IR CORNER

December 2024 Issue 9

Convergence...

When Data Align

Online Readiness Assessment
Preparing Students for Online Success

Attending Multiple Campuses
What's the reason? What's the impact?

TARRANT COUNTY COLLEGE
OFFICE OF INSTITUTIONAL RESEARCH

Convergence:

When Data Align

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In pursuit of truth, one must not only gather information but also evaluate the strength of the knowledge it provides. Is one data point an anomaly or an early indicator of a complex pattern? As you begin to compare data sources and see trends over time, the answers you seek are no longer unbounded but instead become more limited as the evidence you collected begins to converge. As data sources begin to more tightly align, you gain confidence that information you've obtained is more relevant and useful.

At TCC, we are combining internal data sources such as course enrollments and success, student surveys, and external data sources such as the Census Bureau and labor market data in order to create a stronger data narrative. In addition, we are replicating studies over time to determine whether similar outcomes emerge. While obtaining any finding once could be statistically possible, seeing it through multiple sources and/or multiple times moves it to statistically probable and provides a more solid foundation for conversations about moving from data insights to action.

In this issue, we combine survey responses regarding attending multiple campuses with registration data, and we examine online readiness scores alongside course success. By joining Texas Education Agency (TEA), Texas Higher Education Coordination Board (THECB), National Student Clearinghouse (NSC), and internal TCC data, we are able to compare long-term outcomes of Tarrant County graduates based on dual enrollment at TCC. In addition, pairing survey responses from student parents with new internal data provides a first-step for learning more about the student parent population. Lastly, we look at associate degree completion based on online enrollment and examine blended learning through both survey responses and course data.

If ever you feel you are wondering aimlessly in a maze of uncertainty, take comfort that you may simply be circling ever tighter around the knowledge you desire. Our hope is that we can be a part of your journey and that by providing multiple data sources over time we may eventually reach a powerful moment when data indeed align.

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"Data is like a faint light when you're lost in a dark room. Follow it, try to make sense of it, and you might actually know where you are and what's around you."

**Attributed to David Sides*

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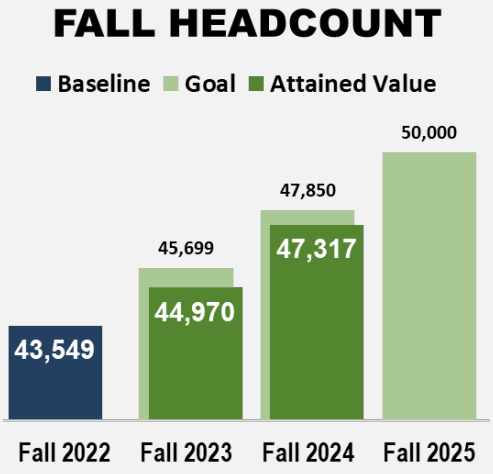
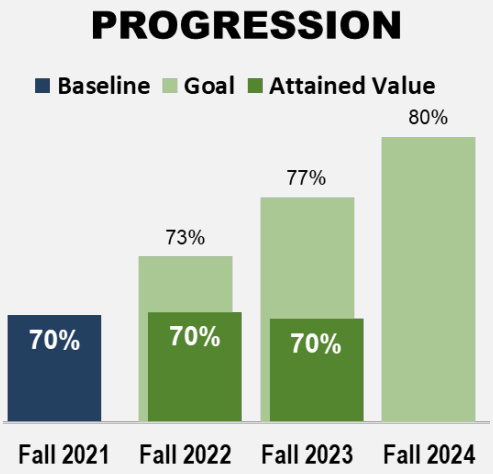
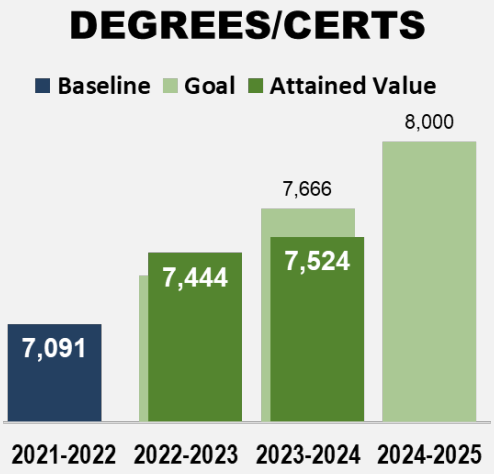
YEAR 2 IN REVIEW

RECRUITMENT, RETENTION, & COMPLETION







Goal 1: Increase Fall Headcount to 50,000 in Fall 2025

Baseline: Fall 2022 ~43,500

Headcount: the number of credit students enrolled on the fall term's census date.

For a decade (Fall 2010 to Fall 2019), TCC's fall headcount was about 50,000. Headcount declined during the pandemic and decreased to a low of about 40,500 by Fall 2021. Fall 2022 brought signs of recovery with about a 7% increase in headcount from Fall 2021. While the year 1 and year 2 milestone goals were not met, there were substantial increases in headcount. Fall headcount increased about 3% from about 43,500 in Fall 2022 to about 45,000 in Fall 2023, and it increased 5% from about 45,000 in Fall 2023 to about 47,000 in Fall 2024.

The growth from Fall 2022 to Fall 2023 was driven almost exclusively by dual enrollment – a 26% increase in continuing/returning dual enrolled students and a 5% increase in new dual enrolled students for a total 14% increase in dual enrollment. While there was still large growth in dual enrollment from Fall 2023 to Fall 2024 (12%), there was also a 3% increase in non-dual enrolled students. In addition, growth was balanced between new students and continuing/returning students.

Goal 2: Increase Progression to 8 in 10 Students for Fall 2024 Cohort

Baseline: Fall 2021 ~70% (7 in 10)

Progression: the number of credit fall students who were retained to TCC the following fall, retained to any other institution the following fall, graduated from TCC in the academic year, or graduated from any other institution in the academic year.

The 2016 to 2018 Fall cohorts had a progression rate just under 70%. Most recently, the rate has reached about 70% for the past three cohorts.

While headcount and completions increased, the progression metric remained flat. Research presented in *The Higher Ed Journey: Stopping Out (IR Corner Issue 8, June 2024)* showed that stopping out one year after a student started (FTIC term) was a common stop out point for those who stopped out.

Goal 3: Increase Degree/Certificates to 8,000+ in 2024-2025

Baseline: 2021-2022 ~7,100

Degrees/Certificates: the number of degrees and certificates awarded by TCC in the academic year.

From academic years 2015-2016 to 2020-2021, the number of degrees/certificates awarded was near 8,000. This number decreased to about 7,100 in 2021-2022. From academic years 2021-2022 to 2022-2023, there was almost a 5% increase to about 7,400 in 2022-2023. As such, TCC met the year 1 milestone goal of 7,333 degrees/certificates in 2022-2023. While the year 2 milestone goal of 7,666 degrees/certificates was not met in 2023-2024, there was sustained momentum with a slight increase to about 7,500 in 2023-2024.

Based on the high demand fields defined for the state and DFW area for 2024-2025, about one-fourth of degrees/certificates awarded in the past three years were in high demand fields.

Source: ODR, NSC, DA Degrees, Stat handbook

The Impact of Dual Enrollment

Methodology

The Texas Higher Education Board (THECB) tracks graduates from Texas public high schools to determine how many immediately enroll at a Texas Higher Education institution and how many earn a Bachelor's Degree or higher within six years of their graduation from a Texas Higher Education institution. Using their reports, all Tarrant ISD students were compared to Tarrant ISD students with former dual enrollment at TCC.

For former TCC dual enrolled (dual credit/ECHS) students, the high school graduation year was approximated using the student's birthdate. Then, using National Student Clearinghouse data, these students were tracked for six years from the expected graduation date to determine immediate enrollment at a Texas Higher Education institution and how many earned a Bachelor's Degree or higher within six years of their graduation from Texas Higher Education institution.

Data included outcomes from Tarrant ISD graduates from 2011 to 2016.

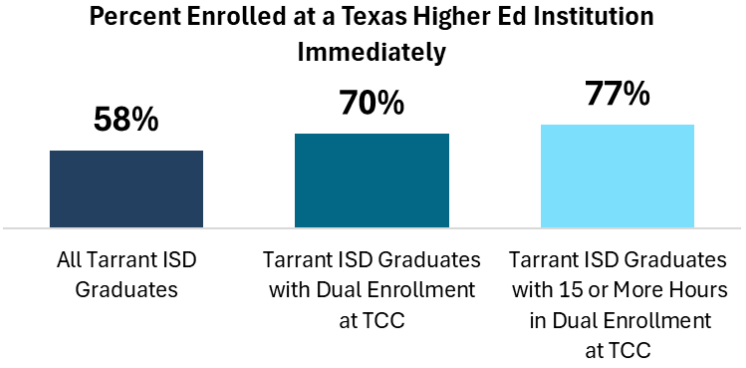
DEFINITIONS:

Graduation Year: defined as September 1st to August 31st of the following year. For example, the Class of 2010 was defined as anyone with a birthdate between September 1, 1991, and August 31, 1992. These students were expected to graduate in 2010SP.

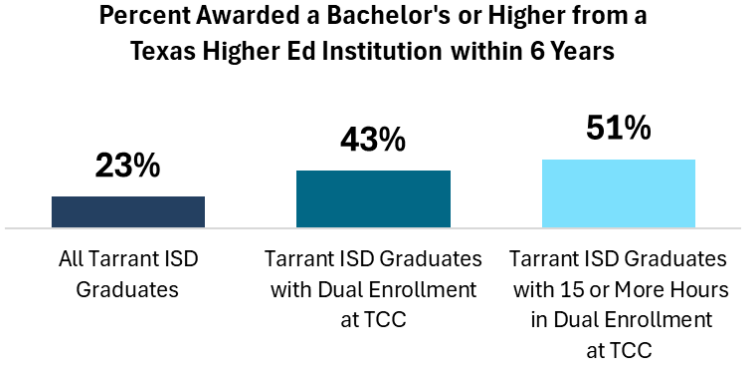
Tarrant ISDs: Arlington, Azle, Birdville, Carroll, Castleberry, Crowley, Eagle Mountain-Saginaw, Everman, Fort Worth, Grapevine-Colleyville, Hurst-Euless-Bedford, Keller, Kennedale, Lake Worth, Mansfield, Northwest, and White Settlement

Estimates:

Tarrant ISD graduates with dual enrollment at TCC were about **1.2 times** more likely to attend a Texas Higher Education institution immediately after high school graduation compared to all Tarrant ISD graduates.



Tarrant ISD graduates with dual enrollment at TCC were roughly **2 times** more likely to earn a Bachelor's Degree or higher from a Texas Higher Education institution within six years of high school graduation compared to all Tarrant ISD graduates.



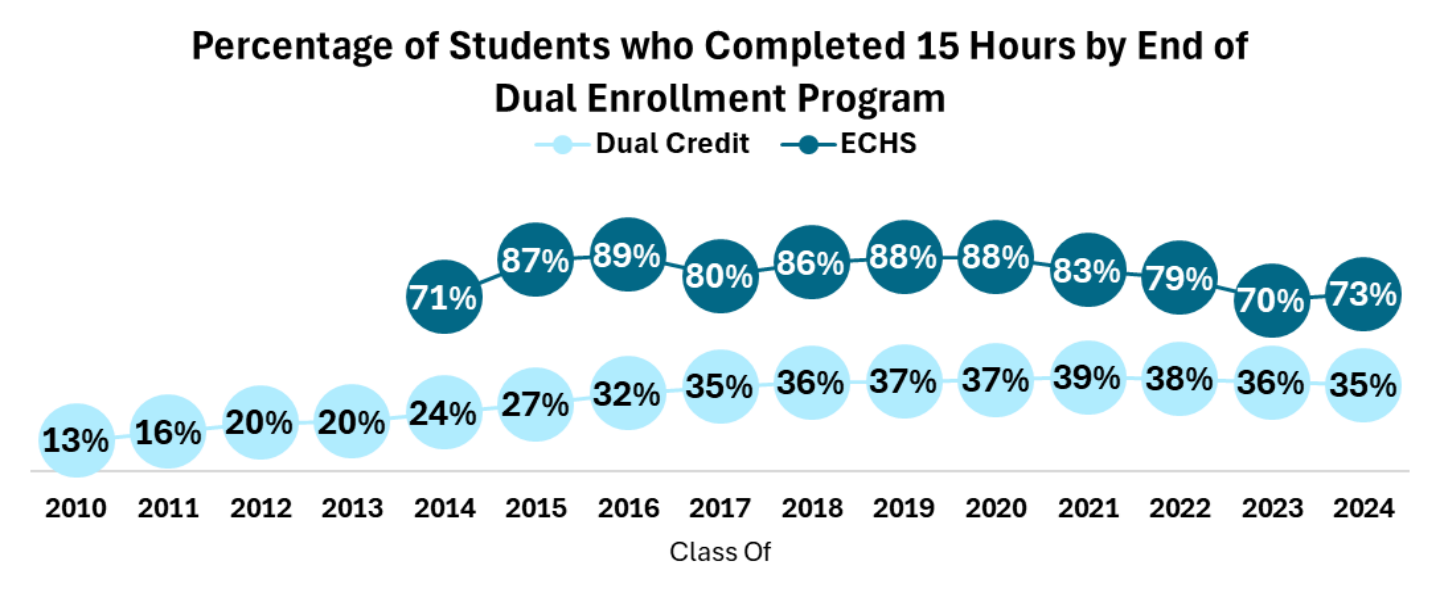
Source: Student Demographics, THECB, TEA, NSC
THED: High School Graduates Higher Education Outcomes

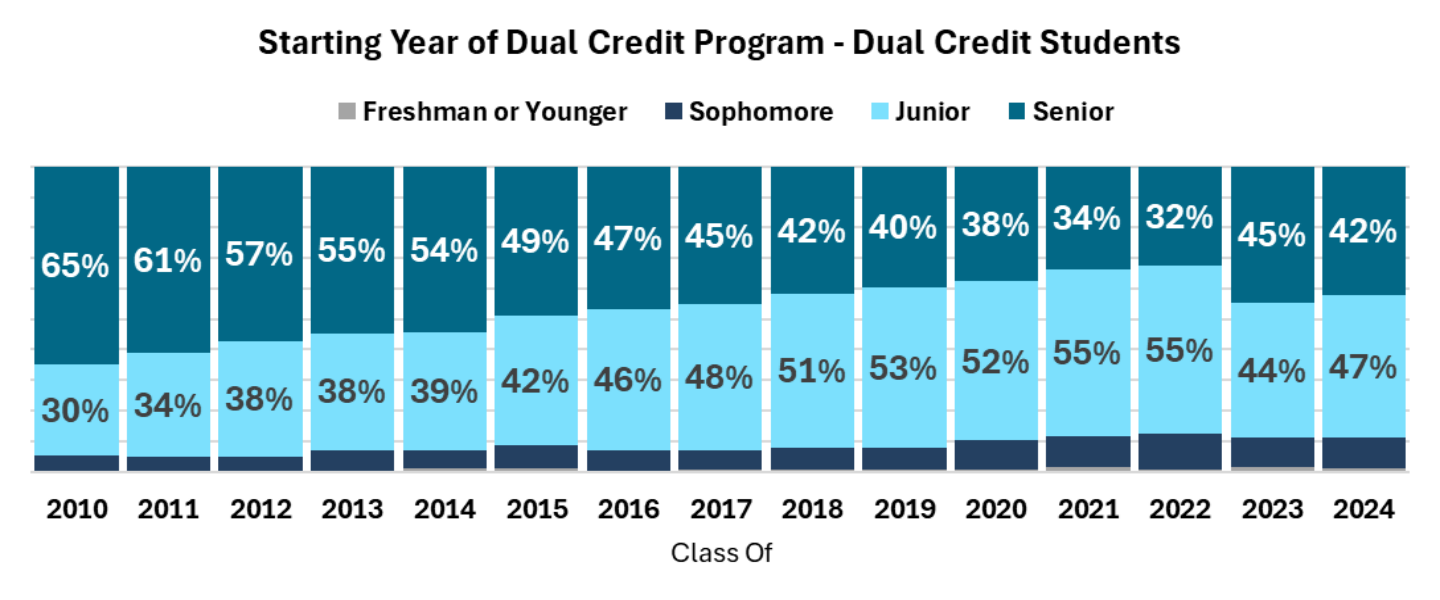
When Do Dual Credit Students Start?

Since students who earn 15 or more hours in dual enrollment have stronger long-term outcomes, it may become more important for students to start their dual enrollment journey sooner. While ECHS students have historically completed their program with an average number of hours well above 15, dual credit students have historically completed their program with an average of about 12 to 14 hours. In fact, typically 70% or more of ECHS students completed 15 hours by the end of their program, whereas, recently closer to 40% of dual credit students completed 15 hours by the end of their program.

While ECHS students were dual enrolled for their first time their freshman or sophomore year, many dual credit students were not dual enrolled until their junior or senior year. Using the Class of 2024 as an example, roughly 4 in 10 dual credit students did not start their dual credit program until their senior year. Thus, these students may not have time to complete 15 or more hours.

Source: Student Demographics, Enrollment by Term





STUDENT PARENTS

Many students are also parents. The additional responsibilities that come with raising children may lead to some unique challenges regarding higher education. Recent reporting changes provide an opportunity for this population to be better identified and in turn provides opportunities for institutions to meet their unique needs.

In the recent 2024FL Student Preferences and Experiences survey, students were asked if they had children and the age groups of their children. The term *parent* in this article refers to a respondent who had at least one child under the age of 18.

About one in five respondents indicated having at least one child under 18. Of those with at least one child under age 18, close to half had children in multiple age ranges. N=276

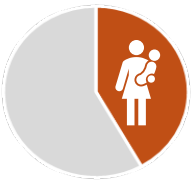
43% Had children ages 0-4

54% Had children ages 5-12

41% Had children ages 13-17

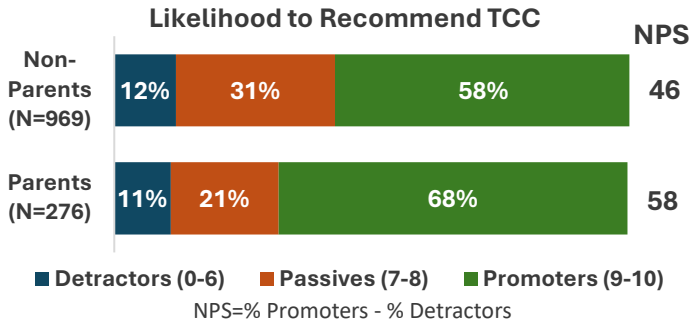
20% Had children ages 18+ years old

About 4 in 10 respondents with children under 18 were single parents.



LIKELIHOOD TO RECOMMEND TCC

When asked how likely they were to recommend TCC to others, respondents with children were more likely to recommend attending TCC than those without children. The *Net Promoter Score* for parent respondents was 58, which was 12 points higher than non-parent respondents.



FINANCIAL WELLBEING

Respondents with children indicated at higher rates that they would have trouble getting $500 to meet an unexpected need within the next month. Additionally, parent respondents agreed at higher rates than non-parent respondents that they worried about being able to pay their current monthly expenses and worried about having enough money to pay for school.

Respondents with children were more likely than those without to report in the last 12 months:

- They had difficulty paying for rent (41% vs 20%)
- They had difficulty paying the full amount of a gas or electric bill (48% vs 27%)

- They were unable to afford to eat balanced meals (36% vs 28%).

More than three in four respondents who were parents indicated they worked, with more than half working full-time.

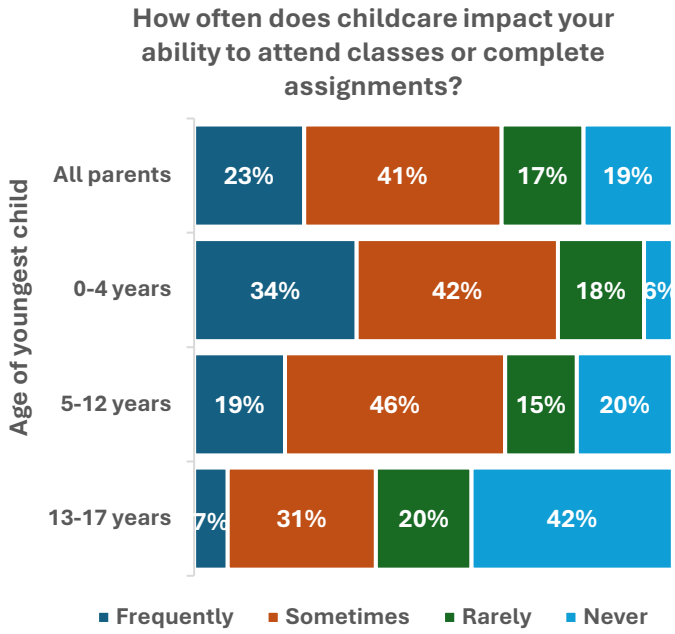
How many hours worked for pay at a job?

Student Type	Parents N=268	Non-Parents N=941
Work full-time	52%	23%
Work part-time	24%	42%
Solely a student	24%	35%

Of those who work, respondents with children were more likely than those without to indicate that their work responsibilities *frequently* or *sometimes* impacted their ability to attend class or complete coursework.

CHILDCARE

About two-thirds of parent respondents reported that childcare *frequently* or *sometimes* impacted their ability to attend classes or complete assignments on time, with the greatest impact being felt by parents of younger children. N=274



Three in four parents of younger children (i.e., under age 13) would take more classes if childcare was available nearby.

ACADEMICS

Parent respondents reported they had dropped a class or were considering dropping a class at higher rates than non-parent respondents. Additionally, respondents who were single parents reported dropping a class or considering dropping a class at higher rates than other parents. These results may be related to the above-mentioned impact that childcare had on parents' ability to attend classes or complete assignments.

Respondents with children were more likely than those without to report:

- Taking classes primarily online (39% vs 22%)
- Not being able to select their preferred schedule (37% vs 29%)
- Having chosen a career pathway (81% vs 70%)

In addition to the survey data, TCC has begun collecting self-reported information on student parents. Of those who provided information on their parenting status and were enrolled in 2024FL:

- About 13% indicated they were the parent to a child under age 18.
- Student parents were more likely to be enrolled part-time than non-parent students (71% vs 64%).
- Student parents were more likely to be over 25 years of age than non-parent students (81% vs 19%).

N=13,565

Source: 2024FL Stat Handbook, HB1361_data

Note: Header image is AI generated using Adobe Firefly

Online Readiness Assessment: Preparing Students for Online Success

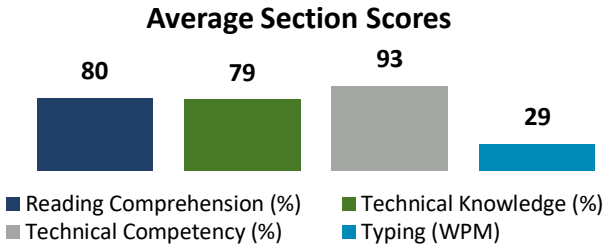
Overview

Upon enrolling in an online course for the first time, TCC students are required to complete an "online readiness assessment" that measures the extent to which students are prepared to succeed in an e-learning environment. The online readiness assessment is a method to ensure students can effectively utilize the digital technologies required to successfully complete an online college course. This article examines how students perform on the online readiness assessment and the impact that varying levels of online readiness have on the success of TCC students in online learning environments.

What is the Online Readiness Assessment?

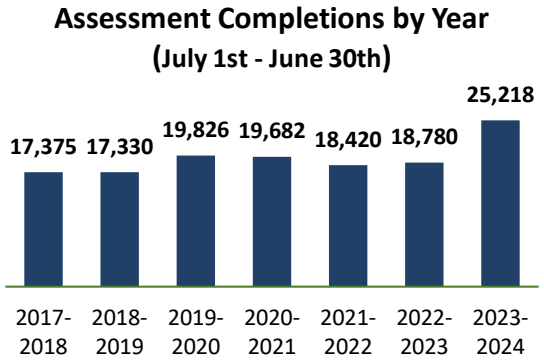
The online readiness assessment is comprised of **four sections** that correspond to different skills that are associated with high degrees of competency in using digital technologies and, subsequently, should promote course success in online learning environments. For each section, students must attain a minimum score to pass the section. Students must pass all four sections in a given attempt in order to pass the assessment and enroll in online courses (although there are exceptions). The four sections and their minimum passing scores are:

- Reading Speed and Comprehension (**60%**)
- Technical Knowledge (**80%**)
- Technical Competency (**80%**)
- Typing Speed and Accuracy (**15 WPM**)



Demographics

Between July 2017 and July 2024, 136,332 students completed 136,631 online readiness assessments. Students who completed the online readiness assessment came from a variety of demographic backgrounds. More than **1 in 3** completers were White, **30%** of completers were Hispanic/Latino, and another **20%** were Black/African American. In terms of age, almost **65%** of completers were 21 or younger, and roughly **85%** of completers were 30 years old or younger.



Note: 2023-2024 runs through July 11, 2024

General Assessment Results

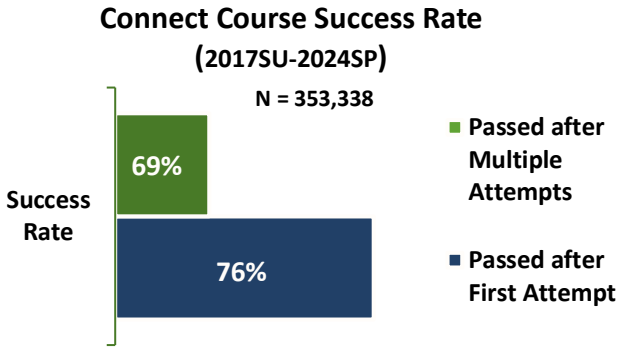
It is worth briefly mentioning some general statistics and results from the assessments that were completed by students during the 2017-2024 period. Of the 136,631 completed assessments, nearly **93%** had a passing result. Moreover, of the 136,332 students who completed at least one online readiness assessment, only 9,663 **(~7%)** did not end up passing the assessment.

The average composite score across all completed attempts was just above **85%**, with a minimum composite score of **35%** and a maximum composite score

Sources: Online Readiness Assessment Data, Enrollment Data by Term, Student Demographics

Assessment Performance and Student Success

Starting with a broad look at assessment performance and course success in online courses offered at TCC Connect, it appears that there was an association between passing the online readiness assessment and achieving a grade of "A", "B", "C" or "CR" in online courses. Overall, students who passed the assessment on their first attempt had a success rate that was roughly **7%** higher than students who passed the assessment after multiple attempts (or did not pass the assessment at all).

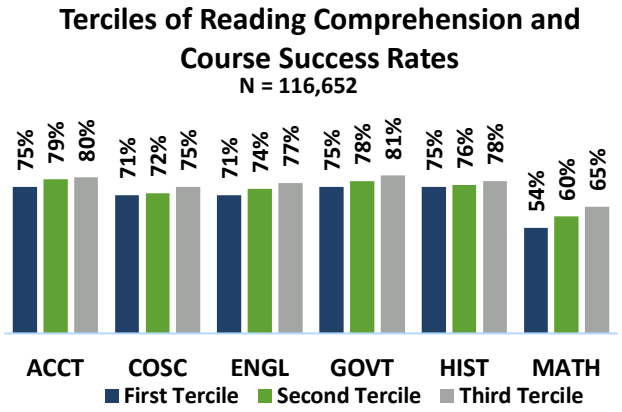


Some students who completed the assessment enrolled in a mix of online and in-person courses. When comparing the **in-person success rate** of students who passed the online readiness assessment against those who did not pass the assessment, a clear disparity emerges. While students who passed the assessment had an in-person success rate of **77%**, students who failed to pass the assessment had an in-person success rate of only **62%**, indicating a relationship between passing the assessment and course success, regardless of modality. (N = 459,557)

Reading Comprehension and Course Success

While each component of the online readiness assessment was designed to measure a student's preparation for success in online courses, the reading comprehension section had a clear connection to student success in courses that are "text-heavy" such as English, Government, and History courses.

The following chart displays the relationship between reading comprehension scores and student success rates for several course subjects, some of which are text-heavy (English, Government, and History) and some of which are non-text-heavy, such as Computer Science or Math. There appears to be a positive association between a student's reading comprehension score and their likelihood of achieving success in online courses, although the effect varies by subject quite a bit.



A "tercile" is a set of values representing one-third of data.

Preparing for Success through Online Readiness

The results of this analysis indicate that performing well on the online readiness assessment was associated with higher levels of success in subsequent courses, regardless of modality. The analysis also suggests that the reading comprehension component of the assessment had some connection to success in a variety of subjects. Given these insights, there are several considerations worth keeping in mind as students continue to take the online readiness assessment in the future:

Follow up with students who do not pass the online readiness assessment

Students who did not pass the online readiness assessment were less likely to achieve success in subsequent courses, in both in-person and online learning environments. This finding suggests that students who fail the assessment may benefit from targeted attention and assistance in future courses or additional training to develop the skills necessary to succeed in online learning environments.

Consider subject-specific assessments to gauge student skills in preparation for college-level courses

The connection between relatively high scores on the reading comprehension section of the online readiness assessment and success in "text-heavy" subjects such as English, Government, and History highlights the potential utility of subject-specific skill assessments for different course subjects. Assessing skills of students before enrolling in different subjects could help instructors and administrators create a personalized experience that addresses the shortcomings and strengths of students taking courses at TCC.

Online vs. In-Person Graduates

Analyzing differences in demographics, course success, and time to completion

Overview

The TCC Connect campus began offering courses during the 2014FL term. **For over 10 years**, TCC students have had the option to complete a growing number of courses and entire degrees *Online*.

Between the 2014FL and 2024SU UG terms, **over 22,000** students enrolled in TCC for the first time and completed their Associate of Arts *(AART.D001.UG)* degree. This is by far the most awarded degree during this period, as well as one of the first available to complete *100% Online* through the Connect campus.

This article explores demographics, graduation rates, course success, and time to completion among students who started and completed their A.A. degree between 2014FL and 2024SU terms and have either taken all their courses *Online*, all *In-Person*, or became *Hybrid* learners.

In-Person, Hybrid, or 100% Online

A total of **22,488** students enrolled in their first UG term at TCC and eventually graduated with their Associates of Arts degree between the 2014FL and 2024SU terms.

By analyzing a graduate's enrollment history between their first term of enrollment at TCC through the term of their graduation, they can be grouped as either an *In-Person, Hybrid, or 100% Online* student based on their collective course modalities.

Modality	Headcount	%
In-Person	4,109	18.3%
Hybrid	18,003	80.1%
100% Online	376	1.7%
Total Graduates	22,488	100.0%

Source: *Enrollment Data by Term (No CreditType 'N'), Student Degrees*

Approximately **80%** of graduates earned their A.A. degree by completing **both** *In-Person* and *Online* courses.

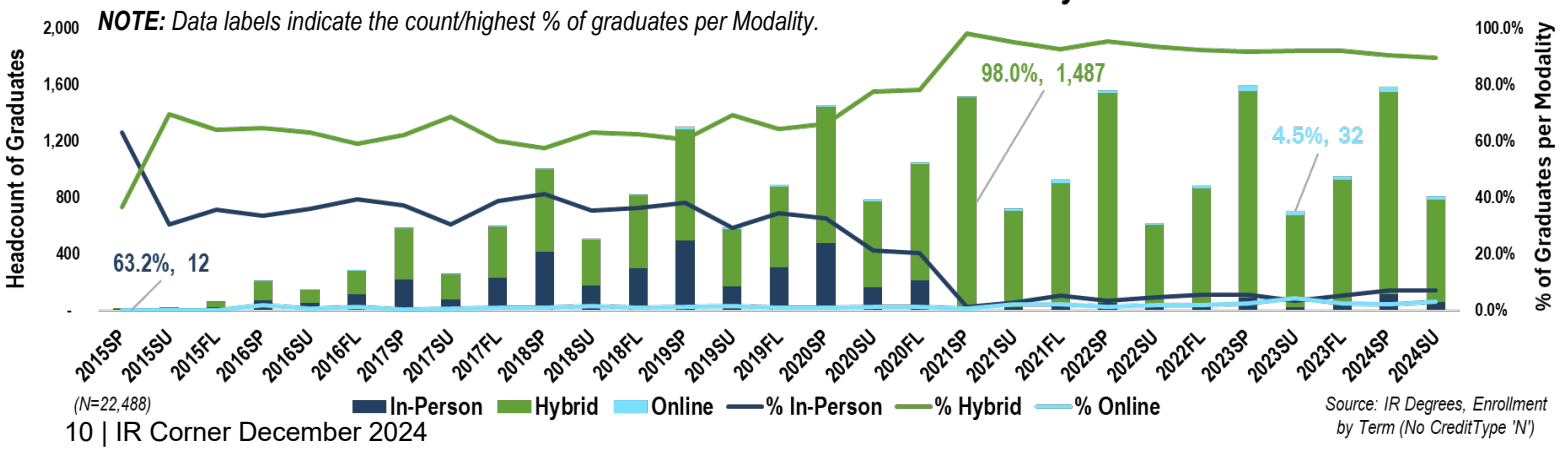
Roughly **18%** of graduates earned their A.A. degree by **only** completing courses offered *In-Person*. *In-Person* refers to courses attended on a physical campus.

Nearly **2%** of graduates completed all their A.A. course work *Online*. *Online* refers to courses offered asynchronously, synchronously, or computer delivered.

COVID-19 Considerations

Between the 2020SU and 2021SP terms, the COVID-19 pandemic necessitated that all students shift to online learning. The data displayed in this article does not delineate between voluntary and involuntary online course enrollments. Therefore, the number of *Hybrid* completers peaks during quarantine in the 2021SP term and remains the dominant modality through the 2024SU term.

AART.D001.UG - Graduates vs. Modality



Source: IR Degrees, Enrollment by Term (No CreditType 'N')

Demographics

Age at Graduation

Over time, the average age of A.A. graduates gradually decreased from **27** years old in the 2014-2015 Academic Year (AY) to **23** years old in the 2023-2024 AY.

Associates of Arts, Age at Graduation, 2014FL-2024SU			
AgeGroup	**Total** *(N=22,488)*	**In-Person** *(N=4,109)*	**100% Online** *(N=376)*
Under 21	35.8%	38.3%	17.8%
21-25	44.3%	47.9%	27.7%
26-30	8.8%	6.5%	19.7%
31-35	4.6%	2.8%	13.8%
36-40	2.9%	1.5%	8.8%
41 and above	3.6%	2.9%	12.2%

Source: *Enrollment Data by Term (No CreditType 'N'), Student Degrees*

- Over **85%** of graduates within the *In-Person* population are *25 or younger* when they completed their degree, compared to **80%** of total graduates.
- **Almost 55%** of graduates who attended *100% Online* were 26 or older, compared to **one in five** of total graduates.

Course Success

The success rate (A, B, C, & CR) of all courses for *Hybrid*, In-*Person* and *100% Online* graduates are as follows:

In-Person	***Hybrid***	***100% Online***
Success Rate	**Success Rate**	**Success Rate**
88.8%	**86.2%**	**90.5%**
(N=93,704)	*(N=445,026)*	*(N=5,865)*

Source: *Enrollment Data by Term (No CreditType 'N'), Student Degrees*

All graduates had a total course withdraw rate of **5.8%** while *In-Person* graduates had a slightly lower withdraw rate at **4.4%** and the *100% Online* graduate population had the lowest withdraw rate of **4.3%**.

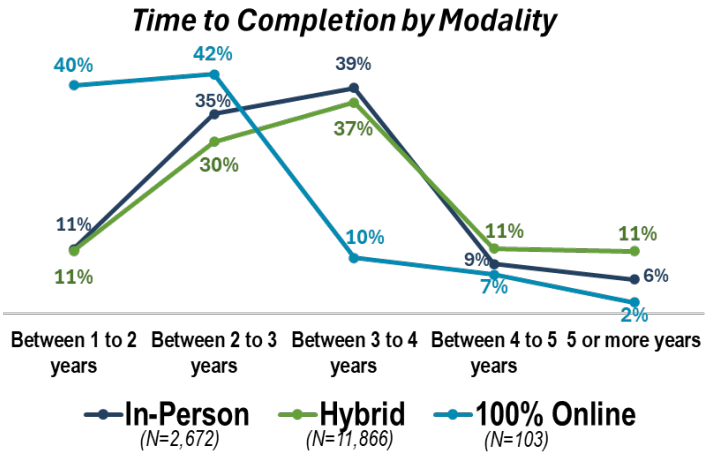
Time to Completion

Tarrant County College offers courses in multiple formats and lengths. The Connect campus grants students more options and flexibility to develop a course schedule that can enable a faster time to degree completion.

Considering Transfer Credits

Many students have completed college courses prior to enrolling at TCC, and therefore have **less hours** to complete their desired degree. When calculating the time to completion among *In-Person, Hybrid, or 100% Online* graduates, the following data only includes students with **zero** transfer hours. **Between 34-35%** of *In-Person* and *Hybrid* graduates had transfer credits, while **roughly 73%** of *100% Online* graduates had transfer credits.

The Time to Completion difference between *In-Person* and *100% Online* A.A. graduates is displayed below:



Source: *Enrollment Data by Term (No CreditType 'N') & Student Degrees*

Around **82%** of *100% Online* graduates completed their degree in less than 3 years compared to **46%** of *In-Person* graduates. The average time to completion for *Hybrid* graduates was about **3.5 years**, *In-Person* graduates about **3.3 years**, and *100% Online* graduates had the lowest average of about **2.5 years**.

Conclusion

In the past 10 years, over **80%** of Associate of Arts graduates have taken **at least one** online course and could therefore be classified as either *Hybrid* or *Online* learners. Despite this high level of participation in online learning, less than **2%** of graduates were *100% Online* learners. A graduate's collective course modality can provide the following insights:

In general, 100% Online Learners have better outcomes than other modality graduates. *100% Online graduates* had a higher course success rate (90.5%) when compared to In-Person (88.8%) and Hybrid learners (86.2%). Additionally, *100% Online* students had a lower withdraw rate than other modalities and saw a dramatically shorter time to completion than other modality graduates, but this population was much smaller in comparison.

Hybrid/Online modalities are becoming more prominent. Since 2020-2021 AY, the rate of *In-Person* graduates has decreased significantly. In 2018FL, nearly **41.4%** of graduates were *In-Person* learners. Right before quarantine procedures went into effect (2020FL), the number of *In-Person* graduates **decreased by over half** to **20.1%**. By 2023FL, roughly **5.3%** of graduates were still exclusively *In-Person* learners. Despite the impact COVID-19 had on enrollment A.A graduates were already trending toward more *Hybrid* or *Online* learning.

Attending Multiple Campuses

What's the reason? & What's the impact?

Overview

When asked in a recent Fall 2024 survey whether their reasons for taking classes on multiple campuses were more personal choice or because of schedule design, **only about 20% of respondents on multiple campuses indicated it was by personal choice**. The aim of this article is to further explore patterns in multiple campus attendance and consider the impact of schedule design.

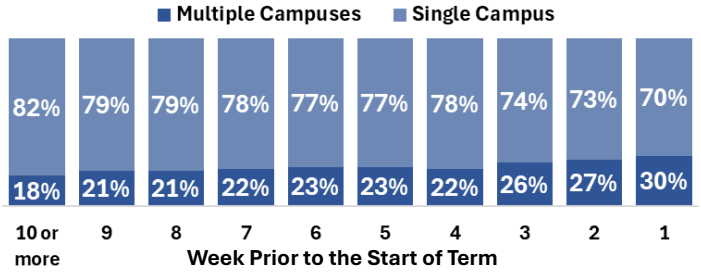
Historical Multiple Campus Enrollment

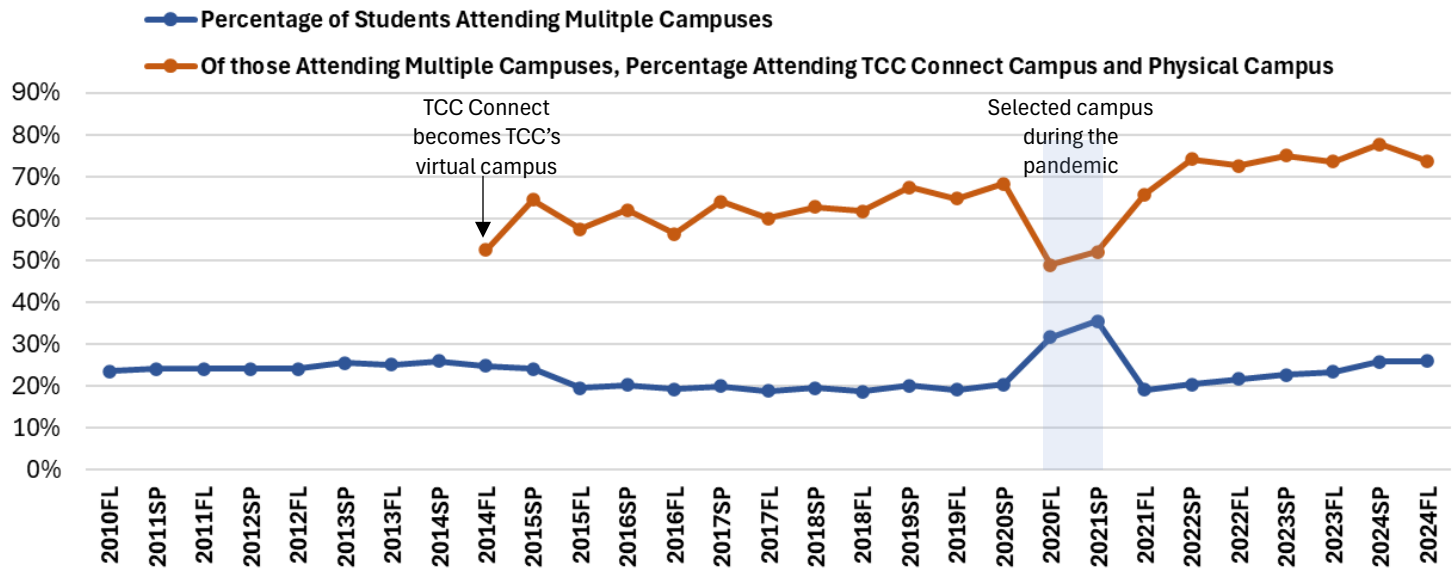
In the roughly five years prior to the establishement of TCC's virtual campus, TCC Connect Campus, about one-quarter of students each fall and spring semester attended multiple campuses. Between 2015 and 2020, the percentage of students attending mutiple campuses dropped to about one-fifth of students each semester. During the pandemic, this percentage increased sharply; however, students likely prioritized campus differently during this time since they did not need to commute to campus. Note that the percentage returned to about 20% post-pandemic but has since risen to about 25%.

Of those attending multiple campuses, the percentage attending TCC Connect Campus and a physical campus grew from nearly 60% in 2015 to almost 75% more recently.

Connection Between Late Registration & Multiple Campuses

A connection between late registration and attending multiple campuses was demonstrated using registration data from 2021FL to 2024FL (fall/spring terms). Students whose last registration was in the week prior to the start of the term (30% on multiple campuses) were about 1.7 times more likely to be enrolled at multiple campuses than students whose last registration was in the 10 weeks prior to the start of the term or earlier (18% on multiple campuses).

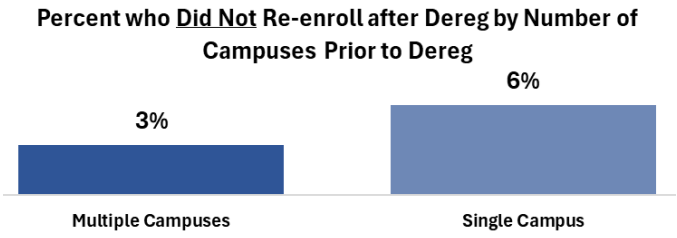




Choosing One Campus

Students who registered early (10 weeks prior to the start of the term or earlier) may have had more choice in whether they attended multiple campuses. Interestingly, about two in ten students who registered early attended multiple campuses, which mirrors the percentage of survey respondents who indicated they attended multiple campuses by choice. In other words, most students likely want to attend just one campus.

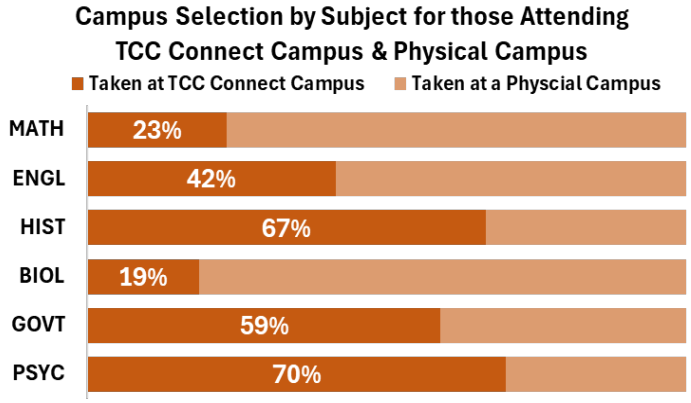
Dereg (drop for non-payment) data from 2021FL to 2024FL (fall/spring terms) suggests that for students who were enrolled pre-dereg, were deregged, and then re-enrolled by the end of the term, about nine in ten students did not change the number of campuses they attended – meaning of those enrolled at a single campus pre-dereg and then deregged, about 90% re-enrolled at a single campus after being deregged. Almost all (over 99%) re-enrolled at the campus in which they had been enrolled prior to being deregged. Note that students enrolled at a single campus who were deregged were about twice as likely to remain unenrolled compared to students enrolled at multiple campuses who were deregged.



Lastly, respondents from both the Spring 2024 and Fall 2024 Student Preferences and Experiences survey indicated that *campus* was among their top considerations along with *time of day* and *modality*. **Thus, collectively, data suggests many students may not consider attending multiple campuses an option.**

Course Selection for those Attending Multiple Campuses (TCC Connect & Physical Campus)

Among students who took courses at both TCC Connect Campus and a physical campus from 2021FL to 2024FL (fall/spring terms), certain subject areas were more likely to be taken online. Math, English, History, Biology, Government, and Psychology accounted for almost half of course enrollments by these students. Math and Biology were much less likely to be taken at TCC Connect Campus compared to the other subject areas.



Note that this campus selection result which shows differences by subject seems to align with survey respondents indicating that their preferred modality was related to the subject of the course.

Success

Likely connected to late registration among other factors, the success rate for students attending multiple campuses (74%) was about 2.6 percentage points lower than the success rate for students attending a single campus (76%).

Impact of Schedule Design

For the past several student surveys, roughly one-quarter or more of respondents reported that they could not select their preferred schedule. Data presented in this article suggests that the inability to select their preferred campus may be a large factor in why students cannot create their preferred schedule. Further, while some students choose to take courses on multiple campuses – likely doing so for a schedule of both online and face-to-face courses, many students may not be willing to attend multiple campuses.

Ultimately, the impact of a schedule design in which students cannot select their preferred schedule may lead to lower retention/completion. In Fall 2024, the percentage of respondents who indicated they would return next year/accomplish their goals this term for those who could select their preferred schedule (92%) was 8 percentage points higher than those who could not select their preferred schedule (84%). In a Spring 2024 survey, this gap was 12 percentage points. In fact, data from the Fall 2024 survey suggest that it is possible that being able to select a preferred schedule has a similar baring on whether a student will return next year/ accomplish their goals this term as the level of barriers they face.

Source: Enrollment by Term (no credit type N), Enrollment Activity, Student Preferences and Experiences surveys

How Predictive is the Prior Year?

Overview

A common metric presented during the registration cycle is the percentage change from the prior year. In other words, how different is the headcount for the current year compared to the same time point (days until start of term) from the prior year? Often this number is used as a gauge to try to anticipate the final growth rate on census date, but how predictive is the early percentage change?

Historical Headcount

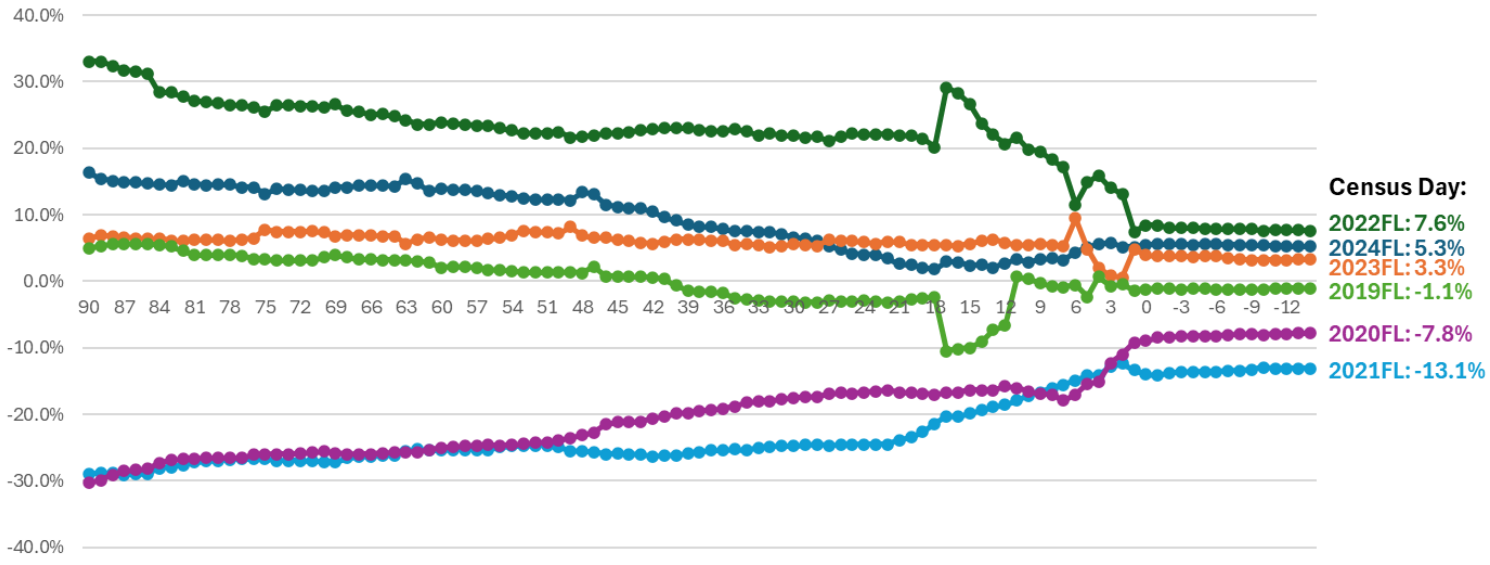
Using Fall 2024 as an example, 90 days prior to the start of the term headcount was up about 16% from Fall 2023. Headcount was up about 14% 60 days prior to the start of the term, and it was up about 7% 30 days prior to the start of the term. Ultimately, the headcount increased about 5% from Fall 2023 to Fall 2024. Thus, the early growth rate was markedly different from the final growth rate. Overall, the past six years showed that the growth rate 90 days out was as much as 25 percentage points different than the final growth rate. The growth rate 60 days out was as much as 17 percentage points different than the final growth rate, and the growth rate 30 days out was as much as 14 percentage points different than the final growth rate.

Implications

Because the early growth rate might not be a strong indicator of the final growth rate, it may become more important to examine sub-populations during the registration cycle. One might investigate which sub-populations are driving growth and whether those groups should continue to increase, and if a sub-population has decreased, is there a true decrease or will the group be registered later in the cycle compared to the prior year. To that end, IR continues to develop registration reports and dashboards to monitor daily registration and provide deeper insights to better understand the growth rate.

Source: Enrollment by Term (no credit type N)

Percentage Change From Prior Year Based on Number of Days Until Start of the Term



Data's Shelf Life

By: Matt Wolfe

I love the grocery store! Its shelves stocked with ingredients appear to me as a well of potential; their contents waiting to be transformed from raw materials into something delicious. I have many times found myself moved by my own overreaching ambitions to purchase far more than is necessary to feed two for a week. As soon as it is all put away, the clock starts ticking. After a few weeks, a sad forgotten piece of produce inevitably and irrevocably withers and melts in the crisper drawer.

In research, there exists a not-insignificant amount of stress surrounding the timeliness of reporting a result to the broader community. Stakeholders and decision makers often have a vital need for fast data to inform their next course of action, and colleagues in the research space might be working on similar projects, creating redundancy while possibly leaving gaps in other areas. Sometimes the research zeitgeist shifts, and the opportunity to strike while the iron is hot is simply missed. Definitions and procedures change as well, rendering old methods of interpretation and manipulation ineffective. In all these cases, fresh data has the potential to, in a sense, spoil. To wither and melt in the crisper drawer.

However (to belabor the metaphor) there are measures that can be taken to preserve both groceries and data. Canning and salting can extend the window within which one can safely consume food without becoming ill; likewise, documentation and careful organization can greatly extend the usefulness of a dataset. Having these stores is extremely important when looking at TCC on a historical scale. We might stop asking,

"What is happening right this second?"

and start asking the more comprehensive question of,

"Where have we been, and where are we going?"

We start to see where data and groceries differ in their shelf lives: While rotten eggs are never again appetizing, the utility of a dataset transforms based on the context it is found in and the questions that are asked of it. I might not care as much about student headcounts in fall 2014 as I would the headcounts in fall 2024, but in a longitudinal study, that 2014 data is part of a story being told.

In arguably the best-case scenario, both food and data are consumed to produce energy and knowledge respectively. When a question has been satisfactorily answered, the data used to create it has effectively served its purpose. While it is possible (and wise) to document and preserve the raw materials for posterity, they will likely not be used again. The information generated from this process is the fuel that powers the research engine: As previous questions are answered, we are led down exciting new paths of inquiry, continually searching for findings that can help our students achieve their goals.

Taking all of this into consideration, we arrive at a conclusion that is either frustrating or hopeful depending on the kind of day you're having. When given some data and asked if it might be helpful to further your project, the only reasonable answer is, "Well, it depends… is it relevant? Have we exhausted the data's shelf life, or is it useful as part of the wholistic story?"

Hybrid/Blended Courses in Action

Examining enrollment trends and student feedback of Hybrid/Blended courses.

Hybrid (Blended) Courses Overview

Tarrant County College offers courses in a variety of different modalities, including *face-to-face*, *online,* and the focus of this article, **Hybrid/Blended**.

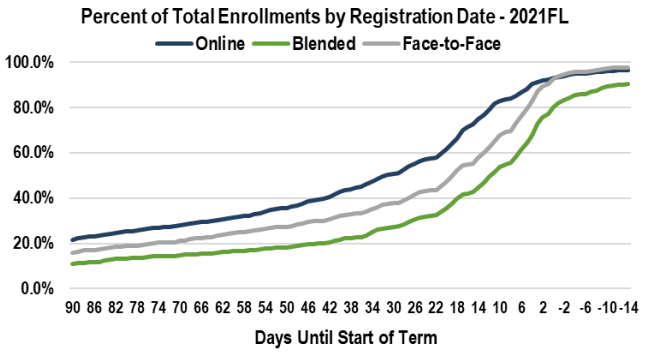
These courses offer an experience that combines both *face-to-face* and *online* components. For instance, a *Hybrid/Blended* lecture or lab course is partly taught face-to-face/in-person in a traditional classroom setting but also incorporates non-traditional methods of instruction typically through online tools.

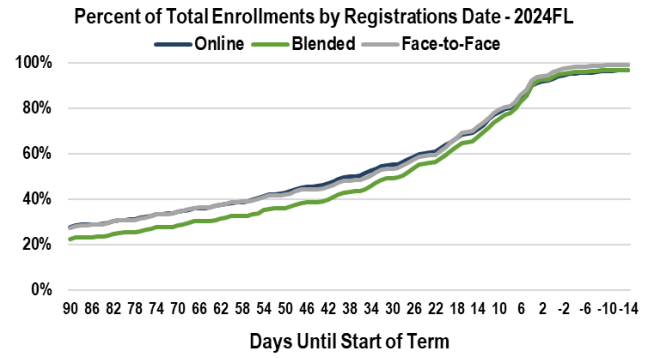
In this article, the enrollment trends, success rates, demographics, and student feedback regarding *Hybrid/Blended* courses are examined to better understand the impact this modality has had on TCC students in recent years.

Registration/Enrollment Metrics

Historically, course enrollments in blended sections occurred much later in the registration cycle.

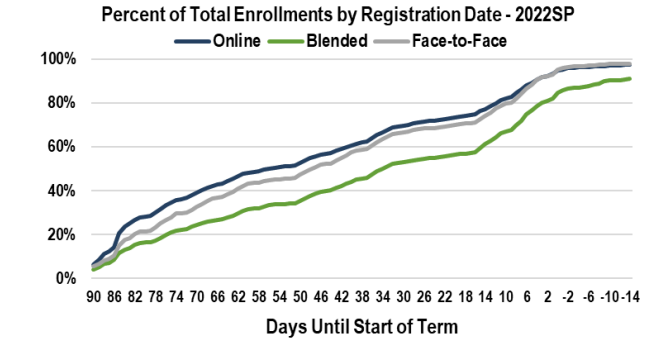
2021FL vs. 2024FL Registration Date by Modality

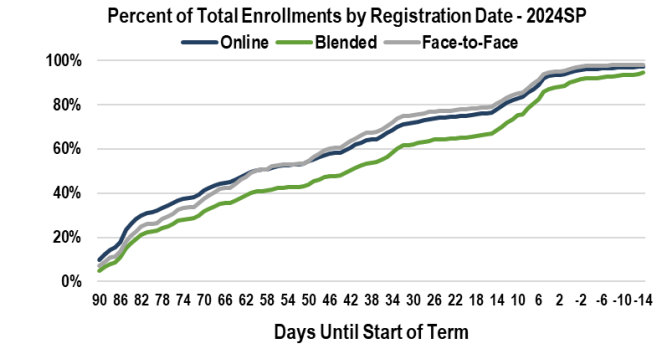




Source: *Enrollment by Term (No Credit Type 'N') - 2024FL data are "to date" as of October 10, 2024.*

2022SP vs. 2024SP Registration Date by Modality

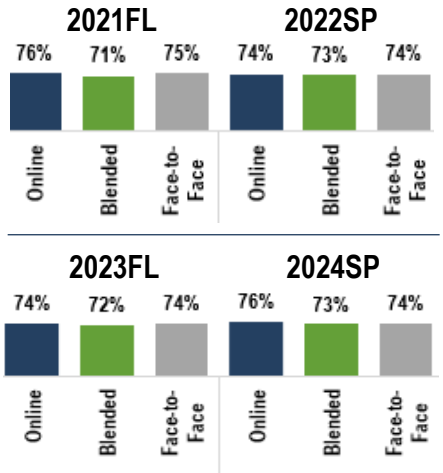




Source: *Enrollment by Term (No Credit Type 'N')*

In the most recent FL/SP terms, **40%** or more of course enrollments in blended sections occurred within *30 or fewer days* before the start of the term.

2021-22AY vs. 2023-24AY Success by Modality



Note: *The charts only include courses that were offered in all three modalities during the term.*

Source: *Enrollment by Term (No Credit Type 'N'), Success (A, B, C, CR)*

In addition, for most recent FL/SP terms, success rates for blended enrollments were **a few percentage points lower** than online and face-to-face enrollments.

Student Feedback

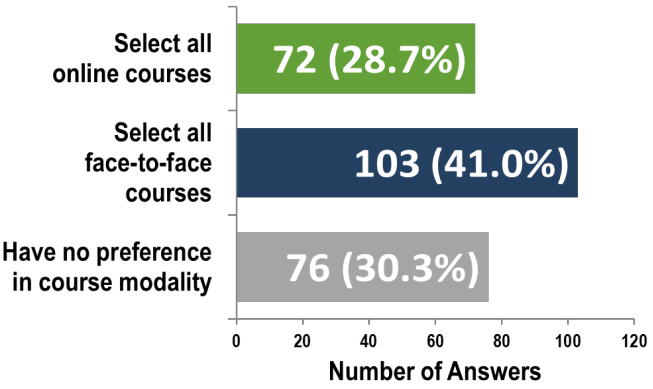
In 2024FL, a survey was distributed to a total of **8,631** TCC students as well as faculty/staff involved in a blended/hybrid course.

Roughly **4%** of students (N ~ 250) completed the survey and provided insights into the student population's current sentiment towards blended learning in general.

When asked why they are enrolled in blended learning, most respondents (**60%**) said they preferred the *hybrid/blended* modality while the remaining respondents (**40%**) enrolled in a blended course because it was their only choice. (N=301)

If a hybrid/blended course were not available, **41%** of respondents stated they would select all face-to-face courses over all online courses (**29%**). *(N=251)*

If blended learning were not an option, I would:



Around **40%** of respondents rated *Hybrid/Blended* courses as effective as *in-person* courses. *(N=288)* Additionally, **42%** of respondents stated that they had about the same level of motivation in their *Hybrid/Blended* courses as compared to traditional *in-person* learning. *(N=286)*

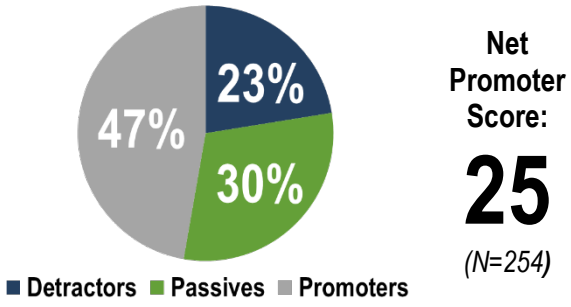
When asked about time management, **58%** of respondents stated *Hybrid/Blended* courses were *more or much more effective* compared to traditional in-person learning. *(N=286)*

This time management result seems to potentially align with how most respondents (**85%**) stated that they benefited from hybrid/blended courses allowing for more flexibility in learning. *(N=269)*

Respondents highlighted their biggest challenges with blended learning like limited interactions with instructors or peers **(38%)**, technical issues with platforms/tools, **(33.5%)** and difficulty managing time **(32%)**. *(N=224)*

Student Feedback Cont.

Most respondents (**83%**) *agreed* or *strongly agreed* that blended learning will continue to be a part of the educational system in the future. About **47%** of respondents would recommend or actively promote blended learning to other students or educators. *(N=254)*



Regarding future improvements to the online components of the blended learning experience, almost half of respondents (**48%**) suggested more interactive content. *(N=216)*

Ultimately, respondents and faculty/staff sentiment toward the blended learning experience can be summarized in the following comment:

> *"I think both students and educators enjoy the student **interaction** that online cannot truly replace but students are going toward online instruction for **convenience** with busy schedules."*

Conclusion

Hybrid/Blended courses are on the rise and will likely continue to increase enrollment over time. Between the 2021FL and 2023FL terms, the number of *Hybrid/Blended* courses offered has **more than doubled**, and subsequently seen a higher rate of enrollment. Additionally, students have been registering for *Hybrid/Blended* courses earlier and have more recently expressed a preference for the modality compared to in-person or online courses.

The Hybrid/Blended modality has room for improvement regarding student outcomes. Students enrolled in *Hybrid/Blended* courses have a **slightly lower** success rate when compared to In-Person or Online sections between 2021FL and 2023FL. While the overall experience in *Hybrid/Blended* courses skews positively with surveyed students having a Net Promoter Score of **25,** some respondents cited grievances with the online components of their courses that were in need of improvement.

Navigating the Maze:

From Applications to Enrollments

Introduction

When it comes to getting potential students to enroll for a semester, there are many steps along the way that might discourage or even derail enrollment. While it may seem as though a submitted application is a sign that a student's enrollment is "in the bag", we have seen that this is not necessarily the case; come census day, many applicants are no-shows. In this article, we highlight one of the strategies that TCC has implemented to help applicants on the path to enrollment.

In spring 2024, 18 Trailblazer Round Up events were held in collaboration with ISD partners, the TCU College Advising Corps, the T3 Partnership, and Tarrant County College to encourage prospective students to enroll at TCC in the fall semester. Events were held from April 4th to May 22nd at participating high schools. In total, 942 student attendees were verified and used in this report.

Applications and Enrollment

Of the 942-student group, **more than 3 in 4** have applied to TCC for the 2024 fall semester. Students' application dates were compared to their respective event dates determined by their high school on record (N = 714 students mapped). Overall, **about 97%** of these students submitted their application to TCC *before* the Trailblazer Round Up event took place at their high school. On average, students submitted their first application roughly **5 months prior** to their Trailblazer Round Up event. Notably, the conversion rate from applications to enrollments for the students who attended the Trailblazer events was much higher than for the general student population. As of the fall 2024 census, **about half (379 or 53%)** of the 714-student group have enrolled in a for-credit course in fall 2024 with an average courseload of about 11 credit hours. **Out of about 36 thousand applications, only about 13 thousand students (about 35%)** ended up enrolling at TCC in fall 2024 as of census day.

Conversion Rates

All Applicants	Event Attendees
35%	53%

Conclusions

Generally, students had applied to TCC for fall 2024 well before they attended the event, suggesting that the main value of the event may have been informational and as preparation for enrollment at TCC as opposed to being a call-to-action. Overall, students who attended one of the trailblazer events were more likely to later enroll in the fall than a typical TCC applicant.

Sources: Provided IDs, Student Demographics, T3 Data, ODR, FA 3YR, coll_production.xf_st_is_echs_student,coll_production.xf_st_is_ehdc_student, Enrollments by Term

CONTACT US

Have you found an article interesting or used some research from IR Corner? Let us know!

Have you ever tried to put together a puzzle without the box to guide you? It's a challenge because, without the picture on the front, you're not sure exactly what the end result should look like. When examining the pieces, it can be hard to know where to start. But when you find pieces that share similar colors and textures, you know you're headed in the right direction. Even better is when you find pieces that actually fit together, and suddenly the puzzle begins to take shape.

Much like assembling a puzzle, when data align, the different pieces begin to fit together, revealing patterns, trends, and relationships that might otherwise remain unseen or unexamined. The connecting pieces strengthen the findings and can provide direction for uncovering the bigger picture. Our goal is to play the part of puzzle solver by connecting various sources of information and shed light on that compressive image we were meant to see and provide powerful insights for our TCC community.

- Team IR

> "…the way is long if one follows precepts, but short and helpful, if one follows patterns."
>
> — *Lucius Annaeus Seneca*

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