



Implementation and Impact of tnAchieves Coaching in Tennessee Community Colleges



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Introduction

Tennessee Promise is a public program intended to increase college access and completion by providing funding and mentoring for recent Tennessee high school graduates enrolled in community or technical colleges. Announced in 2014 as part of the state's "Drive to 55" initiative to help 55 percent of Tennesseans hold a postsecondary credential by 2025, Tennessee Promise began offering last-dollar scholarships and mentoring support to the high school graduation class of 2015.¹ Of the roughly 60,000 high school seniors in Tennessee each year, about a quarter (15,000) receive postsecondary financial support through Tennessee Promise. tnAchieves is a non-profit partner to the Promise program that provides targeted coaching support to help scholarship recipients from 83 of Tennessee's 95 counties navigate the administrative hurdles of enrollment, comply with scholarship requirements, overcome academic setbacks, and persist through degree completion.

This brief reports findings from an analysis of the tnAchieves coaching program. This includes investigation of who receives coaching, the nature and dosage of coaching received, and the postsecondary persistence of program participants. The Tennessee Education Research Alliance (TERA) conducted this research in partnership with tnAchieves and the State Collaborative On Reforming Education (SCORE) using data provided by tnAchieves.

1 Students must be Tennessee residents, US citizens or qualified non-citizens, graduate from a qualifying high school, home school, or GED program prior to their 19th birthday, and enroll in a tnPromise institution the following term. "Last-dollar" means that the scholarship is applied after all other scholarships and aid to cover any remaining tuition and fees.

KEY FINDINGS



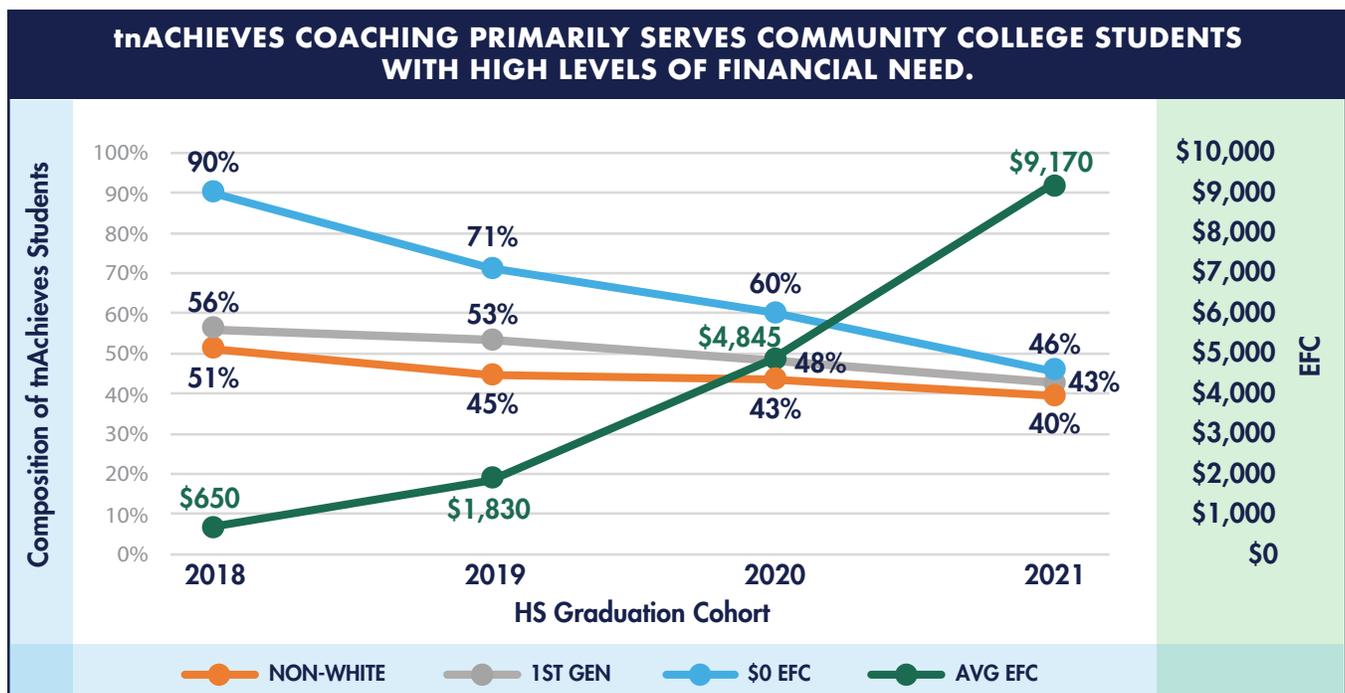
KEY FINDING 1

tnAchieves coaching primarily serves community college students with high levels of financial need.

Tennessee Promise students are eligible for tnAchieves coaching based on demonstrated family need, or expected family contribution (EFC), full-time enrollment, and the completion of a community service requirement. As shown in Figure 1 below, the demonstrated need requirement results in a majority of tnAchieves students (students who receive coaching support through tnAchieves) having an EFC of \$0 in each of the first three graduation cohorts included in this evaluation (2018 to 2020), and just below 50% in the most recent cohort. This EFC of \$0 means that the U.S. Department of Education estimates that these students and their families will be wholly dependent on financial aid to cover the cost of tuition and fees.

As tnAchieves has expanded to include students with less demonstrated need, the average EFC of tnAchieves cohorts has increased and students with a \$0 EFC now make up a smaller share of the tnAchieves program.² In the 2018 graduation cohort, over 90% of students served by tnAchieves had an EFC of \$0. That proportion decreased to just over 60% for the 2020 cohort and under 50% for the 2021 cohort. This shift in the financial need of tnAchieves cohorts corresponded to changes in other demographic indicators among tnAchieves students. Specifically, the proportionate representation of Black students has fallen by almost a third since the 2018 cohort (from 31% to 21%) and that of 1st-generation students has fallen by about a quarter (from 56% to 43%). White students comprise an increasing share of tnAchieves cohorts, increasing from 49% of the 2018 cohort to 60% of the 2021 cohort. Even as the total number of students receiving coaching under tnAchieves increased by 40%, the number of Black students in the coaching program fell from 961 in the 2018 cohort to 896 in the 2021 cohort. The expansion of program eligibility explains dips in proportions of underserved student subgroups, but not reductions in counts. Additional outreach and recruitment may be necessary to help traditionally underserved subgroups take advantage of these available supports.

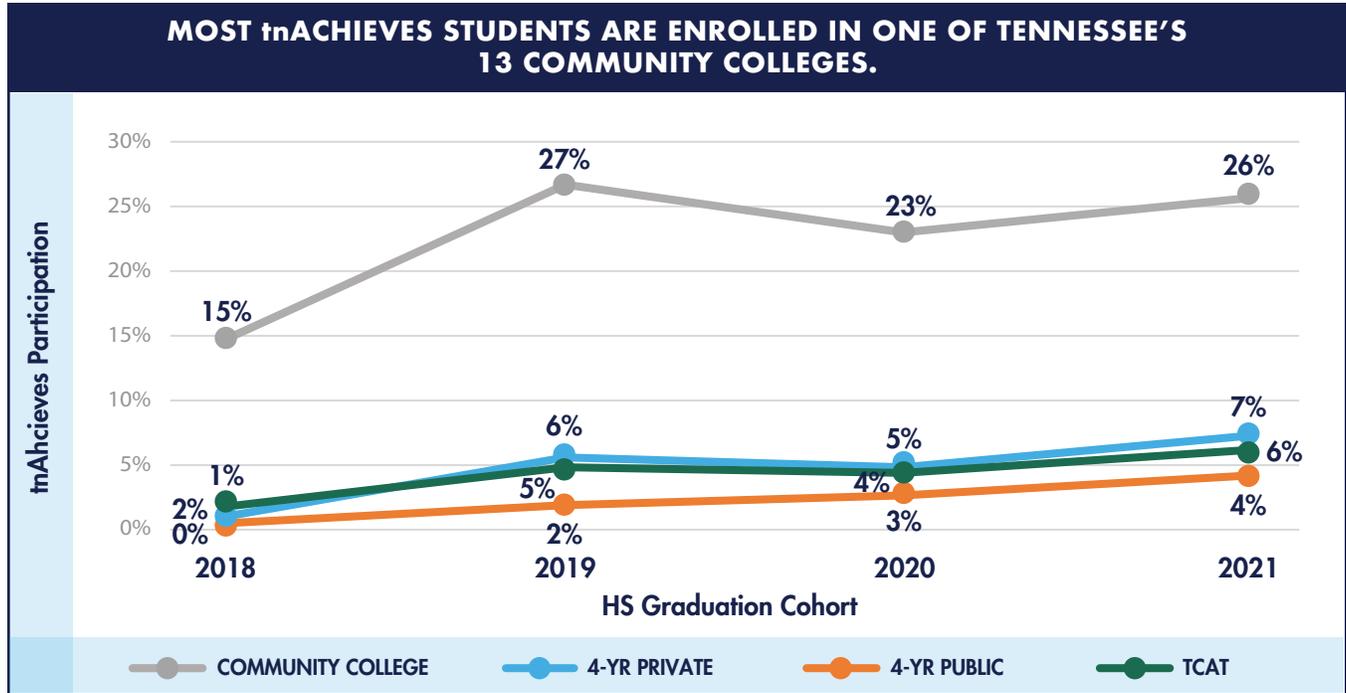
FIGURE 1



² Graduates from Knox County are excluded given separate eligibility criteria for an expanded coaching program available only to students in Knox County.

Though Tennessee Promise students enrolled in any associate degree-granting institution can receive tnAchieves coaching support, a majority of tnAchieves students are enrolled in one of Tennessee’s 13 community colleges, where more than 1-in-4 students receives coaching through tnAchieves. At other institution types, the proportion of students receiving coaching is much smaller.

FIGURE 2



2

KEY FINDING 2

On average, tnAchieves coaches connect with students between five and six times via a variety of communication tools. However, as the program has grown to include more students, the number of coaching contacts each student receives has fallen.

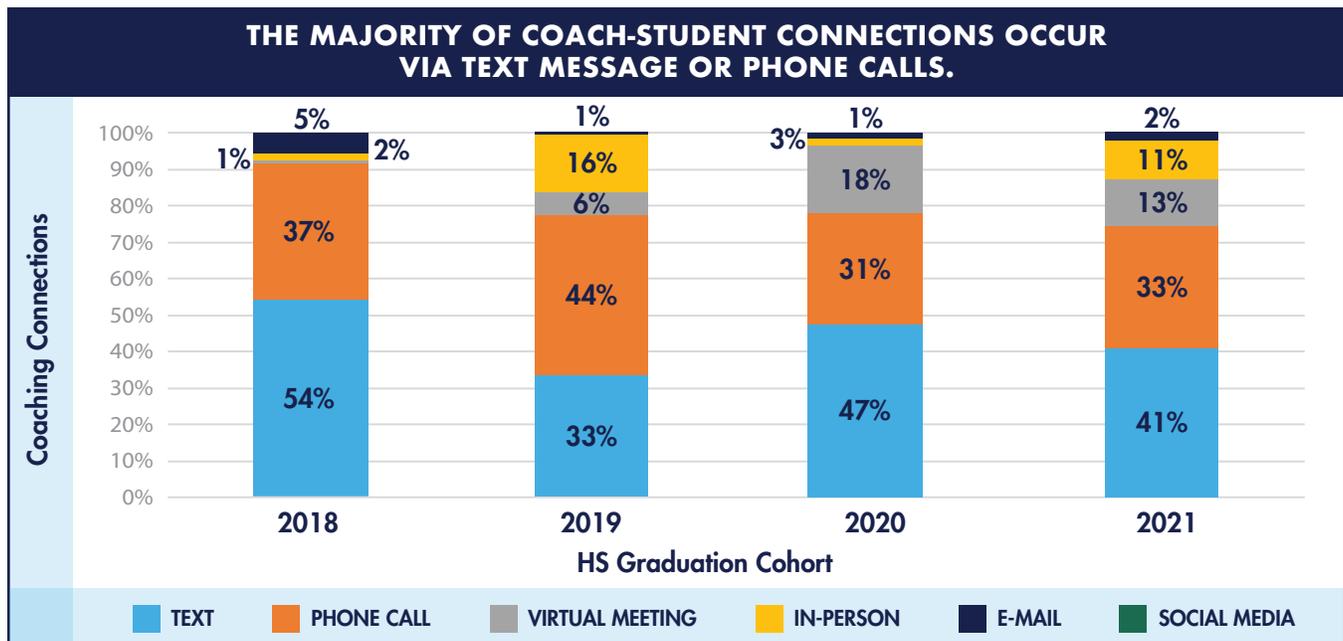
On average, coaches have between five and six successful connections with each tnAchieves student, meaning the coach establishes two-way communication with the student.³ Across the four cohorts studied, just under half of all attempts to contact a student result in a successful connection. However, as Table 1 shows, the average number of attempts and connections per student has fallen over time, from a high of about 14 attempts and 6 connections per coached student in the 2018 high school graduation cohort to just 7 attempts and 4 connections per student in the 2021 cohort.

TABLE 1

Across the four cohorts studied, just under half of all attempts to contact a student result in a successful connection.				
HS GRADUATION COHORT				
	2018	2019	2020	2021
Total Attempts	14	12	10	7
Total Connections	6	5	5	4

TnAchieves coaches connect with students in several different ways including text messages, phone calls, e-mail, virtual meetings, in-person meetings, or through social media. As shown in Figure 3, the majority of connections occur via text message or phone calls, but virtual meetings became more common beginning with the 2020 graduation cohort, coinciding with social distancing in response to the COVID-19 pandemic.

FIGURE 3



³ Over 90% of all intervention attempts are initiated by tnAchieves coaches, with just 8.6% coded as incoming messages from students.

3

KEY FINDING 3

Students who receive tnAchieves coaching are more likely to persist into their second year of college than otherwise similar students who do not receive coaching.

Finally, we evaluated the first fall-to-second fall persistence of students who received tnAchieves coaching from each cohort. To avoid potential confounding of differential outcomes by cohort year, community college attended, or proximity of schools to students' home county, our model compares persistence rates between Tennessee Promise students who graduated high school in the same year, from high schools within the same county, and enrolled in the same community college. The model also controls for student race, ACT score, first generation status, gender, and EFC. With these fixed effects and controls, we then estimate the difference in persistence rates between tnAchieves and non-tnAchieves students who are otherwise similar.

To help us understand how program participation might influence persistence, the model includes three separate variables related to treatment: 1) a binary tnAchieves treatment indicator equal to one for all students who received at least one attempted coaching intervention, 2) a count of how many total connection attempts tnAchieves coaches made for each student, and 3) a count of how many successful connections tnAchieves made with each student.

Our model finds positive differences in persistence rates for tnAchieves students compared to students with similar observable characteristics who do not receive coaching. First, the estimated effect of assignment to tnAchieves coaching, independent of the number of attempts coaches made to contact the assigned student, is small (-1.7 percentage points) and statistically insignificant.³ This means the model estimates that in the absence of coaching interventions, the students in the tnAchieves program would persist at a rate statistically indistinguishable from that of otherwise similar Tennessee Promise students who were never part of the tnAchieves program. **In other words, any positive relationship between tnAchieves coaching and persistence rates is associated with dosage of coaching received, not unobserved differences in who the program serves.**

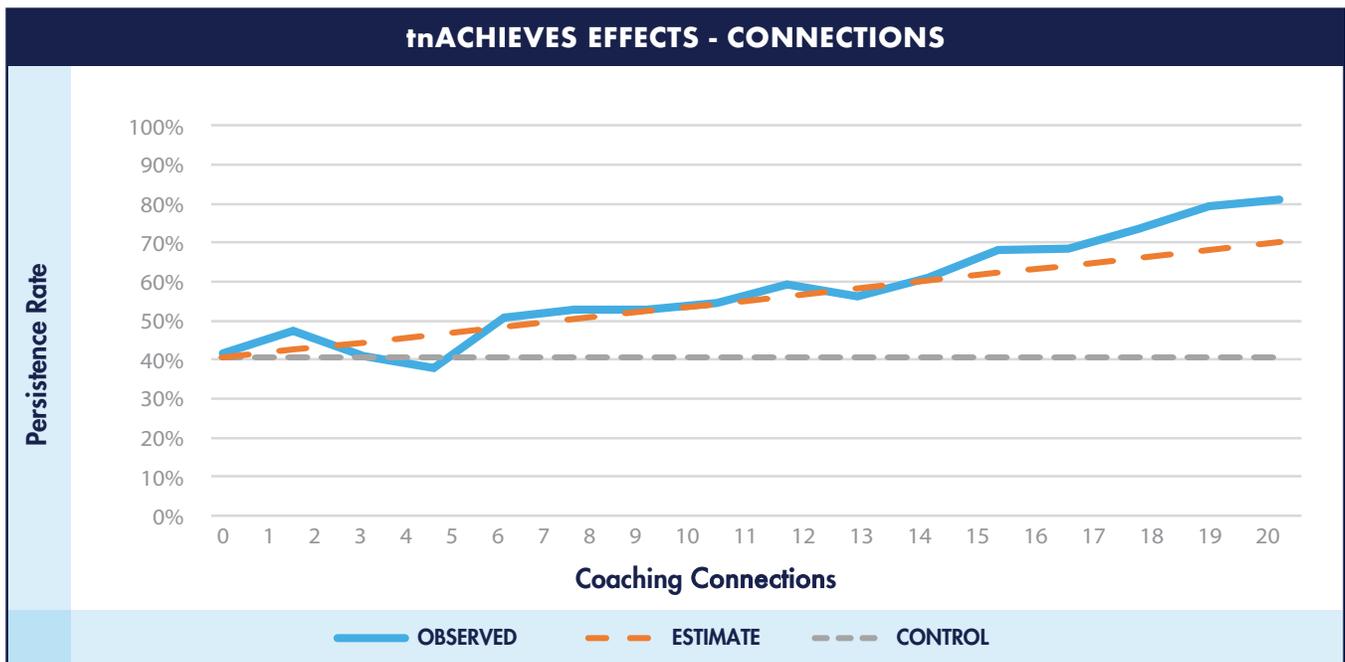
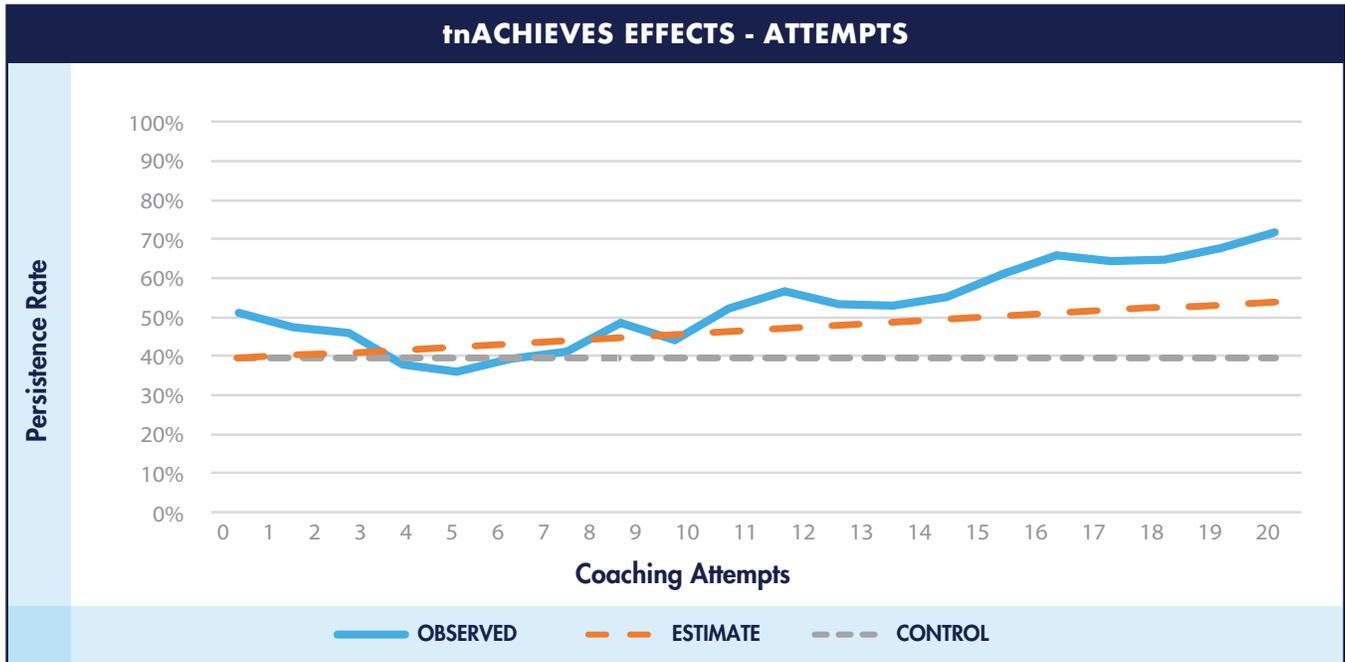
We estimate a positive relationship between dosage of coaching received through tnAchieves and student persistence. Specifically, we estimate an almost one percentage-point (0.8%) increase in persistence rate for each attempt to contact a coached student, even if the coach does not report a successful connection. **This suggests that seeing missed text messages or phone calls from a tnAchieves coach may help students feel supported and motivated even without a real-time, live conversation with their coach.**

Further, there is an additional, independent increase in persistence of 1.5 percentage points if the attempt is successful, which suggests that live conversations have three times the total effect on student persistence as unsuccessful intervention attempts. Adding these two coefficients together (0.8 for a coaching attempt plus 1.5 for a successful connection) suggests that **each successful coaching connection is associated with a 2.3 percentage-point increase in first-year persistence rates.**

³ This is the estimated difference between students who are part of tnAchieves and receive zero coaching attempts, compared to students who are not coded as part of tnAchieves. However, because the binary treatment indicator is based on receiving one or more coaching attempts, there are no observations in the data of tnAchieves students who receive zero coaching attempts. The model-estimated difference in persistence rate associated with selection into tnAchieves as a binary condition is thus the -1.7% coefficient on the treatment indicator plus the 0.8% coefficient on one coaching attempt (-0.9%).

Figure 4 below depicts the relationship between tnAchieves coaching interventions estimated by the model (orange dotted line) compared to the relationship observed in the data (solid blue line) and the persistence rate of the uncoached comparison group. The estimated and observed persistence rates overlap near the average values of coaching attempts (13) and successful connections (5) and follow roughly parallel trends, helping confirm the model's estimates.

FIGURE 4



CONCLUSION

The tnAchieves program serves first-time postsecondary students from traditionally underserved subgroups. In particular, students served by the tnAchieves program have a high degree of financial need as demonstrated by their Expected Family Contribution (EFC) as calculated by FAFSA. We find evidence that most students involved in tnAchieves receive at least a moderate dosage of coaching, with tnAchieves students receiving an average of 13 coaching attempts and 5 successful connections with their tnAchieves coaches. Finally, we estimate substantial persistence benefits from the coaching intervention. Even unsuccessful coaching attempts are associated with an almost one percentage-point increase in first-year persistence rates. Successful connections with tnAchieves coaches have even greater effect, as each connection is associated with a 2.3 percentage-point increase in first-year persistence. With each tnAchieves student receiving an average of 5 coaching connections and 13 attempts, participation in tnAchieves is associated with a 13 to 17 percentage-point increase in first-year persistence rates.

We also find evidence that the execution of the tnAchieves coaching program could improve in important ways. For example, increasing recruitment and outreach to low-income, first-generation, and non-White students may help restore the representation of these traditionally underserved subgroups after declines within recent cohorts. This may necessarily include efforts to encourage initial application and enrollment into postsecondary institutions, in addition to recruiting enrolled students into tnAchieves. Further, given the finding that each additional connection is positively associated with student outcomes, tnAchieves should prioritize a systematic approach to identifying strategies that help establish early and frequent connections with all students, such as randomizing the assignment of hard-to-reach students to different strategies and tracking success rates for each. Finally, the overall positive findings suggest that the most important recommendation may be for coaches to continue to do what's working. tnAchieves coaches' contact with students is associated with substantial increases in postsecondary persistence compared to otherwise-similar, uncoached students. In addition to any program changes, tnAchieves leadership should make efforts to maintain the current quality of their coaching workforce and the nature of coaching contacts.

