research Center.
- cccvii Crowe, W., Smith-Jaggars, S. & Soto, C. (2020). It's time to fix the broken higher education transfer pipeline. The
- cccviii Wyner, J., Deane, K.C., Jenkins, D. & Fink, J. (2016). The transfer playbook: Essential practices for two- and four-year colleges. The Aspen Institute & Community College Research Center.
- cccix Gordon, L. (2021). Easing the transfer path in California from community colleges to universities. EdSource.
- cccx Gordon, L. (2021). Easing the transfer path in California from community colleges to universities. EdSource.

```
cccxi Gordon, L. (2021). Easing the transfer path in California from community colleges to universities. EdSource.
cccxii Association of American Colleges & Universities. (2019). Read to success: community college students at four-
vear institutions. AAC&U News.
```

cccxiii Association of American Colleges & Universities. (2019). Read to success: community college students at fouryear institutions. AAC&U News.

cccxiv Center for Community College Student Engagement. (2012). A Matter of degrees: Promising practices for community college student success. https://www.ccsse.org/docs/Matter\_of\_Degrees.pdf.

cccxy MDRC. (2010). Can improved student services boost community college student success?.

https://www.mdrc.org/publication/can-improved-student-services-boost-community-college-student-success; Visher, M.G., Butcher, K.F. & Cerna, O.S. (2010). Guiding developmental math students to campus services: An impact evaluation of the Beacon Program at South Texas College. Achieving the Dream.

cccxvi MDRC. (2010). Can improved student services boost community college student success?.

https://www.mdrc.org/publication/can-improved-student-services-boost-community-college-student-success. cccvii MDRC. (2010). Can improved student services boost community college student success?.

https://www.mdrc.org/publication/can-improved-student-services-boost-community-college-student-success; Visher, M.G., Butcher, K.F. & Cerna, O.S. (2010), Guiding developmental math students to campus services; An impact evaluation of the Beacon Program at South Texas College. Achieving the Dream.

cccxviii MDRC. (2010). Can improved student services boost community college student success?.

https://www.mdrc.org/publication/can-improved-student-services-boost-community-college-student-success. cccxix Almeida, D.J., Byrne, A.M. & Smith, R.M. (2019). Importance of social capital in first-generation college students' academic success. Journal of College Student Retention: Research, Theory & Practice; Dokuka, S. (2020). How academic achievement spreads: The role of distinct social networks in academic performance diffusion. PLOS ONE; Stadtfeld, C., Voros, Andras, Elmer, T, Boda, Z. & Raabe, I.J. (2019). Integration in emerging social networks explains academic failure and success. Proceedings of the National Academy of Sciences of the United States of America.

cccx O'Brien, J. & Milliron, M. (2019). Catching the waves: Technology and the community college. Educause Review. cccxxi Haagsman, M.E., Scager, K., Boonstra, J. & Koster, M.C. (2020). Pop-up questions within education videos: Effects on students' learning. Journal of Science Education and Technology; Licorish, S.A., Owen, H.E., Daniel, B. & George, J. L. (2018). Students' perception of Kahoot!'s influence on teaching and learning. Research and Practice in Technology Enhanced Learning.

cccxxii Rice, P., Beeson, P. & Blackmore-Wright, J. (2019). Evaluating the impact of a quiz questions within an educational video. TechTrends.

cccxxiii Gerrity, S. (2020). Community building in the community college classroom. Inside Higher Ed.

cccxxiv Bombardieri, M. (2020). Tapping local support to strengthen community colleges. Center for American Progress; National Center for Education Statistics. Trend generator.

https://nces.ed.gov/ipeds/TrendGenerator/app/build-table/2/2?rid=1&cid=9; National Student Clearinghouse Research Center. (2017). Two-year contributions to four-year

 $completions.\ https://nscresearchcenter.org/snapshotreport-two year contribution four year completions 26/.$ cccxxv Hillman, N. (2020). Why rich colleges get rich & poor colleges get poorer: The case for equity-based funding in higher education. Third Way; Deming, D.J. & Walters, C.R. (2017). The impact of price caps and spending cuts on U.S. postsecondary attainment. National Bureau of Economic Research. Working Paper 23736.

cccxxvi Mitchell, M., Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.

cccxxvii Yuen, V. (2020). The \$78 billion community college funding shortfall. Center for American Progress. cccxxviii Baum, S. & Kurose, C. (2013). Community colleges in context: Exploring financing of two and fouryear institutions. In Century Foundation task force on preventing community colleges from becoming separate and unequal. Bridging the higher education divide: Strengthening community colleges and restoring the American dream. New York: Century Foundation Press; Desrochers, D.M. & Hurlburt, S. (2016). Trends in college spending 2003-2013. Washington D.C.: American Institutes for Research; Kahlenberg, R.D. (2015). How higher education funding shortchanges Community colleges. The Century Foundation.

cccxxix Holzer, H.J. & Baum, S. (2017). Making college work: Pathways for success for disadvantaged students. Washington, D.C.: Brookings Institution Press.

cccxxx Yuen, V. (2020). The \$78 billion community college funding shortfall. Center for American Progress. cccxxxi Mullin, C.M (2010). Doing more with less: The inequitable funding of community colleges. American Association of Community Colleges; Mullin, C.M. & Honeyman, D.S. (2007). The funding of community colleges: A typology of state funding formulas. Community College Review.

cccxxxii Murakami, K. (2020). Racial equity in funding for higher ed. Inside Higher Ed.

cccxxxiii Kahlenberg, R.D. (2015). How higher education funding shortchanges Community colleges. The Century Foundation.

cccxxxiv Kahlenberg, R.D., Shireman, R. Quick. K, & Habash, T. (2018) Policy strategies for pursuing adequate funding for community colleges. The Century Foundation.

```
cccxxxv Kahlenberg, R.D., Shireman, R. Quick, K, & Habash, T. (2018) Policy strategies for pursuing adequate funding
for community colleges. The Century Foundation.
```

- cccxxxviii Deming, D.J. & Walters, C.R. (2017). The impact of price caps and spending cuts on U.S. postsecondary attainment. National Bureau of Economic Research. Working Paper 23736; Hillman, N. (2020). Why rich colleges get richer & poor colleges get poorer: The case for equity-based funding in higher education. Third Way.
- cccxxxix Dyarnski, S. (2018). Online courses are harming the students who need the most help. New York Times, cccxl Hillman, N. (2016). Why performance-based college funding doesn't work. The Century Foundation.
- cccxli Mitchell, M., Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.
- cccxiii Jones, T. (2014). Performance funding at MSIs: Considerations and possible measures for public minorityserving institutions. Southern Education Foundation.
- cccxliii Mitchell, M., Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.
- cccxliv Doughterty, K.J., Jones, S.M., Larh, H., Natow, R.S., Pheatt, L. & Reddy, V. (2014). Performance funding for higher educations: Forms, origins, impacts, and futures. The ANNALS of the American Academy of Political and Social Science; Hillman, N., Tandberg, D. & Fryar, A.H. (2014). Evaluating the impacts of 'new' performance funding in higher education. Educational Evaluation and Policy Analysis.
- cccxlv Bound, J., Lovenheim, M.F. & Turner, S. (2010). Why have college completion rates declined? An analysis of changing student preparation and collegiate resources. American Economic Journal: Applied Economics. cccxivi Hillman, N. (2020). Why rich colleges get rich & poor colleges get poorer: The case for equity-based funding in higher education. Third Way.
- cccdvii Whistle, W. (20200. Joe Biden and Bernie Sanders: Free college student loan forgiveness, and crack down on for-profit colleges. Forbes.
- cccxlviii Bombardieri, M. (2020). Tapping local support to strengthen community colleges. Center for American
- cccxlix Rheinheimer, D.C., Grace-Odeleye, B., Francois, G.E. & Kusorgbor, C. (2010). Tutoring: A support strategy for at-risk students. Learning Assistance Review; Rheinheimer, D.C. & McKenzie, K. (2011). The impact of tutoring on the academic success of undeclared students. Journal of College Reading and Learning.
- cccl Di Tommaso, K. (2012). Developmental students: The challenge of peer relationships. Community College Journal of Research and Practice; Kostecki, J. & Bers, T. (2008). The effect of tutoring on student success. Journal of Applied Research in the Community College; Rheinheimer, D.C. & McKenzie, K. (2011). The impact of tutoring on the academic success of undeclared students. Journal of College Reading and Learning.
- cccli Bailey, T.R. &Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges. New Agenda Series. Lumina Foundation for Education; Center for Community College Student Engagement. (2012). A matter of degrees: Promising practices for community college student success--A first look. Austin, TX. The University of Texas at Austin, Community College Leadership Program, Center for Community College Student Engagement; Colvin, J.W. (2007). Peer tutoring and social dynamics in higher education. Mentoring & Tutoring: Partnership in Learning; Comfort, P.P. (2011). The effect of peer tutoring on academic achievement during practical assessments in applied sports science students. Innovations in Education & Teaching International; Cooper, E. (2010). Tutoring center effectiveness: The effect of drop-in tutoring. Journal of College Reading and Learning; Hendriksen, S.I., Yang, L., Love, B. & Hall, M.C. (2005). Assessing academic support: The effects of tutoring on student learning outcomes. Journal of College Reading and Learning.
- ccclii Horn, M. (2019). Could on-demand online tutoring be the gateway to personalizing learning for colleges? Forbes. cccliii Gibbs, S. (2019). Effective tutoring: Assembling the pieces. Information for Educators; Gordon, E.E., Morgan, R.R., O'Malley, C.J. & Ponticell, J. (2007). The tutoring revolution. Lanham, MD: Rowman & Littlefield Education. cccliv RP Group. (2014). Practically speaking: Community college practices that help (re)define student support. cccly The Community College League of California. (2017). Elevating equity for social mobility: Examples of equityfocused practices and partnership.
- ccclvi The Community College League of California. (2017). Elevating equity for social mobility: Examples of equityfocused practices and partnership.
- ccclvii Arendale, D.R. (2014). Supplemental instruction and video-based supplemental instruction: Annotated bibliography 2014. Postsecondary Teaching and Learning Department. College of Education and Human Development. University of Minnesota; Hryciw, D., Tangalakis, K., Supple, B. & Best, G. (2011). Evaluation of a peer mentoring program for a mature cohort of first-year undergraduate paramedic students. Advances in Physiology Education.
- ccclviii Coleman, K. (2018). Learning commons innovative tutoring plans for students. The Observer.
- ccclix Central Washington University. Academic success: Peer-assisted learning, https://www.cwu.edu/academicsuccess/pals/pals.

cccxxxvi Le, C. Pisacreta, E.D., Ward, J.D., Margolis, J. & Booth, H. (2020). Policies to ensure equitable access to wellresourced colleges and universities. Ithaka SR.

cccxxxvii Kahlenburg, R.D. (2014). Community of equals?. Democracy Journal.

- ccclx Arendale, D.R. (2014). Supplemental instruction and video-based supplemental instruction: Annotated bibliography 2014. Postsecondary Teaching and Learning Department. College of Education and Human Development. University of Minnesota.
- ccclxi U-Aspire. Policy agenda. https://www.uaspire.org/BlankSite/media/uaspire/uAspire-Policy-Agenda.pdf. ccclxii Subcommittee on Higher Education and Workforce Development. (2017). Improving federal student aid to better meet the needs of students. Hearing. Committee on Education and the Workforce. U.S. House of Representatives. Serial No. 115-10.
- ccclxiii Bill & Melinda Gates Foundation. (2014). A federal work study reform Agenda to better serve low-income students.
- ccclxiv AlQasisi, R. (2019). Senate democrats unveil comprehensive higher education bill. National College Attainment Network; Gomez, D., Stanford. A. & Sung, C. (2019). Making it possible: Solutions for increasing Maryland college completion rates. Maryland Executive Office proposal.
- ccclary National Association of Student Financial Aid Administrators. (2016). Federal Work-Study Research: National
- ccclavi Gomez, D., Stanford, A. & Sung, C. (2019). Making it possible: Solutions for increasing Maryland college completion rates. Maryland Executive Office proposal.
- ccclxvii National Association of Student Financial Aid Administrators. (2016). Federal Work-Study Research: National survey report.
- ccclxviii National Association of Student Financial Aid Administrators. (2016). Federal Work-Study Research: National survey report.
- ccclxix National Association of Student Financial Aid Administrators. (2016). Federal Work-Study Research: National survey report.
- ccclxx American Association of Collegiate Registrars and Admissions Offices, Higher Education Act.
- https://www.aacrao.org/advocacy/issues/higher-education-act/overview-of-the-college-affordability-act. ccclxxi Alstadt, D. (2014). Earn to learn: How states can reimagine and reinvest in work-study to help low-income adults pay for college, enhance their academic studies, and prepare for post-college careers. The Working Poor Families Project; Goodman, P. & King-Simms, S. (2005). Student success through policy and practice. Community College Journal; Hamilton, G. & Scrivener, S. (2012). Facilitating postsecondary education and training for TANF recipients. Office of Planning, Research and Evaluation. Administration for Children and Families.
- ccclxxii Ma, J. & Baum, S. (2016). Trends in community colleges: Enrollment, prices, student debt, and completion. College Board.
- ccclxxiii McPherson, M. & Baum, S. (2017). The federal-state higher education Partnership, Urban Institute.
- ccclxxiv Doyle, W.R. (2020). Throwing out the 'recession playbook' for higher education: The need for joint federal-state policy in the wake of COVID-19. Third Way.
- ccclxxv Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity.
- ccchxxvi Deming, D.J. & Walters, C.R. (2018). The impact of state budget cuts on U.S. postsecondary attainment. National Bureau of Economic Research.
- ccclxxvii Mitchell, M. Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.
- ccclxxviii Mitchell, M. Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.
- ccclxxix Mitchell, M. Leachman, M. & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities.
- ccclxxx Long, B.T. (2010). Making college affordable by improving aid. Issues in Science and Technology.
- ccclxxxi Chen, V. (2004). The Georgia HOPE Scholarship. Policy Perspectives.
- ccclxxxiii Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity. But see Dynarski, S. (2004). The new merit aid. In C.M. Hoxby (Ed.) College choices: The economics of where to go, when to go, and how to pay for it. Chicago: University of Chicago.
- ccclxxxiii Fitzpatrick, M.D. & Jones, D. (2012). Higher education, merit-based scholarships and post-baccalaureate migration, National Bureau of Economic Research. Working Paper No. 18530; Scott-Clayton, J. & Zafar, B. (2016). Financial aid, debt management and socioeconomic outcomes: Post-college effects of merit-based aid. National Bureau of Economic Research. Working Paper No. 22574; Sjoquist, D.L. & Winters, J.V. (2014). State merit-based financial aid programs and college attainment. Journal of Regional Science.
- ccclxxxiv Cohodes, S.R. & Goodman, J.S. (2014). Merit aid, college quality, and college completion: Massachusetts' Adams Scholarship as an in-kind subsidy. American Economic Journal; Goodman, J., Hurwitz, M. & Smith, J. (2017). Access to 4-year public colleges and degree completion. Journal of Labor Economics.
- ccclxxxv Delaney, J.A. & Doyle, W.R. (2011). State spending on higher education: Testing the balance wheel over time. Journal of Education Finance.
- ccclxxxvi McPherson, M. & Baum, S. (2017). The federal-state higher education Partnership. Urban Institute; Hurley, D.J., Harnisch, T.L. & Nassirian, B. (2014). A proposed federal matching program to stop privatization of public higher education. PolicyMatters.
- ccclxxxvii Doyle, W.R. (2020). Throwing out the 'recession playbook' for higher education: The need for joint federalstate policy in the wake of COVID-19. Third Way.

ccclxxxviii Baum, S. & McPherson, M. (2020). Strengthening the federal role in the federal-state partnership for funding higher education. Urban Institute.

ccclxxxix Debt-Free College Act of 2019, S.672, 116th Cong. (2019).

cccxc Doyle, W. R. (2013). A new partnership: Reshaping the federal and state commitment to need-based aid. Committee for Economic Development; Hurley, D.J., Harnisch, T.L. & Nassirian, B. (2014). A proposed federal matching program to stop privatization of public higher education. PolicyMatters.; Deming, D.J. (2017). The economics of free college. Economics for Inclusive Prosperity; Laitinen, A., Delisle, J., Fishman, R., McCann, C., Carey, K., Holt, A. & Burd, S. (2013). Rebalancing resources and incentives in federal student aid. New America Foundation.

cccxci Kirshner, J.A. (2019). Broke: Hardship and resilience in a city of broken promises. New York: St. Martin's. cccxcii DeBaun, B. (2019). Students in higher-poverty school districts are less likely to apply for financial aid. National College Access Network.

