KNOX PROMISE AND NASHVILLE GRAD: AN EARLY LOOK AT COLLEGE OUTCOMES

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Executive Summary

Knox Promise provides coaching and need-based financial aid to Knox County high school graduates who enroll in community and technical colleges as Tennessee Promise students. Nashville GRAD is a similar program for Davidson County students enrolling in Nashville State Community College and TCAT Nashville.

In this report, we review college persistence, credit completion, and grade point averages for the first two cohorts of students participating in Knox Promise and Nashville GRAD. Available data allow us to summarize these outcomes for their first 1-2 years of college. Key findings are as follows:

- About one-third of Knox Promise students were still enrolled in college two years after high school graduation, and another 21% earned a certificate or degree in that time.
- Knox Promise students who engaged with key program supports, including coach connections and completion grants, were more likely to persist in college, complete all attempted credits, and earn a certificate or degree than students who did not engage with those supports.
- One-third of the 2019 Nashville GRAD cohort were still enrolled in college two years later, and another 13% had earned a credential in that time. The second cohort, who enrolled in fall 2020, had similar or better credit and GPA outcomes than their statewide counterparts and was 11% likely to earn a college credential in their first year, versus 6% statewide.

This is the first in a series of reports on efforts to supplement the tuition-free guarantee inherent in Tennessee Promise. See Carruthers and Pratt (2023) for a supplemental analysis focused on Knox Promise participants and their postsecondary progress up to 3 years after starting college. Up front, we will note that results in this report are purely descriptive and should not be interpreted as causal effects of Knox Promise or Nashville GRAD programs. As the Knox Promise model spreads statewide, these findings will serve as a reference point for future research on these and related programs.

Section 1: Knox Promise and Nashville GRAD Programs

Knox Promise

Knox Promise was designed to increase college attendance and graduation, beginning as a pilot serving the 2019-2021 cohorts of Knox County high school graduates. The program is a financial aid and mentoring supplement to Tennessee Promise, which has provided tuition-free community and technical college to high school graduates since 2015. In 2022, major components of Knox Promise launched statewide through the tnAchieves COMPLETE program.

Tennessee Promise is a last-dollar scholarship, meaning that the program covers any remaining tuition and fee balances after other grants and scholarship have been applied. Last-dollar scholarships like Tennessee Promise tend to provide less financial aid to lower-income students, who qualify for need-based federal and state grants that oftentimes exceed community and technical college tuition. In addition, tuition-only scholarships cannot assist with nonacademic expenses that may derail a student's progress toward a degree. Knox Promise provides an additional layer of college coaching and need-based financial aid for all Knox County high school graduates who enroll in a community or technical college and retain their Tennessee Promise eligibility.

Knox Promise financial support includes need-based completion grants, funding up to $1,500 per term for nonacademic expenses. Completion grants are available to lower-income Tennessee Promise students who are eligible for Federal Pell grants, who submit a request with documented need, and who have been in contact with a tnAchieves Completion Coach. The grants can be used toward $100 in transportation (gas, rideshare, or a bus pass), $100 for grocery gift cards, a standard computer, materials required in a class syllabus, rent and utilities debt, credit at the college bookstore for textbooks, and class fees. Each category requires a separate grant request. Specific needs cited by Knox Promise students include college fees, financial help to overcome homelessness and unemployment, healthcare costs during COVID, childcare costs, and groceries. The main request categories in 2019 and 2020 were books and supplies (22 percent), transportation (16 percent), food (13 percent), gas (10 percent), and housing (10 percent) with the largest disbursements allocated, in total, toward books ($41,697), housing ($34,400) and gas and transportation ($27,529). Disbursements on average covered 70 percent of what students requested.

Each Knox Promise student is matched with dedicated tnAchieves completion coaches who provide personalized degree roadmaps and general academic guidance. Coaches proactively communicate with students in person or by text, email, and on virtual platforms. In addition to coaches, each student is assigned to a Tennessee Promise mentor. Mentors are volunteers from throughout the community who work with 5-10 students over the transition from 12th grade to college. Mentors are expected to commit about an hour per month to their Tennessee Promise mentees, to act as role models, and to provide encouragement and help with various aspects of the college transition. Knox Promise college coaches overlap in some of the same roles as mentors but represent a more intensive form of academic guidance, with more detailed knowledge of institutional pathways and resources for students.

Nashville GRAD

The Nashville GRAD program began as a City of Nashville initiative for Davidson County students attending Nashville State Community College or TCAT Nashville.

Initial eligibility is granted to students who lived in Davidson County at least one year prior to filing for financial aid, who have not previously earned a college degree, and who enroll full-time at Nashville State Community College or TCAT Nashville. Once enrolled, students can renew their eligibility by maintaining a 2.0 grade point average, filing for federal financial aid each year, and participating in Nashville GRAD's academic and personal success initiatives.

The program offers supplemental financial aid that goes beyond last-dollar Tennessee Promise and Tennessee Reconnect grants. Nashville GRAD supports include a laptop, flexible class scheduling, and grants to purchase textbooks, transportation, food, technology fees, industry certification fees, and emergency needs. Additionally, students receive tutoring, academic advising, and career development services.

Section 2: Data

We describe short-term college outcomes for Knox Promise and Nashville GRAD students who enrolled in college in the fall of 2019 and 2020. Outcomes of interest include college persistence from one term to the next, grade point averages (GPA), and credit completion rates. We compare program participants to statewide cohorts of 12th graders who likewise moved immediately to a Tennessee community college or TCAT.

Data for this report come from three sources: tnAchieves (a nonprofit organization that manages Knox Promise), Nashville GRAD staff, and Tennessee's P-20 student longitudinal data system. De-identified Knox Promise program data from tnAchieves include lists of participating students, completion grant requests and receipt records, and data on the type and frequency of connections between Knox Promise students and completion coaches (in-person meetings, virtual meetings, text messages, etc.). For Nashville GRAD, we observe de-identified participant lists but no additional information about their engagement with financial or non-financial supports.[1] Participant lists are merged with statewide administrative "P-20" data connecting K-12 and college records. P-20 data include college enrollment by term, GPA, credits attempted and earned, and certificate/degree receipt. Program and P-20 data allow us to track Knox Promise and Nashville GRAD students enrolling in Fall 2019 and Fall 2020 through Summer 2021. This allows us to summarize 2 full academic years of college outcomes for the 2019 cohort and 1 year for the 2020 cohort.

Section 3 focuses on Knox Promise students, and Section 4 describes what we can observe for Nashville GRAD students. Section 5 concludes and offers directions for follow-on research.

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[1] Dickason et al. (2021) study the Nashville GRAD program in more detail, pairing qualitative insights from student interviews with quantitative data on college outcomes.

Section 3: Knox Promise: Early College Outcomes for the First Two Cohorts

The Knox Promise 2019 cohort included 1,426 students out of 15,838 Tennessee Promise students statewide, and out of 17,008 across the state who enrolled in a community or technical college the fall after high school graduation. The 2020 Knox Promise cohort included 1,435 students, out of 14,851 in the statewide two-year college-going cohort.

Table 1 lists race, ethnicity, gender, and socioeconomic statistics for 2019 and 2020 Knox Promise cohorts, with comparable statistics for the statewide 2019-2020 two-year, college-going cohorts. Knox Promise students were less likely to be Black or Hispanic (16-18%) compared to the rest of their Tennessee peers moving into two-year schools (24%), which is consistent with Knox County having a somewhat less racially diverse population than the state as a whole.[2] Knox Promise students had a similar gender profile as the rest of the two-year college-going cohort, with just over half of each cohort being female.

Program records from tnAchieves indicate that 30-32% of Knox Promise students were first-generation college students, meaning that neither parent had gone to college. We do not observe first-generation status in the P-20 data, but for comparison, THEC and TSAC report that 37-38% of Tennessee Promise students in these cohorts were first-generation college students (THEC/TSAC, 2022b, Table 6). Table 1 also reports that 44-46% of Knox Promise students were lower-income and eligible for Pell grants, compared to 60-63% of Tennessee Promise students in these cohorts (THEC/TSAC, 2022b, Table 7). Finally, we find that the average expected family contribution (EFC, a federally determined measure of a student's ability to pay for college out of family resources) for Knox Promise students was $6,733 in the 2019 cohort, rising to $9,093 for the 2020 entering cohort. At the median, Tennessee Promise student EFC was $3,992 for the 2019 cohort and $4,500 for the 2020 cohort. Altogether, Table 1 summary statistics suggest that Knox Promise students were somewhat more financially advantaged than Tennessee Promise participants statewide, although it should be noted that part of that gap is likely attributable to Knox County having higher-than-average incomes relative to the rest of the state.[3]

An important caution arising from Table 1 is that we should be very careful drawing inferences from differences in 2019 and 2020 cohort characteristics and college outcomes. The 2020 cohort started college in the midst of the COVID-19 pandemic when a much smaller share of high school graduates enrolled directly in college. It is notable that Knox Promise enrolled about the same number of students in 2019 and 2020 despite a 9% drop in college-goers statewide (THEC/TSAC, 2022a, Table 1).

For each Knox Promise participant, we use National Student Clearinghouse records in the P-20 data to identify if they enrolled in college and where they enrolled in college, up to and including the spring 2021 term. National Student Clearinghouse data cover all in-state public colleges and universities as well as the vast majority of private and out-of-state higher education institutions throughout the U.S. **Figure 1** illustrates where Knox Promise students enrolled in their first fall term. Almost three-quarters of Knox Promise students enrolled in Pellissippi State Community College, 9% enrolled in Roane State

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[2] According to the 2020 Census, 79.2% of the Knox County population was white, non-Hispanic, versus 72.2% of Tennessee. Additional state and county racial profiles can be found here: https://arcg.is/0eWzy8.
[3] In 2021, per capita personal incomes were about 6% higher in Knox County than in Tennessee overall (https://fred.stlouisfed.org/graph/?g=XOOz).

Community College, and 17% enrolled in other colleges (including 3% in TCATs) or university-based associate programs.

Table 1. Knox Promise participants: Socioeconomic summary statistics.

	Knox Promise Enrollees	Knox Promise Enrollees	All TN High School Grads Enrolling in Community Colleges
Cohort	2019	2020	2019 and 2020
Black or African-American	11%	10%	16%
Hispanic	7%	6%	8%
White	78%	79%	70%
Female	52%	54%	54%
First Generation	32%	30%	
Pell Grant Eligible	46%	44%	
Expected Family Contribution	$6,733	$9,093	
Number of students	1,410	1,438	31,859

Source: Authors' calculations using tnAchieves program records and statewide P-20 longitudinal data on high school graduates enrolling directly in community colleges. Cohort refers to the fall semester of students' first year in college.

Figure 1. Knox Promise students' first institution
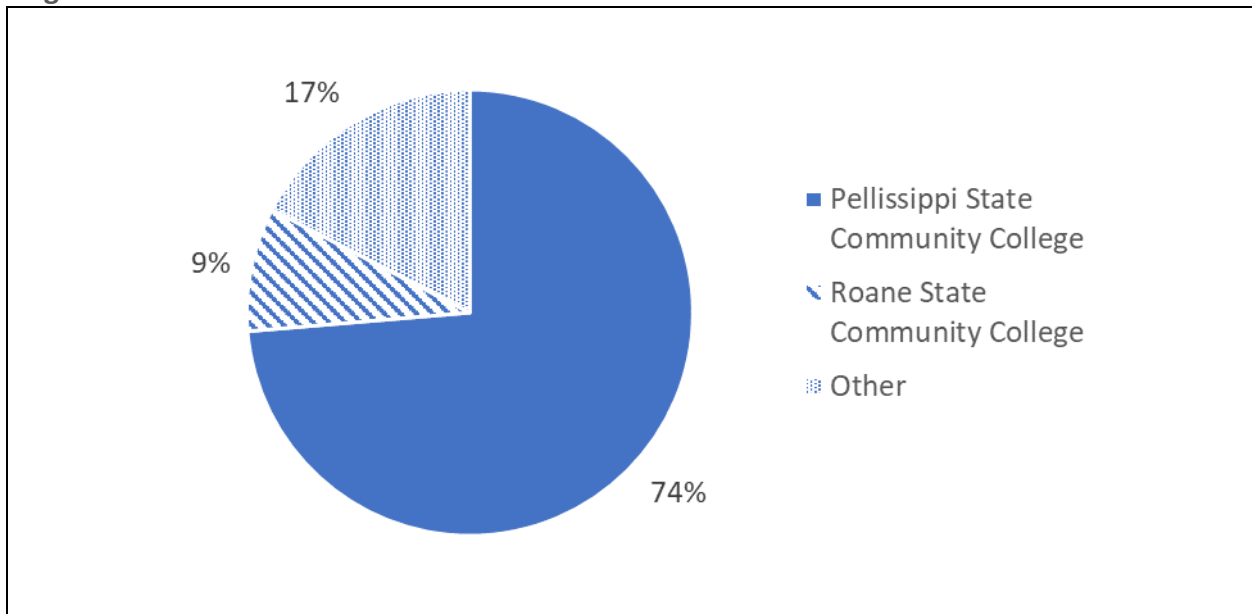
Source: Authors' calculations, using tnAchieves program records merged to statewide P-20 longitudinal data.

## College outcomes for Knox Promise students

Measures of academic success evaluated in this report include persistence/completion, earned credit hours, and GPA.

Studying persistence—i.e., re-enrollment after a student's first term—is complicated in two-year postsecondary settings for a couple of reasons. First, many two-year college students take more than two years to complete a degree, so we will not get a complete picture of college progression from the 2019-2021 data on hand. Second, some students will complete one or more certificates along the way to a degree, or as their terminal postsecondary credential. Since some certificates can be earned in less than one academic year, we report students' rate of persistence and/or credential receipt by their time since initial enrollment. We group credentials from summer terms with the previous spring.

Figure 2 illustrates re-enrollment and credential receipt for Knox Promise students in the 2019 cohort (Panel A) and 2020 cohort (Panel B), alongside comparable statistics for all two-year college-goers. The figure identifies students who either re-enrolled after their first semester (solid portion), and/or who completed a certificate or degree by the end of each term (patterned portion). Note that some credential completers also re-enrolled, although they are not double-counted in the figure.

We find that 74% of Knox Promise students entering college in Fall 2019 persisted into the next semester, Spring 2020, and another 3% had a certificate or degree in hand by the end of their second semester (Panel A). This is similar to statewide persistence and completion rates for the same cohort. Fall-to-spring persistence was lower for the 2020 cohort (Panel B), who entered college during the early phase of the COVID-19 pandemic. Knox Promise students in that cohort were 68% likely to re-enroll and/or complete a credential by Spring 2021, versus 73% statewide.

Figure 2. College persistence and credential completion rates, Knox Promise students compared with all community college-goers.
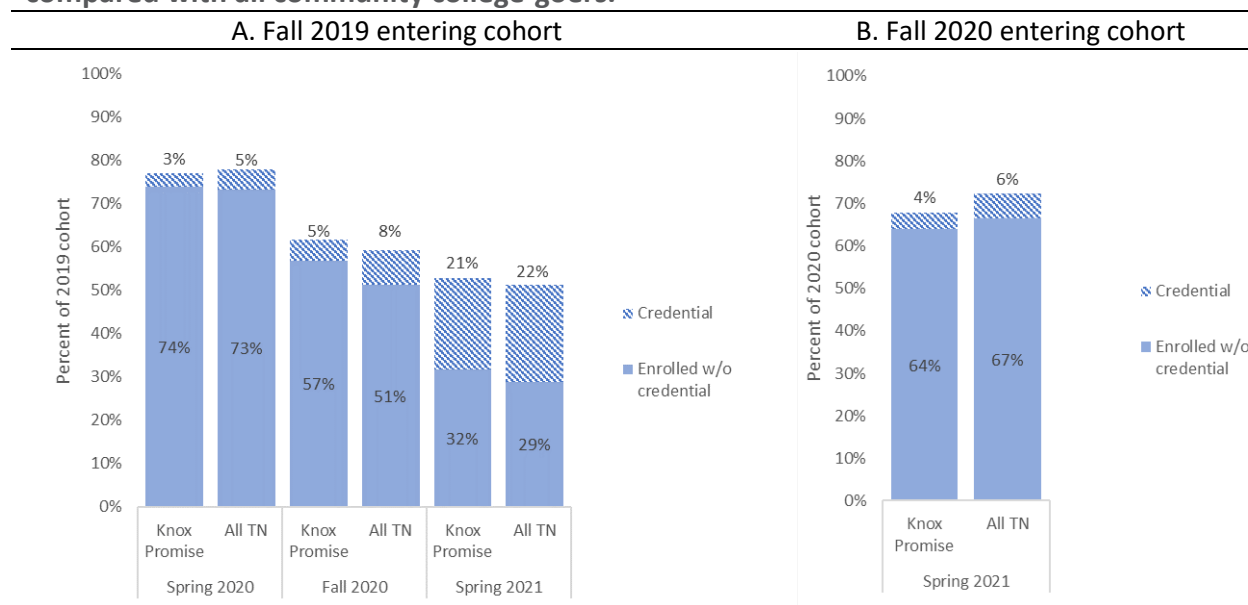
Source: Authors' calculations, using tnAchieves program records merged to statewide P-20 longitudinal data. "Knox Promise" students are program participants who enrolled in a community or technical college in the fall after high school graduation. "All TN" students are all Tennessee public high school graduates who enrolled in a community or technical college immediately after high school. "Credential" completion includes certificate and/or associate receipt. Credential receipt in summer terms is grouped with the previous spring.

Looking to the 2019 cohort's second year of college, 62% of Knox Promise students re-enrolled in Fall 2020 and/or received a credential, and 53% were enrolled in Spring 2021 and/or holding a credential by the end of that term. Statewide second-year persistence/completion rates were similar (59% in Fall

2020 and 51% in Spring 2021). By the end of their second year in college, 21% of Knox Promise students had earned a postsecondary credential, similar to 22% in the statewide community college-going cohort.
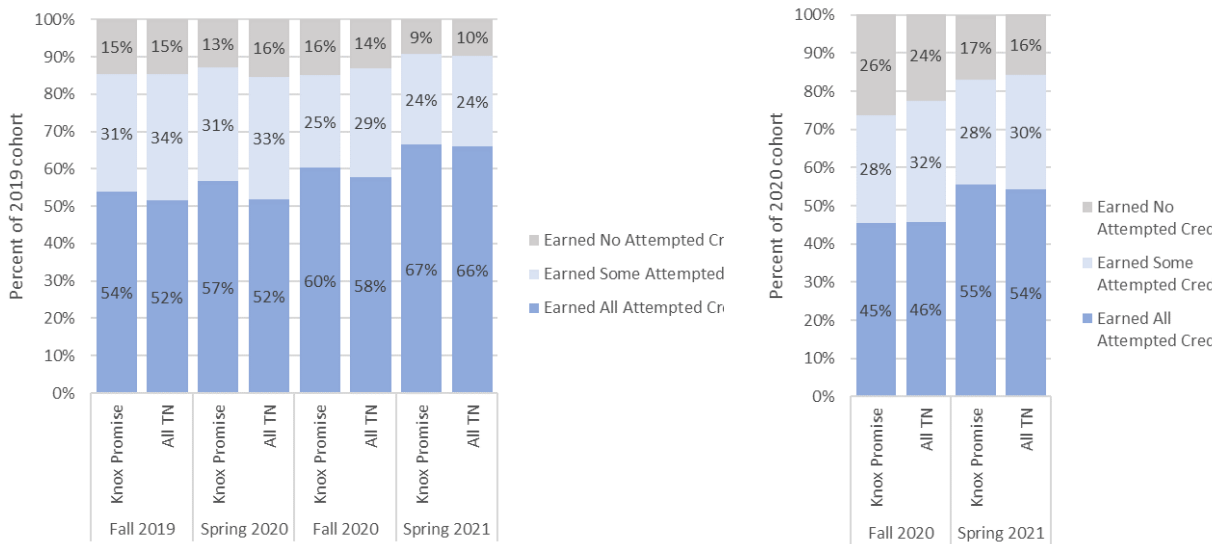
Next, we focus on enrolled community college students and summarize college credit completion. **Figure 3** illustrates credit completion rates for the 2019 and 2020 cohorts, separately by term and Knox Promise participation.[4] Each bar represents all students who enrolled in college in a given term, broken out into three groups: the percent who earned all attempted credits, the percent who earned some of their attempted credits, and the percent who did not earn college credits. Note that students taking only remedial, non-credit-bearing classes will be included in the last group, along with any students who did not pass their classes or withdrew.

Figure 3. Credit completion rate by term, Knox Promise students compared with all community college-goers.

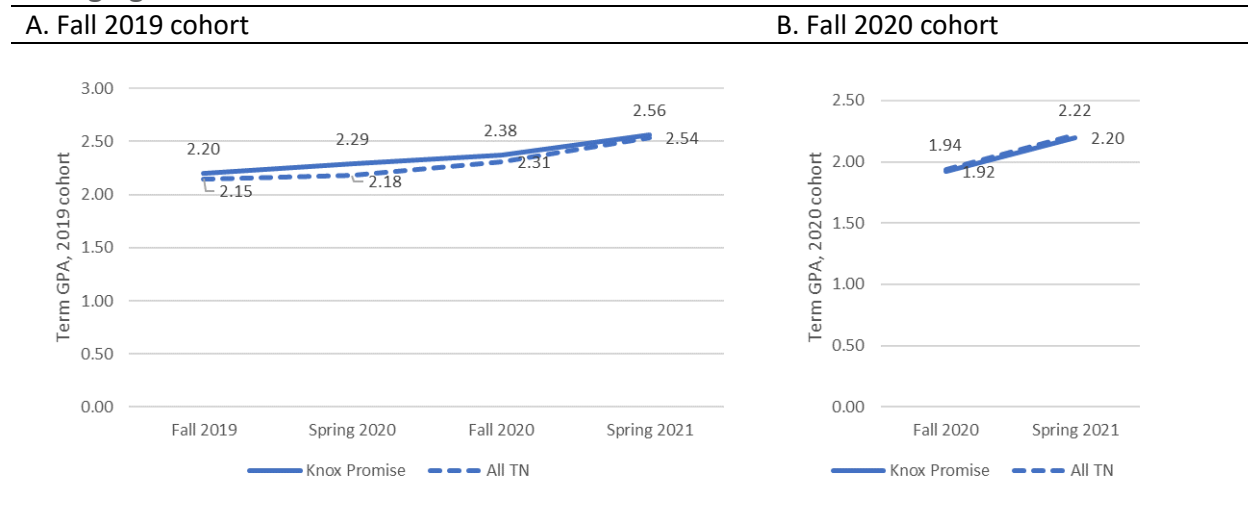A. Fall 2019 entering cohort   B. Fall 2020 entering cohort

Source: Authors' calculations using tnAchieves program records merged with statewide P-20 longitudinal data. "Knox Promise" students are program participants who enrolled in a community or technical college in the fall after high school graduation. "All TN" students are all Tennessee public high school graduates who enrolled in a community or technical college immediately after high school. The figure depicts the percent of enrolled students who completed none/some/all of their attempted credits each semester.

One takeaway from Figure 3 is that Knox Promise students in the 2019 and 2020 cohorts were usually more likely than their statewide peers to earn all attempted credits in each term that we can observe, the exception being Fall 2020. A second takeaway is that the likelihood of completing no credits tends to fall as students move through college, for Knox Promise as well as other students. About 15% of first-semester students in the 2019 cohort completed no credits, versus 9-10% of fourth-semester students. A third takeaway is that credit completion rates fell across the board for the 2020 cohort. About one-quarter of Fall 2020 first-semester students in Knox Promise and throughout the state attempted but did not earn any college credits that semester.

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[4] TCAT students, who earn contact hours rather than credits, are not part of the Figure 3 analysis due to small sample sizes.

Figure 4 plots Knox Promise and statewide student GPA by term. We find that Knox Promise students in the 2019 cohort tended to have slightly better grades than other two-year college-goers, although the gap was small and narrowed further by the Spring semester of their second year. In the 2020 cohort, Knox Promise student grades were very similar to the rest of their statewide cohort, and both were notably lower than what we saw for first-time freshmen in the 2019-2020 school year. Combined with persistence and credit completion results in Figures 2-3, this reinforces the idea that 2020-2021 was a very difficult year for Tennessee college students with or without Knox Promise support.

Figure 4. Term GPA by semester, Knox Promise students compared with all community college-goers.

A. Fall 2019 cohort	B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged with statewide P-20 longitudinal data. "Knox Promise" students are program participants who enrolled in a community or technical college in the fall after high school graduation. "All TN" students are all Tennessee public high school graduates who enrolled in a community or technical college immediately after high school. The figure depicts average term grade point average for Knox Promise and All TN students, by term.

Next, we narrow the focus to Knox Promise students and two of the program's support systems: coach connections, and completion grants.

College Outcomes by Frequency of Knox Promise Coach Connections

Completion coaches fulfill a key role supporting students through college success and completion. Knox Promise program data allow us to observe the number and type of interactions between coaches and students, i.e., "connections." Additionally, we observe the number of times a coach planned to connect with a student but did not succeed, either because the student did not respond or did not attend a planned meeting.

Figure 5 documents the average number of connections for enrolled students, by semester and cohort. Coaches connected with students 2 times per term, on average, for the 2019 cohort. During their first semester, 10 percent of students in the 2019 cohort had no connections—that is, they never responded to coaches—and this figure rose to 20 percent in later semesters. The 2020 cohort had much fewer initial connections with Knox Promise coaches—just 1, on average, in the Fall 2020 semester. This may have been driven by a lack of student response: in Fall 2020, 32 percent of this cohort never responded to coaches. Both indicators rebounded for the 2020 cohort's second semester: The average number of

connections rose to 3 in Spring 2021, and similar to the 2019 cohort, 19 percent of the 2020 cohort did not respond to any connections in their spring/second semester.

Figure 5. Average number of Knox Promise coach connections by term.
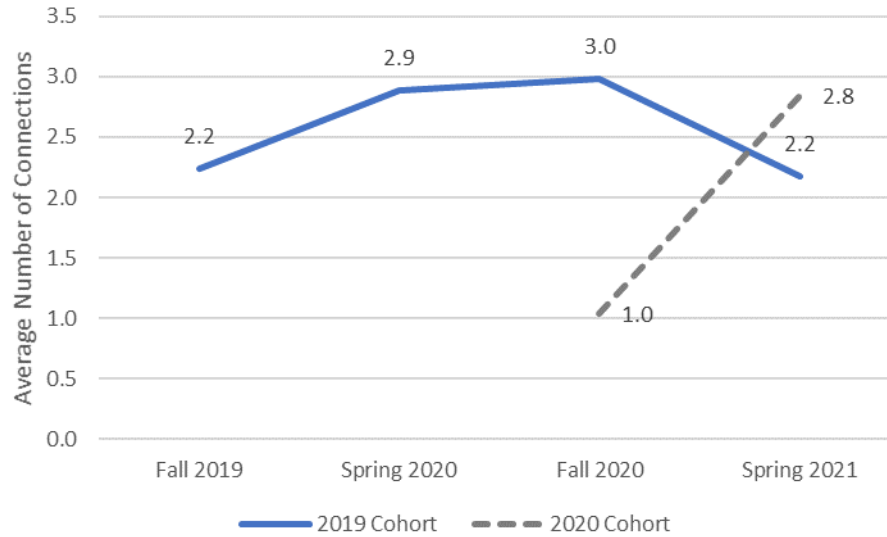
Source: Authors' calculations using tnAchieves program records.

Figure 6 illustrates the different modes of coach-student communication, by cohort and mode, along with the percent of coach-initiated connections that elicited a response from students. The 2019 cohort interacted with coaches in-person as well as through email, phone calls, social media, text messages, and virtual meetings. The 2020 Knox Promise cohort had fewer in-person meetings, likely due to the pandemic. Relative to the 2019 pre-pandemic cohort, the 2020 cohort had a somewhat higher response rate to email, phone, social media, and text message connections. The 2020 cohort also had access to the CONNECT platform for videochat.

**Figure 6. Knox Promise coach outreach success rate, by mode of connection**
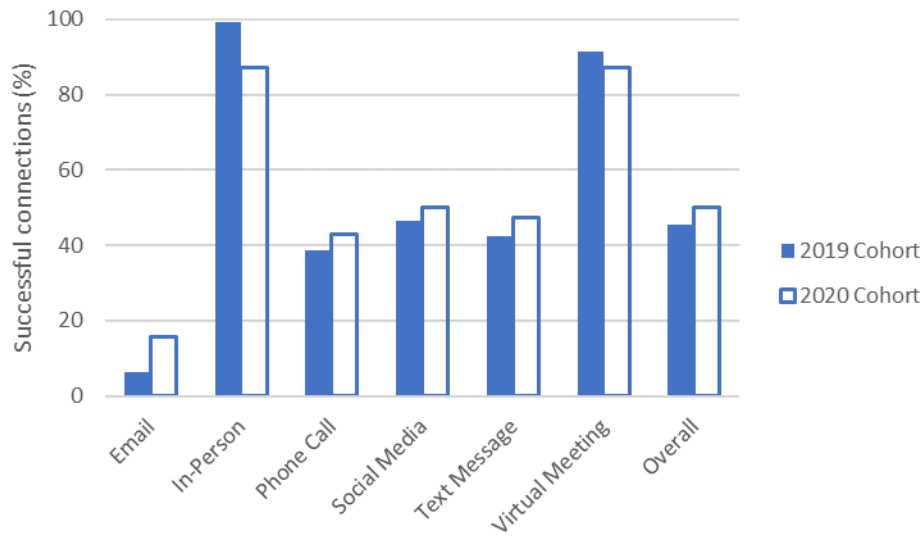
Figures 7-9 plot college persistence/completion, credits, and GPA for two groups of Knox Promise students: Those who had 3 or more successful connections with Knox Promise coaches in a given semester (an above average frequency describing 30-35% of the total cohort each semester), and those who had no connections. It is not obvious at the outset if we should expect students with more coach interactions to do better or worse in terms of these college outcomes. Supporting college persistence and completion was the role of Knox Promise completion coaches. If they succeeded, then all else equal, we should see better outcomes for students with connections. But we cannot be certain that "all else" was equal between students who connected with coaches and students who did not. Connecting students may have been more intent on completing a degree than non-connecting, non-responding students, and more likely to take advantage of all resources available to them, including Knox Promise coaches. On the other hand, connecting students may have welcomed coaches' assistance because they were struggling academically.

Whatever the unobserved causal mechanisms between connections and student outcomes may be, our findings in Figures 7-9 indicate that students who connected with completion coaches tended to have better college outcomes than students who did not. They were more likely to persist in college and complete credentials, they completed more credits, and they had higher GPAs.

Figure 7 shows that connecting students in the 2019 cohort were much more likely to re-enroll or complete credentials than non-connecting students. About 9 out of 10 students in the 2019 cohort who connected with coaches at least three times per term persisted for two full academic years or completed a credential by the end of their second year. Fewer than 5 in 10 non-connecting students did so. After two years enrolled, connecting students in the 2019 cohort were three times as likely as non-connecting students to have a certificate or degree (45% versus 15%). In the 2020 cohort (Panel B), 95 percent of connecting students persisted into Spring 2021 or completed a credential versus only 56 percent of non-connecting students.

Figure 7. Knox Promise student persistence or credential receipt, by frequency of coach connections
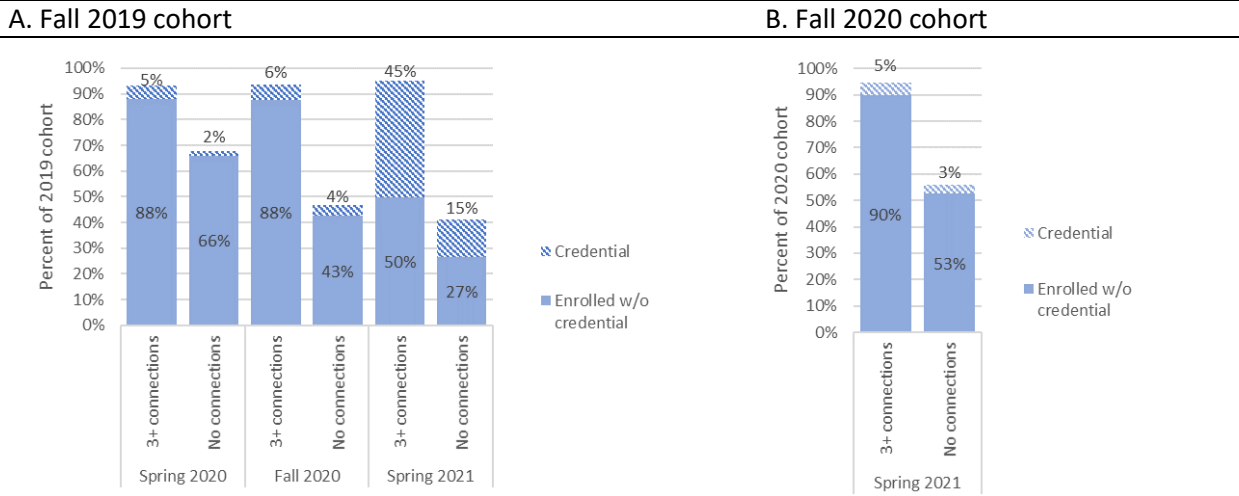
A. Fall 2019 cohort

B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged to statewide P-20 longitudinal data. The figure depicts the percent of each fall cohort who re-enrolled and/or earned credentials in later terms.

Figure 8 illustrates credit completion rates for connecting and non-connecting students in each cohort, by semester. In each term and across both cohorts, students who connected with completion coaches were more likely to complete all of their attempted credits, and they were less likely to complete no credits. In both cohorts, about 1 in 4 non-connecting students completed no credits in their first semester.

**Figure 8. Knox Promise student credit completion rate, by semester and number of coach connections**
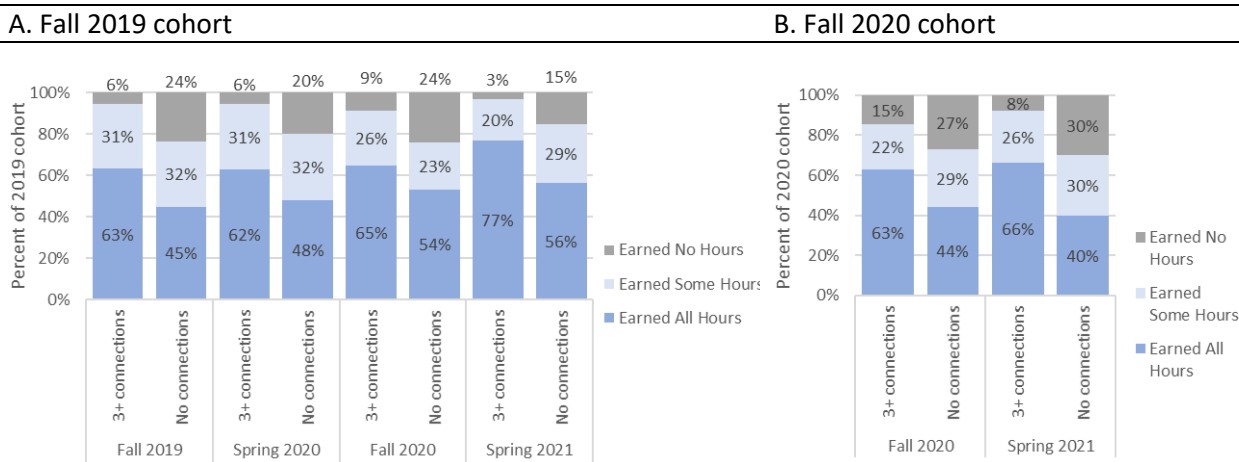
A. Fall 2019 cohort

B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged to statewide P-20 longitudinal data. The figure depicts the percent of enrolled students who completed none/some/all of their attempted credits each semester.

Figure 9 displays term GPA for the 2019 and 2020 cohorts, separately for students with and without completion coach connections. Students who connected with completion coaches had much higher

GPAs than students who did not. A typical connecting student's GPA was 2.47 – 2.55 in their first semester, (roughly a C average), versus 1.85 – 1.87 for non-connecting students (a D average, and below the 2.0 required to maintain Knox Promise and Pell eligibility).

Knox Promise student GPAs tended to climb in later semesters, for students with and without connections in the 2019 cohort, and for students with connections in the 2020 cohort. This may because of improving grades, lower-scoring students stopping out of college (and therefore leaving the sample), or a combination of these two trends. Regardless, we continue to see a GPA gap between students with and without connections.

Figure 9. Knox Promise students' term GPA by number of coach connections.
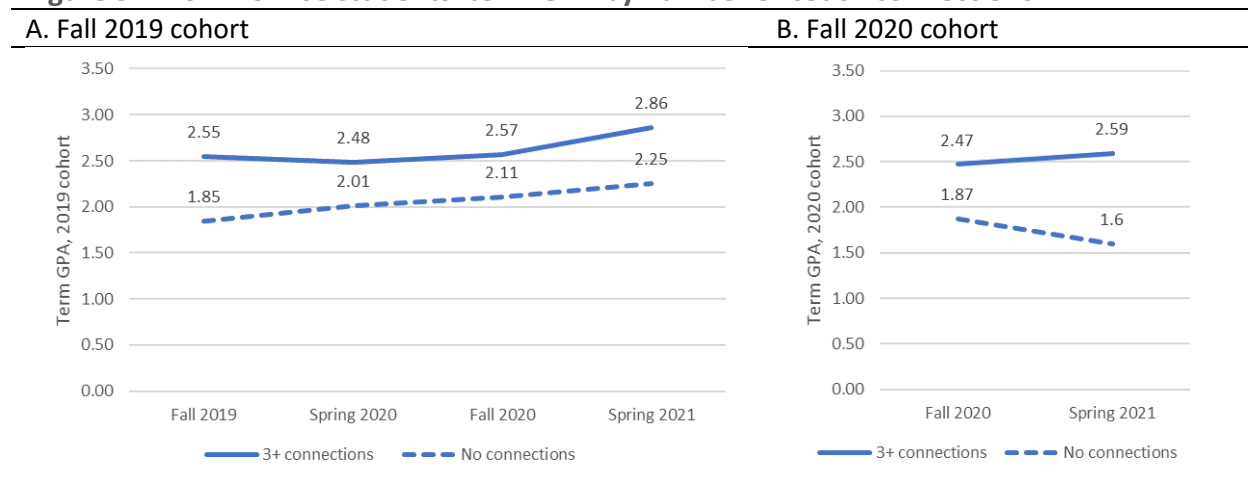
A. Fall 2019 cohort   B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged with statewide P-20 longitudinal data. The figure depicts average term grade point average for Knox Promise students by cohort, term, and number of successful connections with program coaches.

College Outcomes with versus without Knox Promise Completion Grants

Completion Grants offer up to $1,500 per academic period to be spent on transportation, class supplies, groceries, and various living expenses that may support success in college. Students can make multiple requests per term. Among students in the 2019 cohort who applied for grants, the average request amounted to $975.95 per semester, and the average grant was $398.75. For the 2020 cohort, the average request was $1,003.62 per semester, and the average grant was $352.29. We calculate that 254 students benefitted from completion grants, receiving support for books, computers, housing, and other expenses. During the course of their postsecondary enrollment, some students received up to $5,748.3 from completion grants. Table 2 summarizes completion grant disbursements by term.

Table 2. Knox Promise Completion Grant Disbursements

| Period	Grant Recipients	Mean Disbursement
2019 Fall	28	$588.91
2020 Spring	64	$412.52
2020 Fall	134	$378.43
2021 Spring	80	$285.94

Source: Authors' calculations using tnAchieves program records.

Figures 10-12 summarize college persistence, credit completion, and GPA for students who received completion grants during any period they were enrolled, compared to the same outcomes for students who did not receive completion grants. As with coach connections, these comparisons are for reference and we do not consider them to represent causal effects of completion grants on student outcomes. Grants were not randomly allocated, and students who applied for completion grants (and whose requests were approved) may have been different from non-recipients in ways that would have pushed their grades up or down regardless of grant receipt. Students who sought grants may have had low GPAs because financial needs competed with college. Alternatively, grant recipients may have had stronger ambitions to succeed in college, leading them to earn better grades and seek help for expenses. Completion grants likely influenced student outcomes including grades, but we cannot precisely isolate the effect of grants from other factors, many of which are unobserved.

Figure 10 illustrates college persistence and credential completion for the 2019 and 2020 cohorts, respectively, by grant receipt. Grant recipients in the 2019 cohort were more likely than non-recipients to re-enroll for their second, third, and fourth semester of college, and/or complete a credential in that time frame. We find that 83% of Fall 2019 entrants who received grants persisted into Spring 2020, versus 73% of non-recipients. After four semesters, 63% of grant recipients in the 2019 cohort were still enrolled or holding a credential, versus 52% of non-recipients.

The 2020 cohort appears to have been following a similar pattern: 85% of grant recipients reenrolled for their second semester in Spring 2021 and/or earned a credential by the end of Spring 2021, versus 67% of non-recipients.

Figure 10. Knox Promise student persistence or credential receipt, by receipt of completion grants
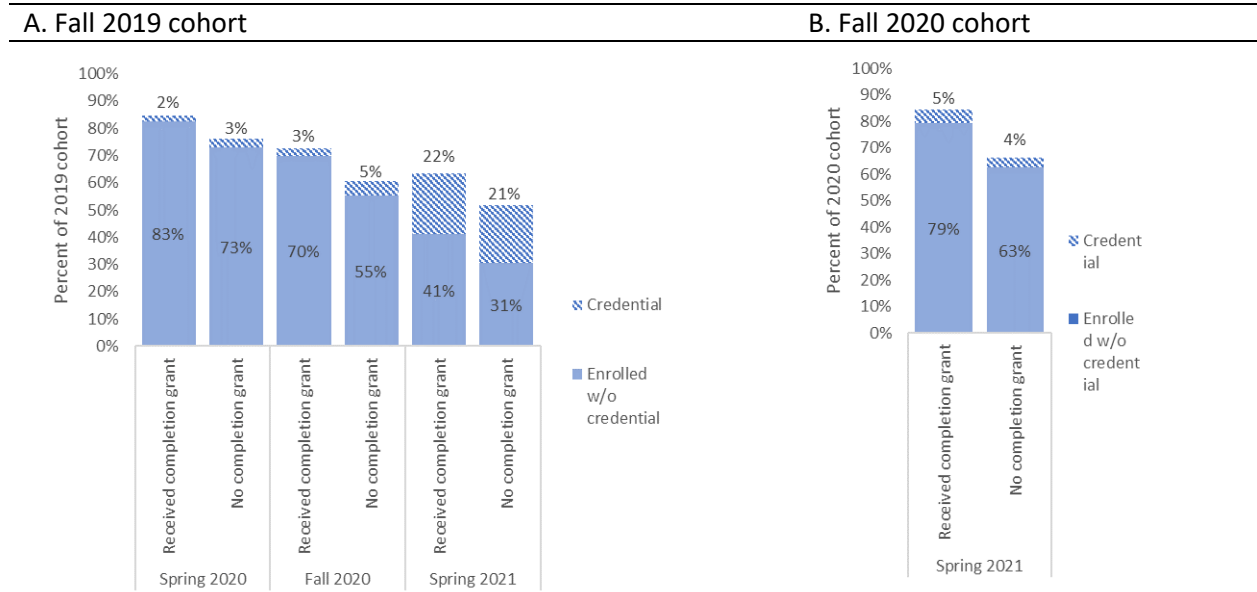
A. Fall 2019 cohort   B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged to statewide P-20 longitudinal data. The figure depicts the percent of each fall cohort who re-enrolled and/or earned credentials in later terms.

Figure 11 displays the relationship between credits earned and completion grants for the 2019 and 2020 cohorts, respectively. During their first two semesters, completion grant recipients were more likely to

earn all of the credits they attempted. We see this pattern for both the 2019 cohort (Figure 11 Panel A) and the 2020 cohort (Panel B). Non-recipients were more likely to earn zero credits in their first year of college, especially in the 2020 cohort, when 27% of non-recipients earned zero credits in their first semester. This relates to another pattern that is evident from comparing Figure 11 Panels A and B: credit completion rates were noticeably lower in the 2020 cohort for students with and without grants. For example, we find that 66% of grant recipients from the 2019 cohort completed all attempted credits in their second semester, versus 60% of grant recipients in the 2020 cohort.

After the first year of college, credit completion rates were fairly similar between grant recipients and non-recipients in the 2019 cohort, perhaps because students who persisted to their second academic year had transitioned out of remedial coursework or developed more familiarity with their academic responsibilities.

Figure 11. Knox Promise student credit completion rate, by receipt of completion grants
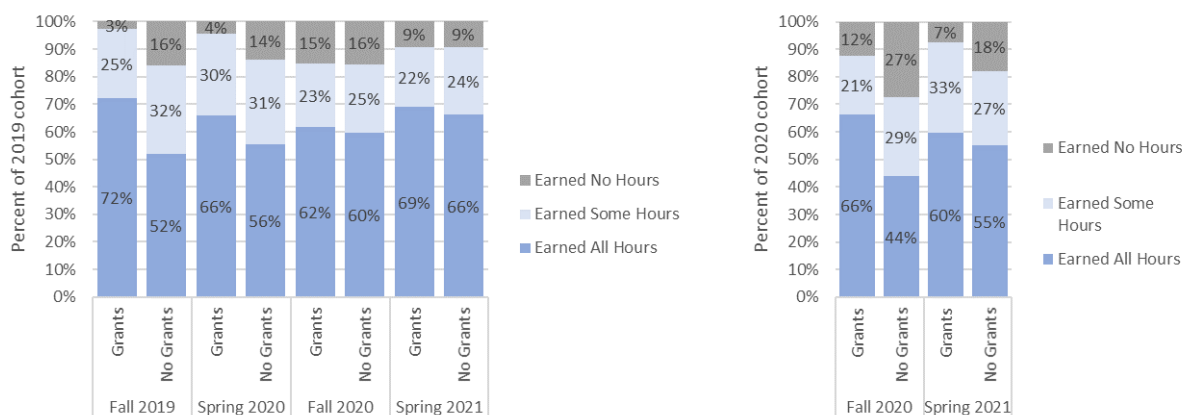
A. Fall 2019 cohort   B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged to statewide P-20 longitudinal data. The figure depicts the percent of enrolled students who completed none/some/all of their attempted credits each semester.

Term GPA for the 2019 and 2020 Knox Promise cohorts are illustrated in **Figure 12**. For the 2019 cohort's first year of college, we see a similar pattern for grades as we did for earned credits in Figure 11. Students who received completion grants outperformed students who did not. The gap narrowed beginning with their second semester in college, however, and closed in their third and fourth semesters.

Likewise, grant recipients in the 2020 cohort tended to have higher grades than non-recipients in their first semester (2.61 versus 1.86 GPA), and this gap narrowed in their second semester.

It is not clear from these descriptive statistics why grades declined for grant recipients but not non-recipients in the 2020 cohort. The drop was very small but nonetheless inconsistent with other GPA patterns we see in Figure 9. In results not shown, we find a similar GPA convergence between grant recipients and non-recipients when we ignore future grant receipt, i.e., when we compare students who received grants up to and including a given semester to students who had not.

Additional data for these and more recent cohorts will shed more light on these patterns and help us understand causal effects of completion grants. In follow-on work, we are planning to study persistence, credits, and GPA for students who gained access to program supports through the statewide Tennessee COMPLETE expansion of the Knox Promise model.

Figure 12. Knox Promise students' term GPA, by completion grant status
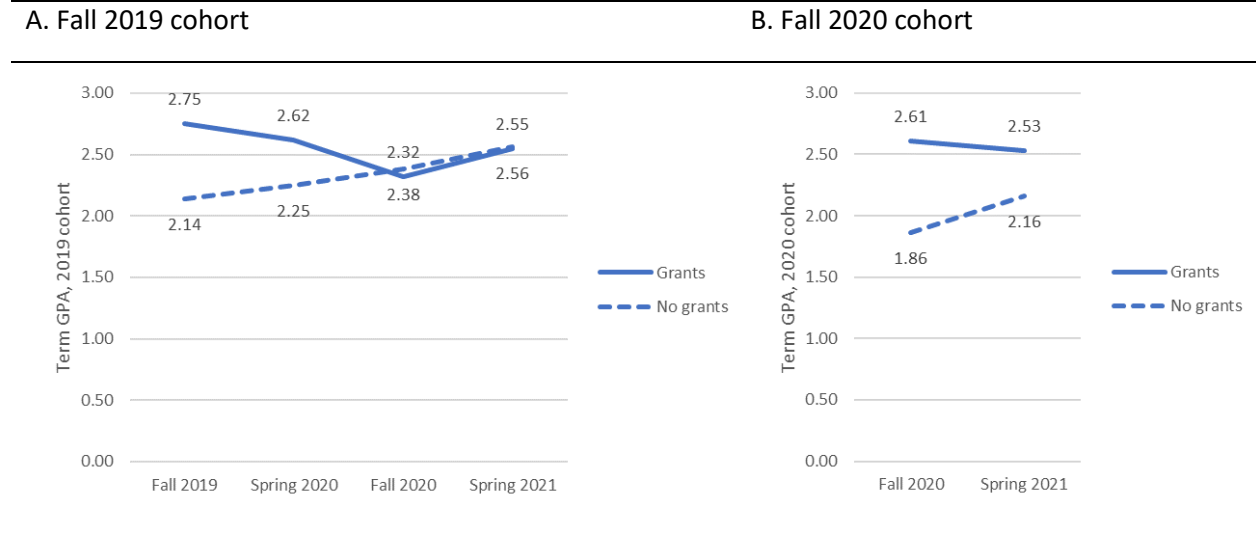
A. Fall 2019 cohort   B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged with statewide P-20 longitudinal data. The figure depicts average term grade point average for Knox Promise students by cohort, term, and separately for students who received and did not receive completion grants.

Section 4: College Outcomes for the First Two Cohorts of Nashville GRAD Students

Table 3 includes summary statistics describing Nashville GRAD student demographics. There were 265 students in the cohort who started college in Fall 2019, and 84 in the cohort who started in Fall 2020. Nashville GRAD students were more racially and ethnically diverse than Knox Promise students and the statewide college-going cohort. More than 60% of participating students were Black, African-American, or Hispanic, compared to 24% statewide. Nashville GRAD students were 57-58% female, versus 54% statewide.

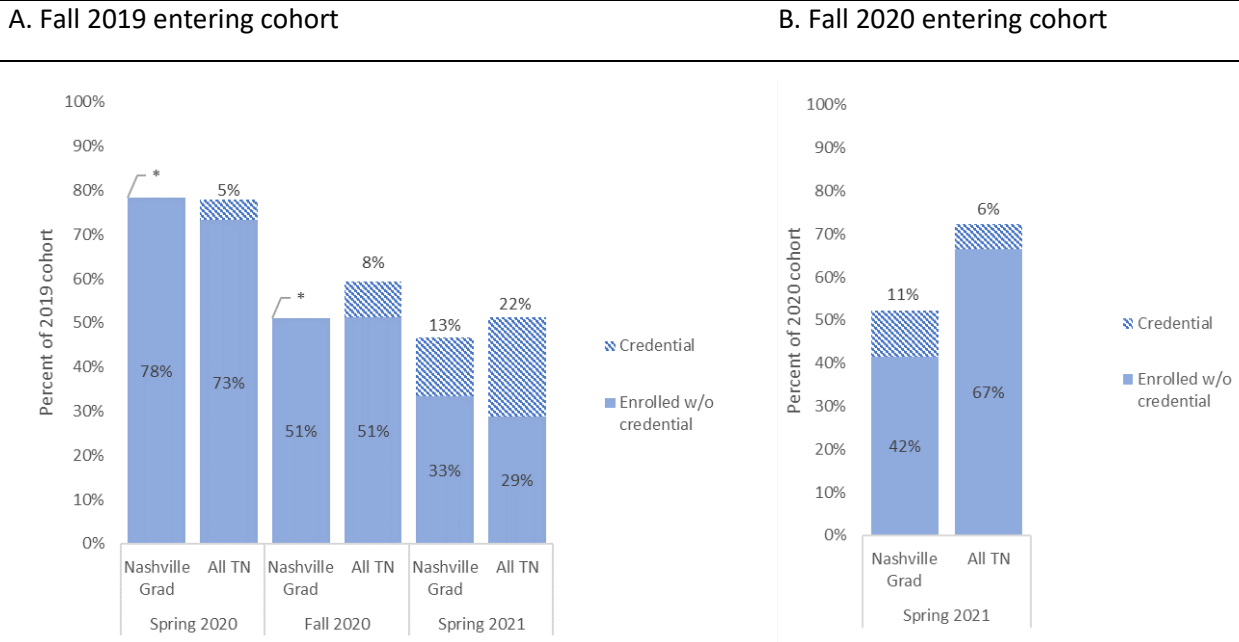**Table 3. Nashville GRAD student demographic summary statistics.**

	Nashville Grad enrollees	Nashville Grad enrollees	All TN High School Grads Enrolling in Community Colleges
Cohort	2019	2020	2019 and 2020
Black or African-American	51%	42%	16%
Hispanic	17%	20%	8%
White, Non-Hispanic	23%	21%	70%
Female	58%	57%	54%
Number of students	265	84	31,859

Source: Authors' calculations using Nashville Grad program records and statewide P-20 longitudinal data on high school graduates enrolling directly in community colleges. Cohort refers to the fall semester of their first year in college.

Figure 13 depicts college persistence and/or completion for Nashville GRAD students alongside statewide statistics for comparison. Nashville GRAD cohorts are fairly small, a small share of students' complete credentials within the first year of college (in general and not just among Nashville GRAD participants), so we suppress the number of program participants in the 2019 cohort who earned credentials in their first year. Nashville GRAD bars in Figure 13A, Spring and Fall 2020 terms, represent the percent of the 2019 cohort who re-enrolled and/or completed credentials in those terms.

The Fall 2019 cohort was 78% likely to re-enroll the following semester, which was equivalent to the statewide rate. We find that 52% of the 2019 Nashville GRAD cohort persisted into their second academic year, versus 59% of the statewide cohort. After two years in college, 13% of program participants in the 2019 cohort had a credential, versus 22% statewide. As with other findings in this report, the gap between Nashville GRAD and statewide persistence and completion should not be attributed to any causal effect or shortcoming of the program. Figure 13 statistics do not shed light on how Nashville GRAD students would have fared in the absence of the program, or how many would have enrolled in college at all after high school. Our last takeaway from Figure 13 is that the 2020 cohort had lower fall-to-spring persistence than the cohort who enrolled in 2019. Only 53% of Nashville GRAD students in the 2020 cohort re-enrolled and/or completed a credential in their second semester, although program participants' 11% completion rate was notably higher than the 6% first-year completion rate statewide.

Figure 13. College persistence and credential completion rates, Nashville Grad students compared with all community college-goers.

A. Fall 2019 entering cohort   B. Fall 2020 entering cohort

Figure 14 illustrates credit completion rates for Nashville GRAD students compared with the statewide two-year college-going cohort. In their first semester, Nashville GRAD's 2019 cohort (Panel A) was 86% likely to earn some or all attempted credits, which was the same as the statewide share. Nashville GRAD students were, however, less likely to complete all attempted credits (39% versus 52% statewide in their first semester, and 34% versus 52% in their second), and 23% of program participants in the 2019 cohort earned no credits in Spring 2020. Those who re-enrolled for a second year, however, were as or more likely than the rest of the state to complete some college credits (90-91% for Nashville GRAD second-year students, versus 86-90% statewide).

We do not see as much of a gap in credit completion between Nashville GRAD students in the smaller 2020 cohort and their counterparts statewide, and credit non-completion rates were higher across the board in the 2020 cohort.

Figure 14. Credit completion rate, Nashville Grad students compared with all community college-goers

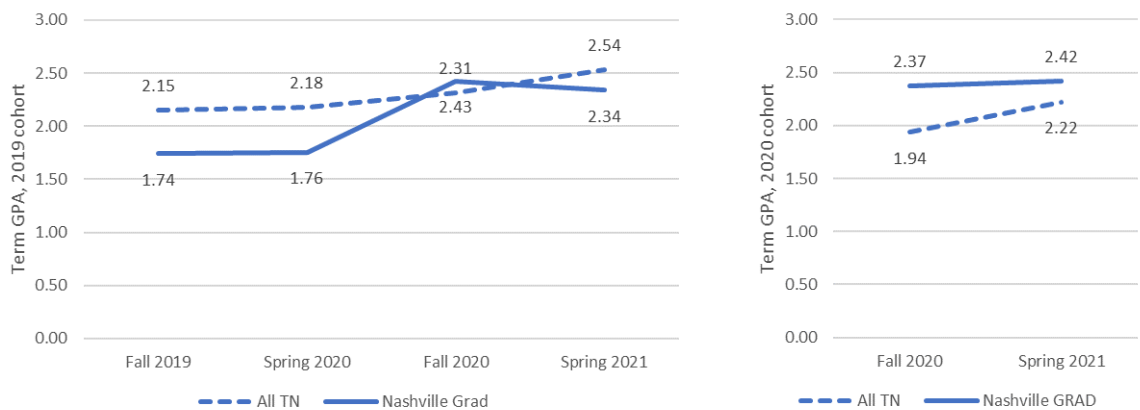A. Fall 2019 cohort | B. Fall 2020 cohort
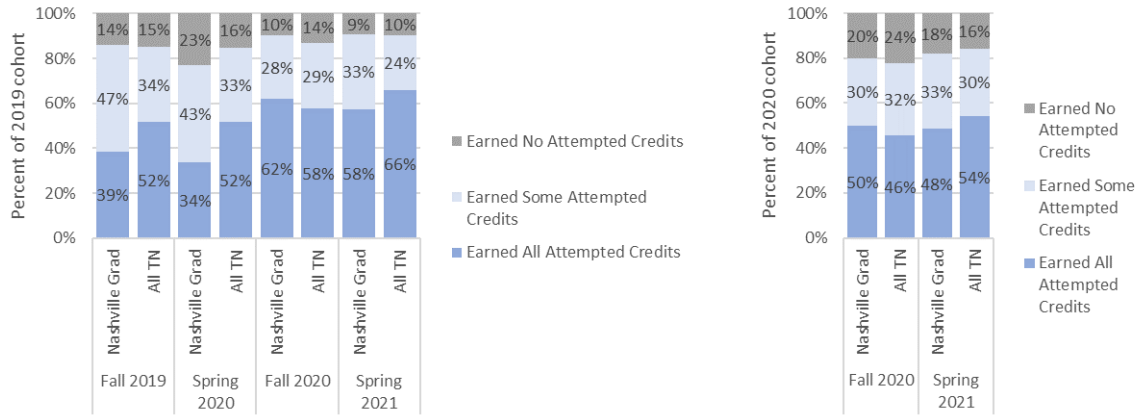
Source: Authors' calculations using Nashville Grad program records merged to statewide P-20 longitudinal data. The figure depicts the percent of enrolled students who completed none/some/all of their attempted credits each semester.

Lastly, **Figure 15** illustrates average term GPA for Nashville GRAD participants and the statewide cohort, by term. Nashville GRAD students in the 2019 cohort had a 1.74 GPA in their first year, on average, which falls below the typical 2.0 threshold for satisfactory academic progress, and below the statewide average GPA of 2.15. Program participants who persisted into a second year had higher GPAs that met or exceeded the statewide average. The program's 2020 cohort had much higher grades in their first two terms, averaging 2.37 – 2.42 versus 1.94 – 2.22 for the state.

Figure 15. Term GPA, Nashville Grad students compared with all community college-goers

A. Fall 2019 cohort | B. Fall 2020 cohort

Source: Authors' calculations using tnAchieves program records merged with statewide P-20 longitudinal data. The figure depicts average term grade point average for Knox Promise students by cohort, term, and separately for students who received and did not receive completion grants.

Looking across Table 3 and Figures 13-15, it appears that Nashville GRAD students had higher credit completion rates and better grades in the 2020-2021 school year. This was the case for 2019 cohort members who re-enrolled for their second year as well as for the smaller 2020 program cohort, despite transitioning to college during the height of COVID-19 disruptions in education.

Conclusions and Next Steps for Research

Our early look at the first two cohorts enrolling in Knox Promise and Nashville GRAD highlight bright spots for the programs: strong persistence rates, credit completion rates, and GPAs for Knox Promise students who engaged with coaches or received completion grants, and improvement in credit completion and grades between the first and second year of Nashville GRAD. There are also points of concern, such as lower rates of first-year credit completion and second-year re-enrollment in the first Nashville GRAD cohort, and subjectively low 21% rates of two-year credential completion for Knox Promise participants. These and other patterns are worth additional study as more recent data become available. Once again, we emphasize that findings are descriptive and that the statewide comparison group we used in this report does not represent how program participants would have performed in the absence of Knox Promise and Nashville GRAD supports.

Both programs launched shortly before COVID-19 and the ensuing precautions impacted K-12, higher education, the broader economy, and day-to-day life in general. Our findings likely reflect some of the consequences of the pandemic. For example, we report notably lower rates of fall-to-spring re-enrollment in 2020-2021 and lower rates of credit completion, for Knox Promise and Nashville GRAD participants as well as all two-year college-going students in the state.

As the Knox Promise support structures expand to the rest of the tnAchieves student population in 2022-2023, there is an opportunity to assess the causal effects of coaching, completion grants, and Tennessee Promise supplements more generally, again within the context of the ongoing pandemic.

Acknowledgments

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