IR CORNER

SUMMITTING NEW HEIGHTS:
The next phase for data

Student Barriers
What gets in the way?

The Higher Ed Journey:
Stopping Out

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Summitting New Heights:
The next phase for data

EDITORIAL

Holly Stovall

To steal a line from Nike, "It's only crazy until you do it." Driven by this mantra, perhaps we're too stubborn (eh…. determined), to believe something is impossible. With a few issues complete, you might be interested in a bit of our origin story. About a decade ago, we became fixated on a few grandiose ideas: create better access to data through dashboards, conduct more thorough research projects, and present data using more compelling methods to a wider audience.

Towards those ends, we started journeys to create IR's Data Hub, a collection of PowerBI dashboards, and IR Corner, a more captivating manner, we hope, to explain research conducted at TCC. Routine reports became Excel dashboards that are becoming Power BI dashboards, and ad hoc, disparate research projects are becoming cohesive articles. These efforts culminated in IR's inaugural Data & Research Summit in April, a peak we couldn't have reached without the support of our TCC colleagues.

As we work to operationalize what was once innovative and continue to try to raise the standards for excellence, we look forward to the next destinations for data at TCC. We share a few new ones in this issue. We examine the barriers students face and patterns for those who stop out. We present an overview of the English Language Learner Program (ELLP), the Adult Learner population, and the College for Kids population and investigate their long-term outcomes. In addition, we analyze the impact of utilizing the learning commons. Lastly, we provide an infographic for Trinity Metro usage.

By considering new data sources, conducting more thorough analyses, and, most importantly, collaborating to leverage the passion and expertise of our TCC colleagues, we are truly summitting new heights!

inspIRe

"We cannot lower the mountain, therefore we must elevate ourselves."

*Attributed to Todd Skinner

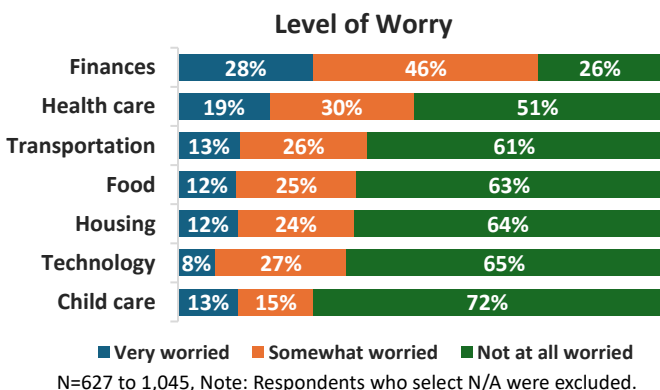# CONTENTS

Student Barriers: What gets in the way?

Students face hurdles and barriers to their success in college due to many factors. Through recent District-wide surveys, information has been collected on the barriers TCC students face and the extent to which those barriers impact the students.

OVERVIEW

In 2023SP, students who responded to a district-wide survey indicated their level of worry regarding meeting their basic needs. This research was expanded in 2023FL to evaluate how big of a barrier meeting their basic needs was to them staying enrolled. A list of possible barriers to classroom success was also developed, which included barriers related to academic preparedness and social readiness for college. Additionally, in 2024SP, students were asked to identify the primary barriers they faced and what resources, if any, they used to help address or alleviate the barriers.
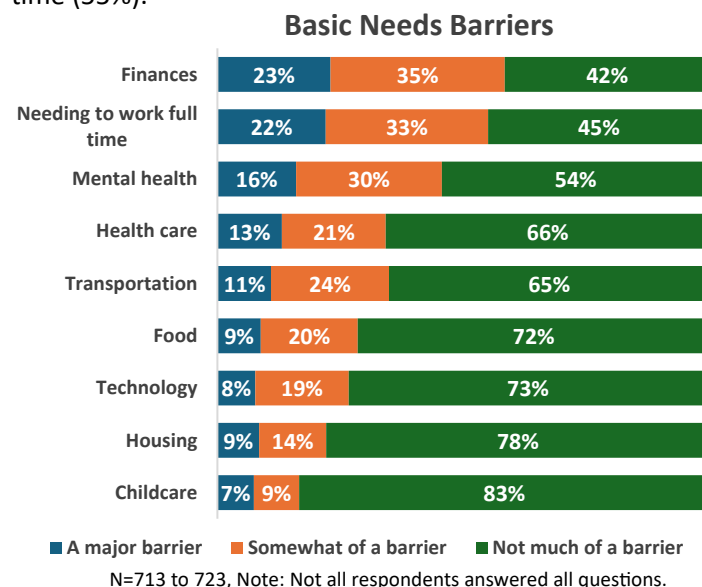
BASIC NEEDS

As part of the 2023SP student survey, students rated their level of worry related to meeting their basic needs. Finances (74%) and health care (49%) were the top two basic needs that respondents indicated being *somewhat* or *very worried* about.

Level of Worry

	Very worried	Somewhat worried	Not at all worried
Finances	28%	46%	26%
Health care	19%	30%	51%
Transportation	13%	26%	61%
Food	12%	25%	63%
Housing	12%	24%	64%
Technology	8%	27%	65%
Child care	13%	15%	72%

■ Very worried ■ Somewhat worried ■ Not at all worried

N=627 to 1,045, Note: Respondents who select N/A were excluded.

To better understand the challenges facing students regarding their basic needs, in the 2023FL district-wide survey, students were asked to identify to what extent meeting each of their basic needs was a barrier to them continuing as a student at TCC.

Similar to the level of worry previously noted, respondents identified finances as the basic need that presented the greatest barrier to them staying enrolled, with 58% saying it was *somewhat of a barrier* or *a major barrier*. This was followed closely by needing to work full time (55%).

Basic Needs Barriers

	A major barrier	Somewhat of a barrier	Not much of a barrier
Finances	23%	35%	42%
Needing to work full time	22%	33%	45%
Mental health	16%	30%	54%
Health care	13%	21%	66%
Transportation	11%	24%	65%
Food	9%	20%	72%
Technology	8%	19%	73%
Housing	9%	14%	78%
Childcare	7%	9%	83%

■ A major barrier ■ Somewhat of a barrier ■ Not much of a barrier

N=713 to 723, Note: Not all respondents answered all questions.
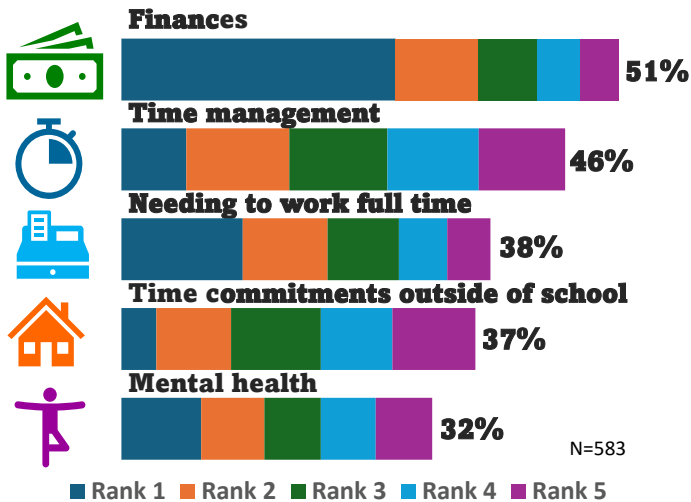
ACADEMIC & SOCIAL BARRIERS

Respondents also identified the extent to which several academic and social skills were barriers to them being successful in class. The top barriers identified included:

- Time commitments outside of school (60%)
- Time management (58%)
- Test taking (50%)
- Math skills (48%)
- Studying techniques (46%)

N=682 to 716 Note: Percentages include *somewhat of a barrier* or *a major barrier*.

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TOP FIVE BARRIERS

When presented with all the basic needs barriers, as well as the academic and social skills barriers, students ranked the top five barriers they experienced. More than half of respondents ranked finances (51%) as one of their top 5 barriers, followed closely by time management (46%).

Finances
51%

Time management
46%

Needing to work full time
38%

Time commitments outside of school
37%

Mental health
32%

N=583

■ Rank 1 ■ Rank 2 ■ Rank 3 ■ Rank 4 ■ Rank 5

The top five barriers identified by respondents appeared highly interrelated. Finances and needing to work full time most likely impact time management and time commitments outside of school. The next five top ranked barriers were mostly related to academic preparedness (i.e., studying techniques, test taking, transportation, awareness of my degree plan, and math skills). Additionally, approaching my professors and asking questions in class were ranked amongst many of the academic barriers.

PRIMARY BARRIER

Based on the top barriers identified in 2023FL, respondents were asked in the 2024SP student survey to select the primary barrier to their success at TCC: Finances, Time management, or Academic Preparedness. About one in three selected time management (30%), followed by finances (27%), and academic preparedness (13%).

Time Management (e.g., commitments outside of school, awareness of time expectations for coursework)
Finances (e.g., paying for school, needing to work, living expenses)
Academic Preparedness (e.g., test taking, difficult course material, math/reading skills)

N = 884

Other, 9%
Academic Preparedness, 13%
No Barriers, 20%
Finances, 27%
Time Management, 30%
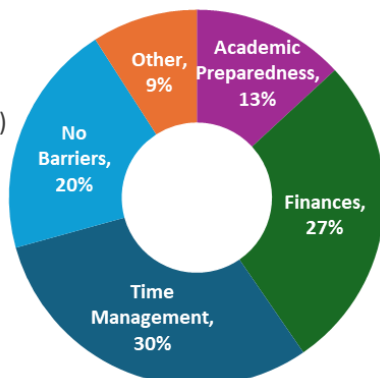
One-fifth of respondents indicated they did not currently feel there were barriers impacting their success. Respondents mentioned other barriers including issues with faculty or staff, physical or mental health concerns, and courses not being offered/available.

ADDRESSING BARRIERS

To better understand what steps students had taken to address the barriers and what resources may be needed, respondents were asked to identify the actions they had personally taken related to their primary barrier.

Time Management

Most respondents who indicated time management as their primary barrier reported designing their class schedule to fit around their outside obligations and rearranging their outside obligations to ensure they have the necessary time for coursework.
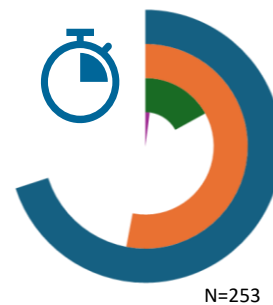
- **70%**: I have designed my class schedule to fit around my outside obligations.
- **53%**: I have re-arranged my outside obligations to ensure I have the necessary time for coursework.
- **17%:** I have attended a session/workshop or learned in a course about time management.
- **2%**: I have used resources for child care through my campus.

N=253

Finances

More than three-fourths of respondents who reported finances as their greatest barrier to success at TCC indicated they had applied for financial aid. About 4 in 10 had met with someone in financial aid. Fewer had attended a session on financial literacy at TCC.
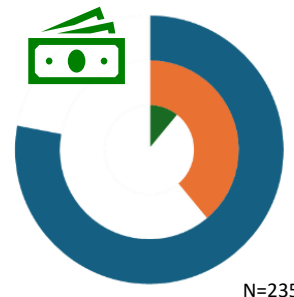
- **78%**: I have applied for financial aid.
- **39%**: I have met with someone in financial aid at TCC.
- **11%**: I have attended a session on financial literacy at TCC.

N=235

Academic Preparedness

For those who stated issues with academic preparedness as their primary barrier, many had visited the Learning
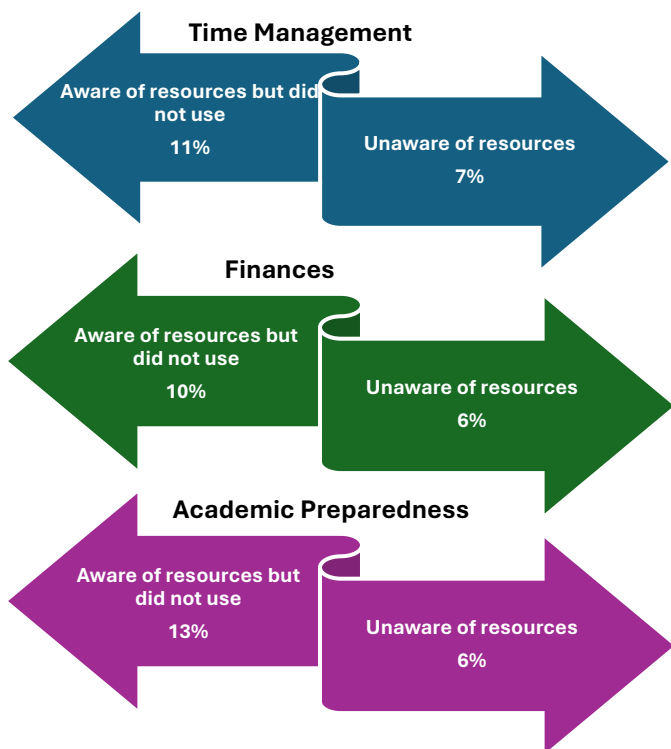
Commons or met with their instructor outside of class to discuss course work. About 1 in 3 also reported forming a study group with their classmates.

- **65%**: I have visited the Learning Commons.
- **42%**: I have met with my instructor outside of class time to discuss coursework.
- **32%**: I have formed a study group with my classmates
- **21%**: I have attended a Supplemental Instruction session.

N=114

For each of the three primary barriers, about 1 in 10 respondents indicated that they were aware of the resources available but did not use them, while 6% to 7% were unaware of the resources available to them as a TCC student.

Time Management

Aware of resources but did not use
11%

Unaware of resources
7%

Finances

Aware of resources but did not use
10%

Unaware of resources
6%

Academic Preparedness

Aware of resources but did not use
13%

Unaware of resources
6%

CONCLUSION

Finances and Time Management were consistently the main barriers respondents reported facing. The need to work and/or care for dependents was necessary for many TCC students. Additionally, some students reported issues with academic preparedness that may also impact their ability to balance time commitments outside of school, as they reported not having the study skills or core math, writing, or reading skills to keep up with the academic rigors of college-level coursework. As one can imagine, these barriers could compound to also impact mental health.

While many respondents reported taking some action to alleviate the barriers they faced, future research could examine the types of support and/or services students need to mitigate and overcome these barriers.

DEMOGRAPHICS

While survey respondents were not necessarily representative of the entire student population, previous survey data indicated many TCC students work and/or care for dependents.

Working students
- 2023SP: About **7 in 10** respondents worked in addition to school with **more than one-quarter** working 40+ hours per week.
- 2023FL: About **two-thirds** indicated working with **about one-fifth** reporting that they worked 40 or more hours per week.
- 2024SP: **56%** stated they had a job outside of school.

Students with dependents
- 2023SP: Almost **40%** of respondents reported caring for dependents.
- 2023FL: About **4 in 10** respondents cared for dependents.
- 2024SP: **26%** stated that they cared for dependents (e.g., a child or older relative).

Working students with dependents
- 2023SP: Almost **3 in 10** indicated caring for dependents and working at a job.
- 2023FL: Close to **30%** of respondents reported working and caring for dependents.
- 2024SP: **13%** stated they worked outside of school and cared for dependents.

*Note: The wording for the demographic questions changed in 2024SP, which may account for some of the differences from prior surveys.

The Higher Ed Journey: Stopping Out

For many students, the journey through higher education is not a straight path but rather a winding road that may lead them away from college and then back. Students who leave for one semester or more and later return to college are often described as stop-outs. In this analysis, the 2007 to 2013 fall first time in college (FTIC) cohorts were tracked for 10 years using data from almost all institutions in the US to better understand patterns in stopping out.

Overview

On average, each cohort had about 8,000 students, and roughly one in three of the students graduated within ten years. Overall, about 45% of students stopped out, meaning they left for at least one term but later re-enrolled. For those who did not graduate, almost 50% stopped out.
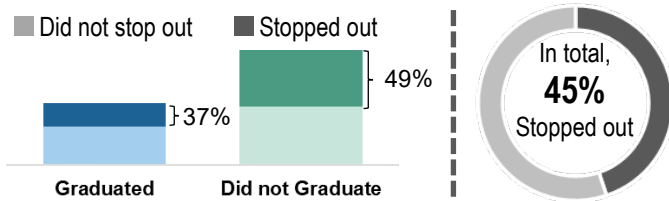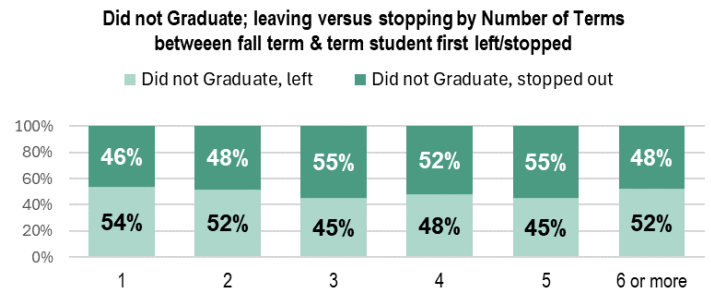

Students who Left

Of those who did not graduate, 51% left higher ed without ever returning and almost one in five of these non-graduates never returned after their first fall term. For non-graduates who left, they most frequently left one term after their start (36%) and almost three-fourths left one to three terms after their start.

Did not Graduate, Left Higher Ed: Number of Terms between starting fall term & term student left
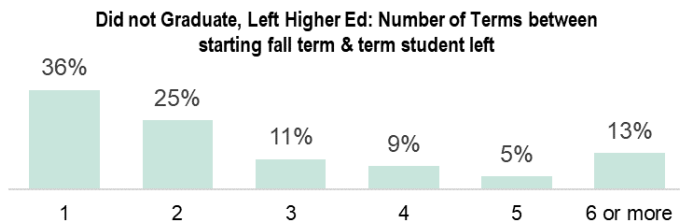
Non-Graduates: Leaving vs Stopping Out

Non-graduates whose first term without an enrollment was 3 to 5 terms after their first fall term were more likely to stop out instead of leaving without returning to higher ed.

Did not Graduate; leaving versus stopping by Number of Terms between fall term & term student first left/stopped

Stop-Outs: Time of Stop Out

About 55% of graduates who stopped out first stopped one to three terms after their start, while about 71% of non-graduates who stopped out first stopped one to three terms after their start.

Number of Terms between starting fall term & term student left
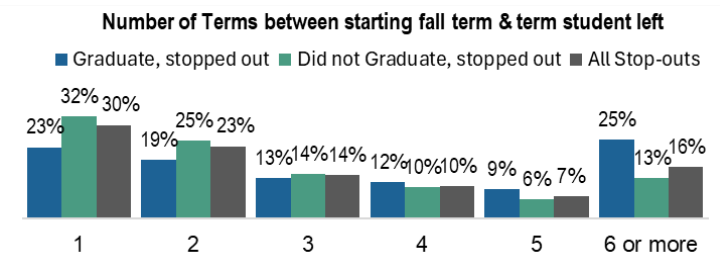
Stop-Outs: Length of Stop Out

For graduates who stopped out, the first stop out lasted more than three terms for about one-quarter of students while the first stop out for non-graduates lasted more than three terms for about 36% of students. Note that about one-quarter of non-graduate stop-outs returned after being gone for 6 terms, or about 3 years.

Length of Stop Out (in terms)

Legend: Graduate, stopped out | Did not Graduate, stopped out | All Stop-outs

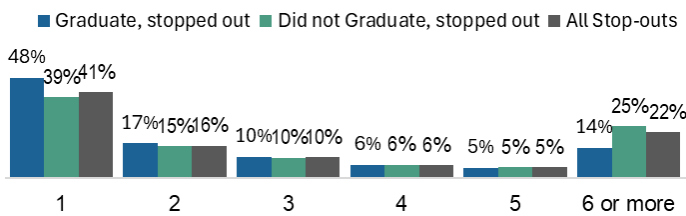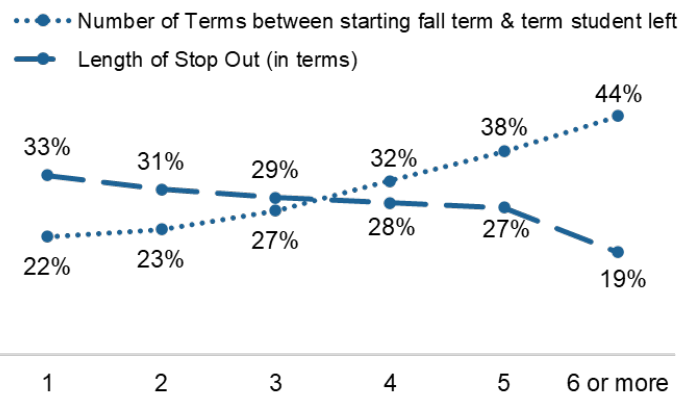| Terms	Graduate, stopped out	Did not Graduate, stopped out	All Stop-outs
1	48%	39%	41%
2	17%	15%	16%
3	10%	10%	10%
4	6%	6%	6%
5	5%	5%	5%
6 or more	14%	25%	22%

Percent of Stop-Outs who Graduated

Legend: Number of Terms between starting fall term & term student left | Length of Stop Out (in terms)

Number of Terms between starting fall term & term student left: 22%, 23%, 27%, 28%, 38%, 44%

Length of Stop Out (in terms): 33%, 31%, 29%, 32%, 27%, 19%
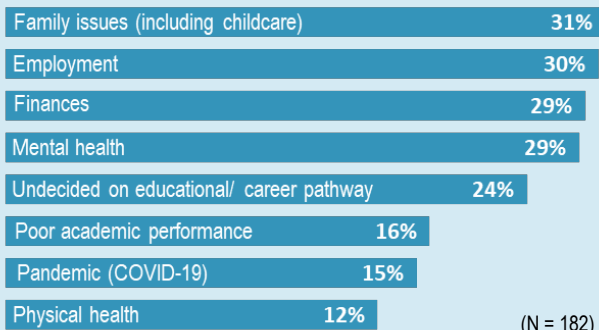
(x-axis: 1, 2, 3, 4, 5, 6 or more)

Stop-Outs: Possible Reasons

On a Fall 2023 district-wide survey, student respondents indicated whether they had ever taken a semester or longer break from TCC and later returned – not including summer semesters. About 25% indicated that they had taken a break, with about 31% citing *family issues (including childcare)*. About 48% cited *employment* or *finances*, and about 36% cited *mental* or *physical health*.

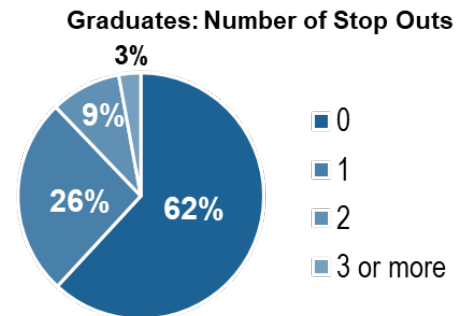**25%** About one in four respondents has stopped out at some point. (N = 757)

Top Reasons: *

Reason	Percent
Family issues (including childcare)	31%
Employment	30%
Finances	29%
Mental health	29%
Undecided on educational/ career pathway	24%
Poor academic performance	16%
Pandemic (COVID-19)	15%
Physical health	12%

(N = 182)

(* Respondents could select all that applied)

Graduates: Number of Stop-Outs

Roughly 4 in 10 graduates stopped out at some point in their higher ed journey with roughly 1 in 10 stopping out two or more times.

Graduates: Number of Stop Outs

Number	Percent
0	62%
1	26%
2	9%
3 or more	3%

Stop-Outs: Likelihood of Graduation

Overall, 29% of stop-outs went on to eventually graduate. There was a strong association between when the student first stopped out and whether they graduated. Students whose first stop out was six or more terms after they started were over twice as likely to graduate as students who stopped out after their first fall term.

There was also a strong association between how long students first stopped out and whether they graduated. Students whose first stop out lasted only one term were almost twice as likely to graduate as students whose stop out lasted six or more terms.

Trends

The percentage of students who stopped out decreased over time while the percentage who graduated was fairly stable during this period.

FTIC Cohort	Percent who Stopped Out	Percent who Graduated in 10 Years
2007FL	49%	35%
2008FL	49%	37%
2009FL	46%	34%
2010FL	46%	33%
2011FL	43%	35%
2012FL	42%	35%
2013FL	40%	36%

Conclusion

Analyses of the 2007 to 2013 fall FTIC cohort's 10-year outcomes yielded important insights regarding stopping out. Overall, almost one in two students stopped out with almost 4 in 10 graduates stopping out at some point in their journey. For stop-outs, the first stop out tended to happen in the first three terms after they started and most often lasted one term. The longer a student was continuously enrolled prior to stopping out, the more likely they were to graduate, and the shorter the length of the stop out, the more likely the student was to graduate. Recent survey data suggests that employment/finances might be the top reason for stopping out while mental/physical health and family issues (including childcare) may also be top reasons.

CONSIDERING POSSIBLE EXPLANATORY FACTORS

Students may face various types of social, financial, and academic barriers along their higher ed journey. First-generation status, poverty status, and first-term GPA were used as proxy variables for these barriers. Overall, although each barrier seemed associated with whether a student left after their first term and whether they ultimately graduated, first-term GPA appeared to be the most highly predictive.

Findings: Non-Graduates

Among non-graduates, those who were not first-generation students were more likely to stop out instead of leaving without returning at some point, and those who were not in poverty were more likely to stop out instead of leaving without returning at some point.

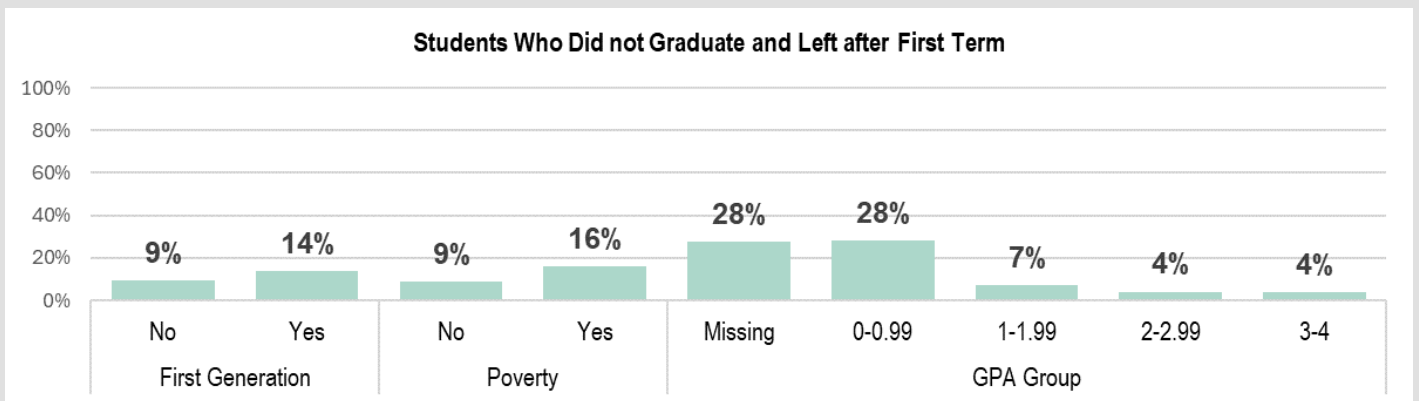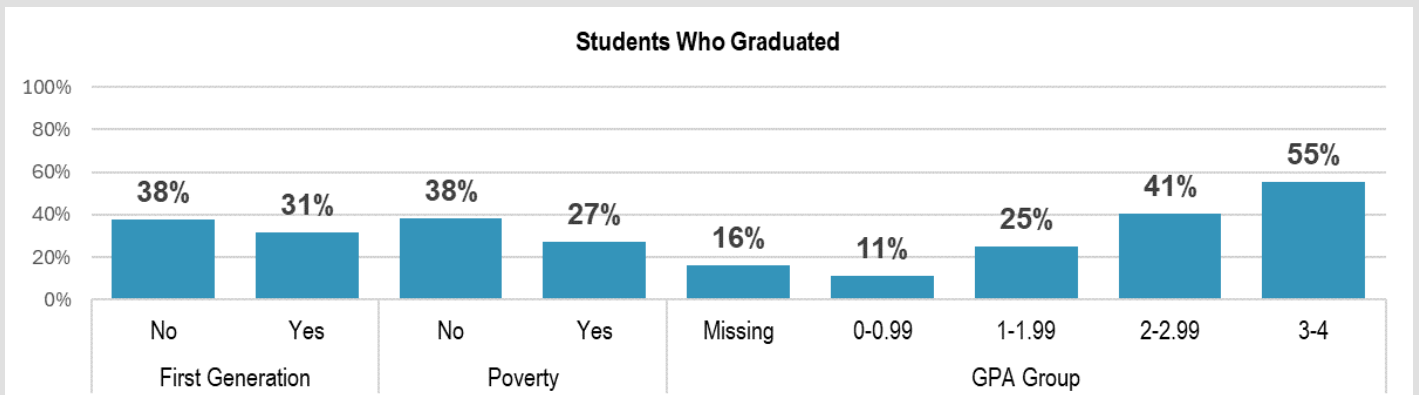Did not Graduate; leaving versus stopping by Number of Terms betweeen fall term & term student first left/stopped

- Did not Graduate, left
- Did not Graduate, stopped out

	First Generation		Poverty		GPA Group				
	No	Yes	No	Yes	Missing	0-0.99	1-1.99	2-2.99	3-4
stopped out	54%	46%	50%	44%	43%	48%	55%	53%	48%
left	46%	54%	50%	56%	57%	52%	45%	47%	52%
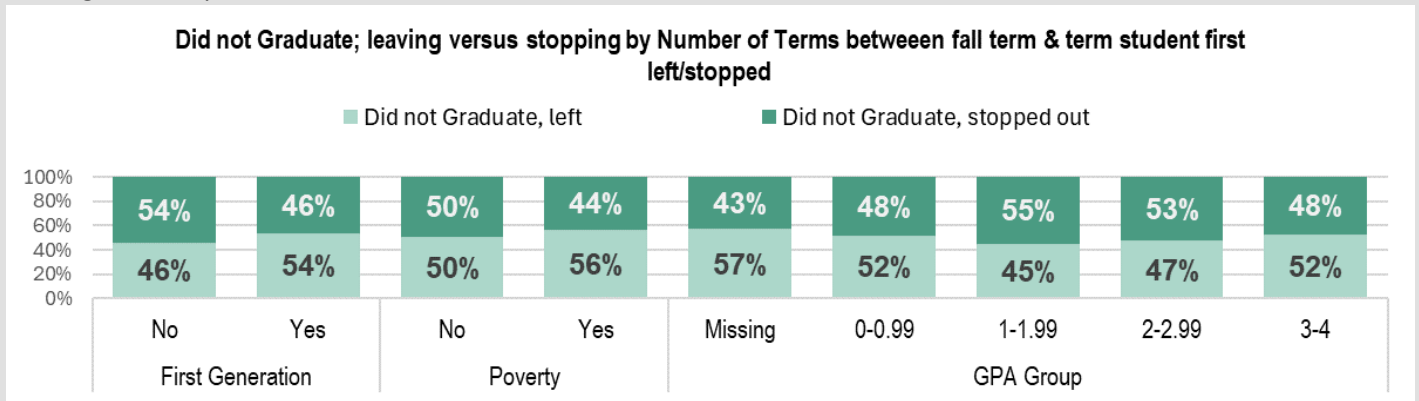
Findings: Left After First Term

Among all FTIC students, almost 30% of those who had a first term GPA less than 1.0 or had a missing GPA (meaning the student only took AE/Dev Ed and/or withdrew from all courses) left higher ed after their first term and never returned.

Students Who Did not Graduate and Left after First Term

	First Generation		Poverty		GPA Group				
	No	Yes	No	Yes	Missing	0-0.99	1-1.99	2-2.99	3-4
	9%	14%	9%	16%	28%	28%	7%	4%	4%

Findings: Left After First Term

Among all FTIC students, those with a first term GPA of 3.0 or higher were over twice as likely to graduate as those with a GPA of less than 2.0.

Students Who Graduated

	First Generation		Poverty		GPA Group				
	No	Yes	No	Yes	Missing	0-0.99	1-1.99	2-2.99	3-4
	38%	31%	38%	27%	16%	11%	25%	41%	55%

Adult Learners at Tarrant County College

Who are Adult Learners?

An Adult Learner at TCC is defined as any student who is enrolled in *undergraduate* courses while they are *25 years or older* during a given term.

These students fall outside of what was once thought of as the traditional age range (18-22 years old) for undergraduate students but still make up an average of **28%** of all fall course enrollments across the past ten academic years at TCC.

In this article, the Adult Learner population was tracked from 2013FL through 2024SP on metrics including course enrollments, headcounts, demographics, programs, retention, degree completions, and other student outcomes. These data provide useful insights into the differences and similarities between Adult Learners and their younger classmates.

Enrollment Trends

Overall, the course enrollment and headcount for Adult Learners declined over the past decade. For fall terms, the percentage of Adult Learners in the overall population **decreased** by about **12 percentage points** between 2013FL and 2023FL. Additionally, the Adult Learner headcount **decreased** almost **42%** from about 19K in 2013FL to under 11K in 2023FL.

Comparable declines were observed across spring and summer headcounts and course enrollments.

Course load for Adult Learners shifted over time. In 2013FL, about **28%** of Adult Learners were full-time. The percentage of Adult Learners who were full-time dropped **9 percentage points** to **19%** in 2023FL.

Fall: % Change in Full-Time Load			
Student Group	*2013*	*2023*	*Diff in %*
Younger than 25	37%	29%	-8%
Adult Learners	28%	19%	-9%

Spring: % Change in Full-Time Load			
Student Group	*2014*	*2024*	*Diff in %*
Younger than 25	34%	28%	-6%
Adult Learners	26%	21%	-5%

Summer: % Change in Full-Time Load			
Student Group	*2014*	**2023*	*Diff in %*
Younger than 25	6%	7%	+1%
Adult Learners	10%	8%	-2%

Note: Full-time was defined as 12 credit hours enrolled per term.
**Note: 2023SU is used as 2024SU is still in progress.*

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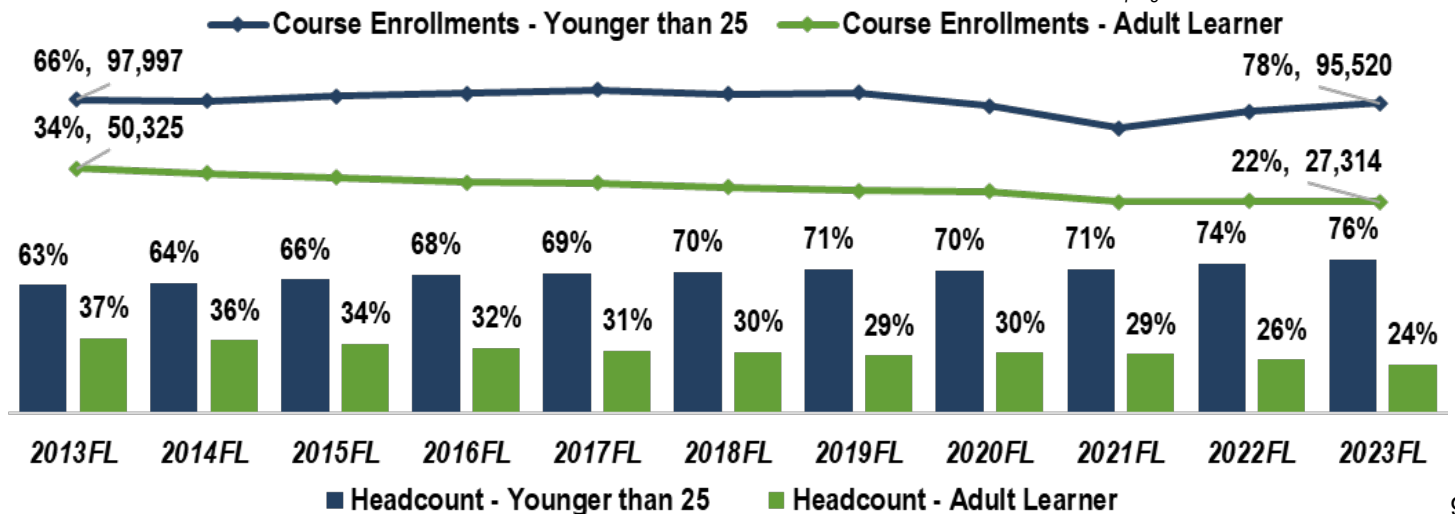
Campus Comparison

Between 2013FL to 2024SP, the campus with the most course enrollments by Adult Learners was **TCC Connect Campus**, accounting for about **27%** of all Adult Learner course enrollments. Between 2014FL and 2023FL, TCC Connect Campus course enrollment for fall terms had about a **27 percentage point increase** among Adult Learners and about a **10 percentage point increase** for students younger than 25.

A similar trend occurred for spring. Adult Learners experienced about a **17 percentage point increase** in TCC Connect Campus course enrollments, compared to about a **9 percentage point increase** for students younger than 25.

Interestingly, the pattern for summer course enrollments differed as students younger than 25 experienced a greater percentage point increase at TCC Connect Campus, with a **29 percentage point increase** compared to about a **21 percentage point increase** for Adult Learners.

Adult Learner – Campus Course Enrollment by Term
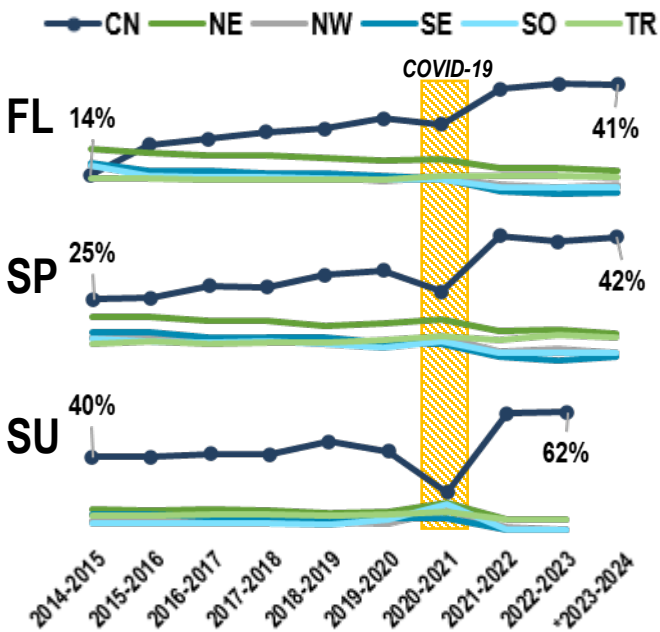
*NOTE: Campus enrollments during COVID-19 were about 95% remote.*

*NOTE: The 2024SU term is still in progress, therefore course enrollments are not included.

Class Time

By class time, Adult Learners enrolled in early evening or evening class times about **two times more** than students younger than 25 (29% compared to 14% respectively).

*Note: Credit Type N and L excluded. **Sources:** IR EOT Enrolls, IR Demo, IR Programs, NSC, ODR, IR Sections, Student Academic Info*

Face-to-Face – *Class Time Breakdown*
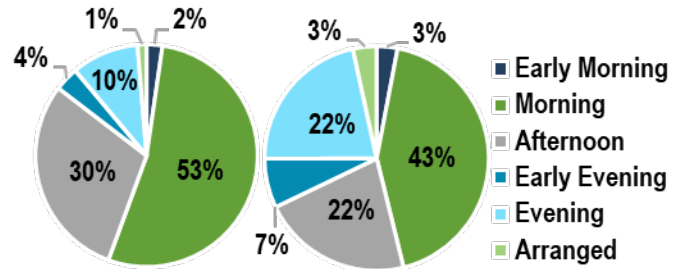
Younger than 25   **Adult Learners**

NOTE: Charts exclude meeting time 'Other'.
(Includes 2013FL to 2024SP course enrollments)

Demographics

When comparing demographics for the last 10 years:

- The gender distribution did not change markedly for either population.
- The ethnicity distribution changed substantially with the percentage of Hispanic students growing roughly **8 percentage points** among students younger than 25 and over **10 percentage points** for Adult Learners.
- The percentage of online course enrollments grew substantially for both populations.

In 2023FL:

- Female students represented a **higher percentage** of Adult Learners than they represented for students younger than 25.
- Hispanic students represented a **lower percentage** of Adult Learners than they represented for students younger than 25.
- About **31%** of Adult Learners were enrolled in all online courses, compared to about **13%** of students younger than 25.
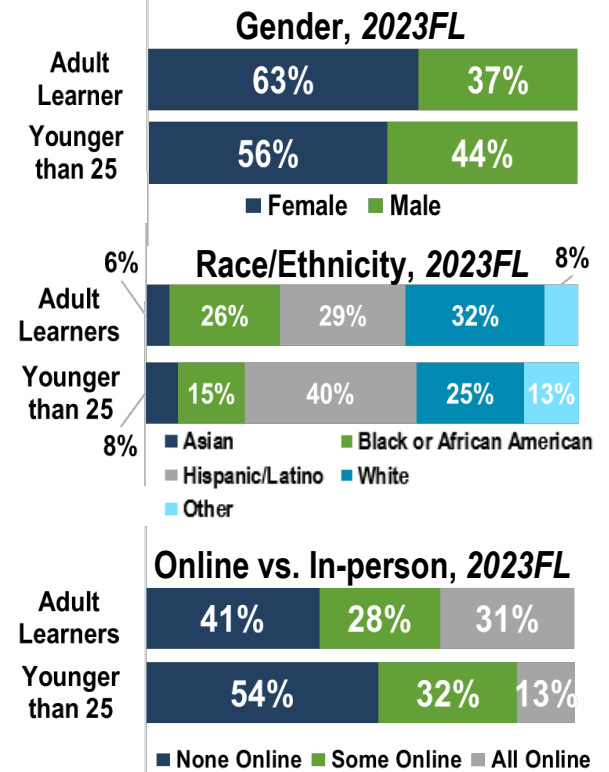
Programs

- The distribution of program pathways and program types for Adult Learners and students younger than 25 emphasized the different educational intents for each student group. About **34%** of Adult Learners were enrolled in Arts & Humanities programs compared to almost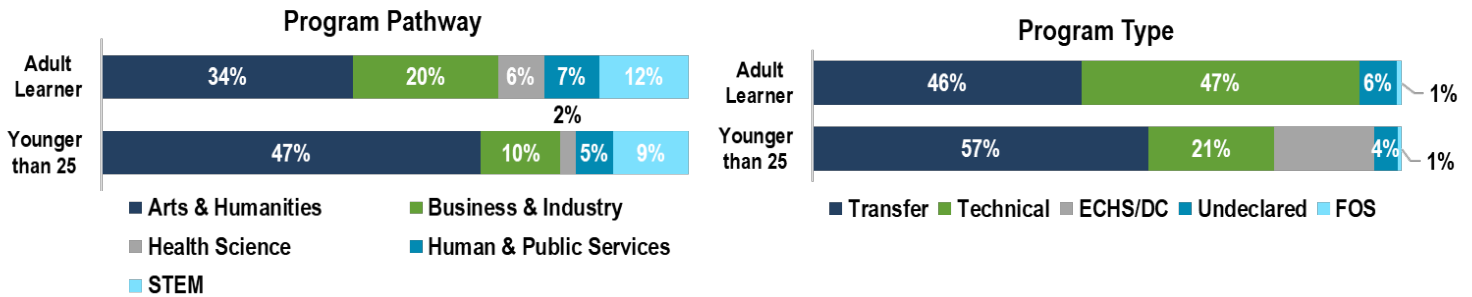 half (**47%**) of students younger than 25. About **46%** of Adult Learners were in transfer programs compared to about **57%** of students younger than 25. Overall, Adult Learners and students younger than 25 shared **8 out of 10** top programs. (Data from 2013FL to 2024SP)
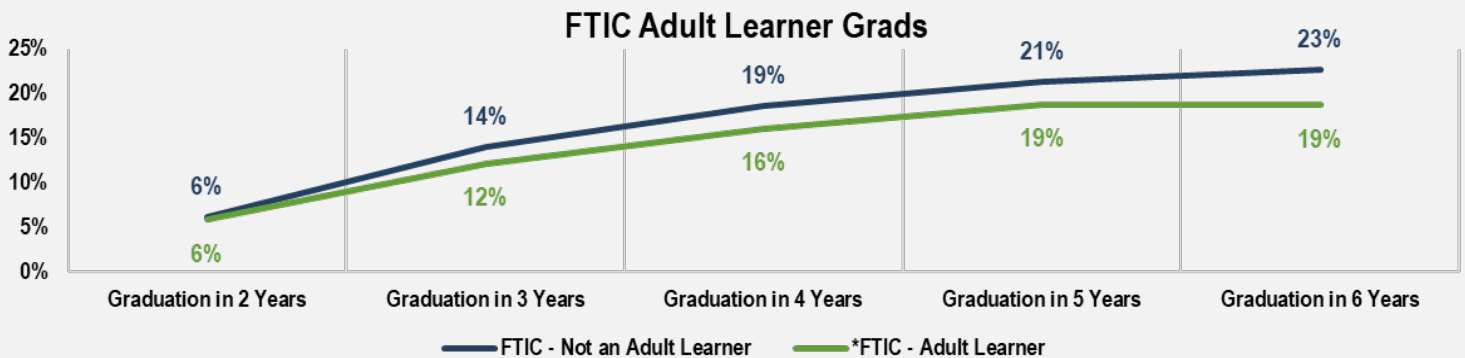
Program Pathway

	Arts & Humanities	Business & Industry	Health Science	Human & Public Services	STEM
Adult Learner	34%	20%	6%	7%	12%
Younger than 25	47%	10%	2%	5%	9%

Program Type

	Transfer	Technical	ECHS/DC	Undeclared	FOS
Adult Learner	46%	47%		6%	1%
Younger than 25	57%	21%		4%	1%

Success, Graduation, & Transfer Rates

Course Success Rates

Term	Adult Learners	Younger than 25
2023FL	76%	76%
2024SP	77%	77%
*2023SU	85%	85%

*NOTE: 2024SU is still in progress, therefore 2023SU is shown as most recently completed SU term.

Course success rates (A, B, C, CR) for both Adult Learners and students younger than 25 were comparable.

When comparing the graduation rates for FTIC Adult Learners (FTIC students who were 25 or older during their first term ever in college) to all other FTIC students, the 2-year graduation rates were comparable (about **6%** for both groups). However, FTIC Adult Learner graduation rates fell behind, with Adult Learners earning credentials at rates about **3 to 4 percentage points** below all other FTIC students. *(Data from most recent five cohorts)*

FTIC Adult Learner Grads

	Graduation in 2 Years	Graduation in 3 Years	Graduation in 4 Years	Graduation in 5 Years	Graduation in 6 Years
FTIC - Not an Adult Learner	6%	14%	19%	21%	23%
*FTIC - Adult Learner	6%	12%	16%	19%	19%

About **7%** of FTIC Adult Learners *transferred to a 4-year* institution within 3 years of first attending TCC, compared to about **18%** of all other FTIC students.

About **4%** of FTIC Adult Learners *completed a bachelor's degree* within 6 years of first attending TCC, compared to about **14%** of all other FTIC students.

Conclusion/Considerations

Data indicated that Adult Learners exhibited enrollment trends, demographics, and student outcomes unique to their group which suggests multiple opportunities for Adult Learners.

- Future analyses could investigate Adult Learner academic preparedness, registration trends, and transfer institutions.

- ***Develop Unique Recruitment Strategies*** - The decline of Adult Learners could potentially be addressed by developing new online programs and offering flexible courses times such as evening that the Adult Learner population has historically favored.

- ***Support Transfer & Completion*** - FTIC Adult Learners are lagging behind in graduation rates, transfer rates, and bachelor's degree attainment. Although their educational intent may differ from younger students, the Adult Learner experience should incorporate TCC resources as well as partnerships with four-year institutions that may be unique to this population.

ENGLISH AS A SECOND LANGUAGE

TCC'S ENGLISH LANGUAGE LEARNING PROGRAM - ELLP

Overview

How many students struggle with speaking English? What languages are spoken at home? How successful are TCC's ESOL courses in progressing students to additional TCC coursework? A few members of TCC's English Language Learning Program (ELLP) posed these questions to IR with hopes of gauging the reach of the program. The ELLP is offered as face-to-face curriculum designed to assist students with improving their all-around skills related to using the English language. TCC's five physical campuses each have a Center for English Language Learners (CELL), which serve as hubs for students in the program.

This article synthesizes three sources of data which highlight the need for and success of the ELLP.

How many students struggle with speaking English?

The American Community Survey (ACS) gathers data at a ZIP Code level about English Learners through the question: "Speak English Less Than Very Well (population 5 years and over)." Using the latest ACS survey data (2018-2022 estimates), **about 11% of Tarrant County residents spoke English less than very well**.[1] Furthermore, we compared the ZIP Codes in Tarrant County with high rates of "Speaking English less than Very Well" to the rates at which students took ELLP courses in the same time frame, by ZIP Code. From 2018-2022, about 13,900 students took an ELLP course, or about 6% of students.

Ranking the ZIP Codes from each map, the overlap of high-ranking ZIP Codes from both maps indicated areas where there was high need for English language education and where more TCC students were already taking ELLP coursework. ZIP Codes with a high need ranking but with a lower ELLP coursework rate indicated areas of possible growth for ELLP student outreach.

Percent who "Speak English Less than Very Well" (2018-2022)

% ZIP Code Speaks Less Than Very Well
1.4%   36.3%

Percent ELLP Students of TCC Students (2018-2022)

% ELLP Students in ZIP Code
0.0%   15.1%

High Need/Higher Headcount & High Need/Lower Headcount

1 - American Community Survey 2018-2022

For the ZIP Codes considered **High Need and Higher Headcount**:

- On average, about **26% of each ZIP Code** spoke English less than very well.
- About **26% of all ELLP students** in the time frame were captured by the ZIP Codes.
  - *On average, about **13% of TCC students** in each High Need and Higher Headcount ZIP Code were taking ELLP courses.*

For the ZIP Codes considered **High Need and Lower Headcount**:

- On average, about **19% of each ZIP Code** spoke English less than very well.
- About **15% of all ELLP students** in the time frame were captured by the ZIP Codes.
  - *On average, about **8% of TCC students** in each High Need and Lower Headcount ZIP Code were taking ELLP courses.*

Each physical campus except Northeast Campus bordered or was contained within a ZIP Code in both ZIP Code groupings. Additionally, the average rates of "Speaking English Less Than Very Well" for both groups of ZIP Codes were higher than Tarrant County's average rate, indicating a likely continuing need for ELLP services.

What languages are spoken at home?

In the 2024SP Student Preferences and Experiences Survey[2], respondents reported what language was primarily spoken at home. Collectively, **about 17% of respondents indicated primarily speaking a language other than English** at home. *(N = 865)*

- Spanish – about 10%
- French – about 2%
- Vietnamese – about 2%
- Some other language – about 3%

About **21% of respondents who selected South Campus** as their primary campus indicated speaking Spanish at home. *(N = 91)*

Conversely, about **92% of respondents who selected TCC Connect Campus** as their primary campus indicated speaking English at home. *(N = 112)*

While survey respondents were not necessarily reflective of the entire student population, the results can still be used to gain insights about their experiences at TCC.

How successful are TCC's ESOL courses in progressing students to additional TCC coursework?

The ELLP primarily includes CCPX, COMG, ESLX, and ESOL subjects. Students have a specific course sequence to follow as they progress through the various levels of classes which lead to eventually becoming TSI met and taking UG level coursework. On average for the last five full academic years, about **4,400 students took one or more ELLP related courses** in an academic year. For those course enrollments with grades (about 31,000 enrollments), success rates averaged about **76%**.

Headcount & Enrollment Data for ELLP Students 2018-19 through 2023-24*
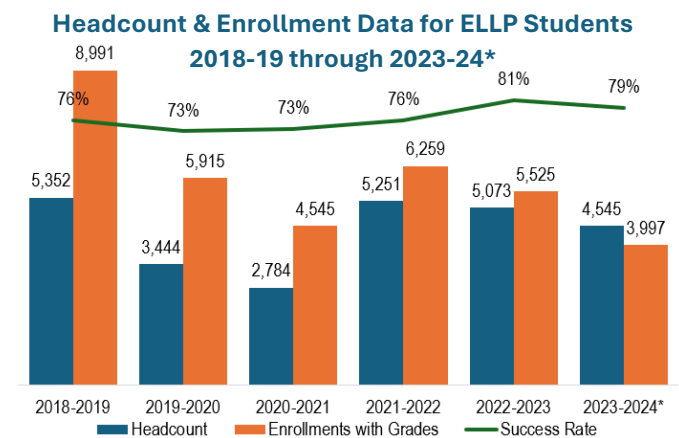
Using the last five years of ELLP data, course pairing progression was analyzed for a variety of common ELLP pathways. Only the ESLX/ESOL courses are presented in this report. Progression was defined as being enrolled in the subsequent course listed in the pairing in the same term or one of the following two terms after the first course.

ESLX/ESOL-0307 to ESLX/ESOL-0308

- 532 students took ESLX/ESOL-0307 during the time frame and averaged about **76% success**.
  - About **41% of students progressed** to ESLX/ESOL-0308 within a year, with about **86% passing** the course.
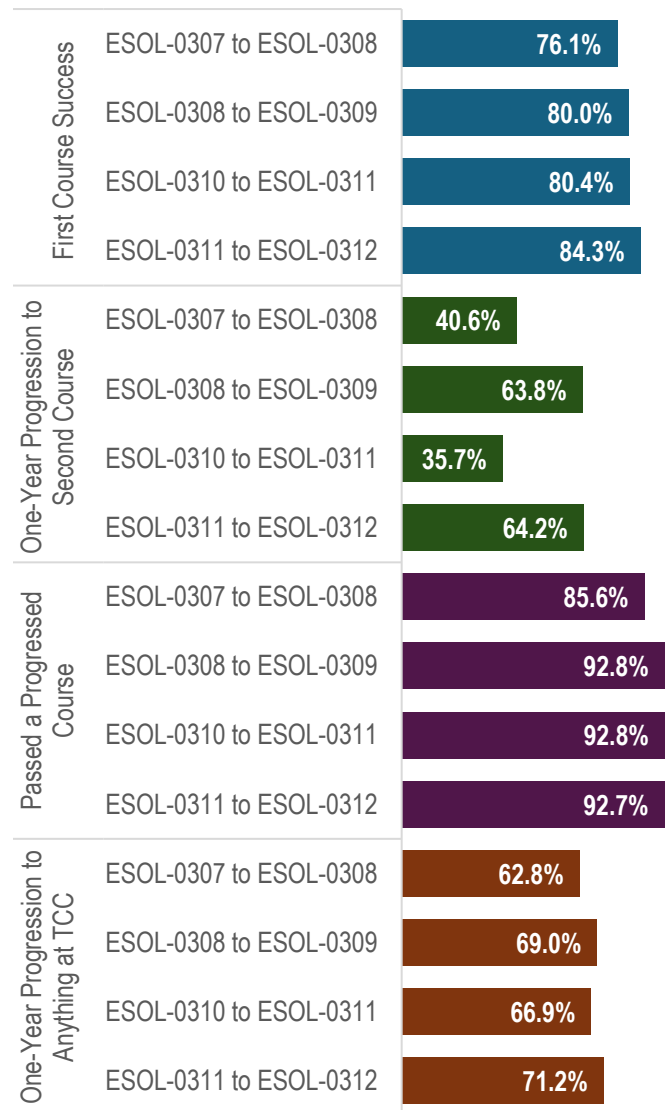 - About **63% of students continued** at TCC within the year.

ESLX/ESOL-0308 to ESLX/ESOL-0309

- 542 students took ESLX/ESOL-0308 during the time frame and averaged about **80% success**.
  - About **64% of students progressed** to ESLX/ESOL-0309 within a year, with about **93% passing** the course.
  - About **69% of students continued** at TCC within the year.

ESLX/ESOL-0310 to ESLX/ESOL-0311

- 272 students took ESLX/ESOL-0310 during the time frame and averaged about **80% success**.
  - About **36% of students progressed** to ESLX/ESOL-0311 within a year, with about **93% passing** the course.
  - About **67% of students continued** at TCC within the year.

ESLX/ESOL-0311 to ESLX/ESOL-0312

- 386 students took ESLX/ESOL-0311 during the time frame and averaged about **84% success**.
  - About **64% of students progressed** to ESLX/ESOL-0312 within a year, with about **93% passing** the course.
  - About **71% of students continued** at TCC within the year.

ESLX/ESOL One-Year Progression

First Course Success	
ESOL-0307 to ESOL-0308	76.1%
ESOL-0308 to ESOL-0309	80.0%
ESOL-0310 to ESOL-0311	80.4%
ESOL-0311 to ESOL-0312	84.3%

One-Year Progression to Second Course	
ESOL-0307 to ESOL-0308	40.6%
ESOL-0308 to ESOL-0309	63.8%
ESOL-0310 to ESOL-0311	35.7%
ESOL-0311 to ESOL-0312	64.2%

Passed a Progressed Course	
ESOL-0307 to ESOL-0308	85.6%
ESOL-0308 to ESOL-0309	92.8%
ESOL-0310 to ESOL-0311	92.8%
ESOL-0311 to ESOL-0312	92.7%

One-Year Progression to Anything at TCC	
ESOL-0307 to ESOL-0308	62.8%
ESOL-0308 to ESOL-0309	69.0%
ESOL-0310 to ESOL-0311	66.9%
ESOL-0311 to ESOL-0312	71.2%

Bringing it Together

When weaving the data together, it's evident that there is a need for the ELLP at TCC.

- With about 13% of Tarrant County's population struggling to speak English and only about 15% of TCC's ELLP students living in ZIP Codes where there was a high need for English language assistance but low ELLP headcounts, the program is in demand and has room to grow.
- TCC's most recent student survey indicated that about 17% of respondents primarily spoke a language other than English at home.
- On average about 4,400 students took part in an ELLP related course annually over the last five years.

- Of the students in ESLX/ESOL courses following a progression pathway who progressed to the second course, collectively over 85% passed the second course.
- Of the students in the ESLX/ESOL courses analyzed, collectively over 63% continued at TCC within the year.

The already consistent monitoring of ESLX/ESOL course success, progress, and persistence at TCC will help steward the ELLP as it continues to best assist students needing support with the English language. A question for the future: ***how can we reach those students needing ELLP support***?

The Office of Institutional Research helps administer surveys for the College.

Below are some frequently asked questions regarding surveys and survey results.

How do surveys support the College? Why is my participation important?

- Departments and teams across the District use the data collected in surveys to support and advise decisions that impact both students and employees. Some recent examples of data-informed decisions from surveys include:

  o Feedback on schedule preferences from student respondents was used in designing course offerings (e.g., modality, time of day).

  o An employee engagement work group was created based on feedback from the 2023 Employee Engagement Survey.

How well do survey respondents represent all students?

- The response rates to student surveys are generally low (<5%). Data gathered from the student sample should be considered exploratory and used to facilitate further research or in conjunction with other data sources when possible. Results should not be generalized to the entire TCC student population, as the sample is a small subset that may not be representative.

How do I know if a survey I received from TCC is legitimate?

- Surveys from Institutional Research will follow TCC branding and will come from surveys@tccd.edu.

How do I know surveys from TCC are anonymous?

- The software used for TCC surveys separates responses from the email address once the participant clicks into the survey. No contact information is recorded with the response.

What data are shared?

- Data are only reported in aggregate - meaning only summary data are distributed. Individual responses are never shared or reported.

- No one outside of Institutional Research has access to the raw data.

Where can I see the results from surveys?

- Executive summaries for most TCC surveys can be found here: https://www.tccd.edu/about/research/institutional-intelligence-and-research/surveys/ir-executive-summaries/

Members of the Office of Institutional Research follow codes of ethics set by the American Educational Research Association (AERA) and the Association of Institutional Research (AIR).

If you have questions about a survey you received from TCC, please email institutional.research@tccd.edu

Quantifying Impact:
Tutoring Visits

Overview

'Correlation is not causation' is frequently touted as a major limitation in social science research because the effect of the factor of interest (e.g. visiting tutoring centers[*] 5 or more times) cannot be easily distinguished from the effect of confounding factors such as full-time status, TSI Status, prior GPA, etc., which could also affect success. However, researchers can use methods to better control for these confounding variables so that the impact of the intervening factor (tutoring) can be better quantified and stronger statements regarding causation can be made.

In this study, a matched pairs analysis was conducted using tutoring visits data from 2022FL, 2023SP, and 2023FL.

"Simple" Comparison

Historically, the impact of tutoring might be gauged through a simple comparison between the success rate for enrollments by students who visited tutoring centers 5 or more times to the success rate of those who did not. With a success rate of about 80%, the *Visited 5 or more times* group outperformed the *Visited 0 to 4 times* group by almost **5 percentage points**.
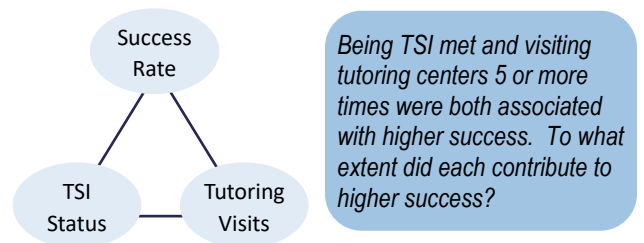
Success Rates (A, B, C, CR)

75% · 80%

Visited 0 to 4 times   Visited 5 or more times
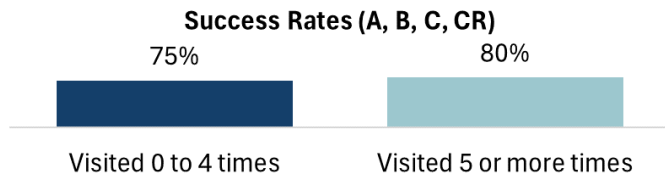
Comparison included over 360,000 course enrollments.

While tutoring may have fostered higher success, it is hard to attribute causation because the two groups differ on more factors than whether they received tutoring. For example, the *Visited 5 or more times* group was more likely to be TSI met – about 62% of this group was TSI met compared to about 56% for the *Visited 0 to 4 times* group. Students who were TSI met outperformed TSI liable students by over 10 percentage points. Since TSI met students were more represented in the *Visited 5 or more times* group and TSI met students had higher success rates, the effect of TSI status became intertwined

with the effect of tutoring. In other words, the success rate of the *Visited 5 or more times* group might be inflated by the higher percentage of TSI met students. Note that various other factors might be deflating the success rate of the *Visited 5 or more times* group.

Confounding Factors

Success Rate

TSI Status   Tutoring Visits

Being TSI met and visiting tutoring centers 5 or more times were both associated with higher success. To what extent did each contribute to higher success?

"Simple" Comparison – Controlling for Course

One step to begin considering confounding variables is controlling for course within term. Using this approach, only courses for which there were students in both groups for that term were included in the success rate comparison. When controlling for course within term, the *Visited 5 or more times* group with a success rate of about 80% outperformed the *Visited 0 to 4 times* group by about **7 percentage points**.

Success Rates (A, B, C, CR)

73% · 80%

Visited 0 to 4 times   Visited 5 or more times
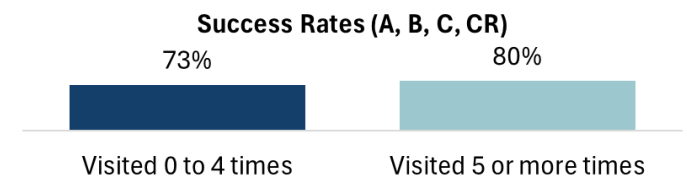
Comparison included over 360,000 course enrollments.

Matched Pairs Approach – Controlling for Several Factors

Using a matched pairs design, a course enrollment by a student who visited 5 or more times was paired with an enrollment by a similar student who visited 0 to 4 times. For instance, a 2022FL MATH-1314 enrollment by John Doe, a white male who was full-time, TSI met, had a prior cumulative GPA above 3.5, and visited tutoring centers 5 or more times was paired with a 2022FL MATH-1314 enrollment by James Roe, a white male who was full-

time, TSI met, had a prior cumulative GPA above 3.5, and visited tutoring 0 to 4 times. Although causation can still not be definitely attributed because these students still differ on factors such a motivation and grit which are tough to quantify, there would be stronger evidence to suggest tutoring had causal impact if John Doe outperformed James Roe because these students differ on fewer factors.

In this analysis, enrollments were paired by course, term, and student's gender, ethnicity, TSI status, full-time status, and beginning GPA group. **When controlling for all of these factors, the estimated impact (difference between the success rates for those who *Visited 5 or more times* and those who *Visited 0 to 4 times*) was about 14 percentage points.**

Success Rates (A, B, C, CR)

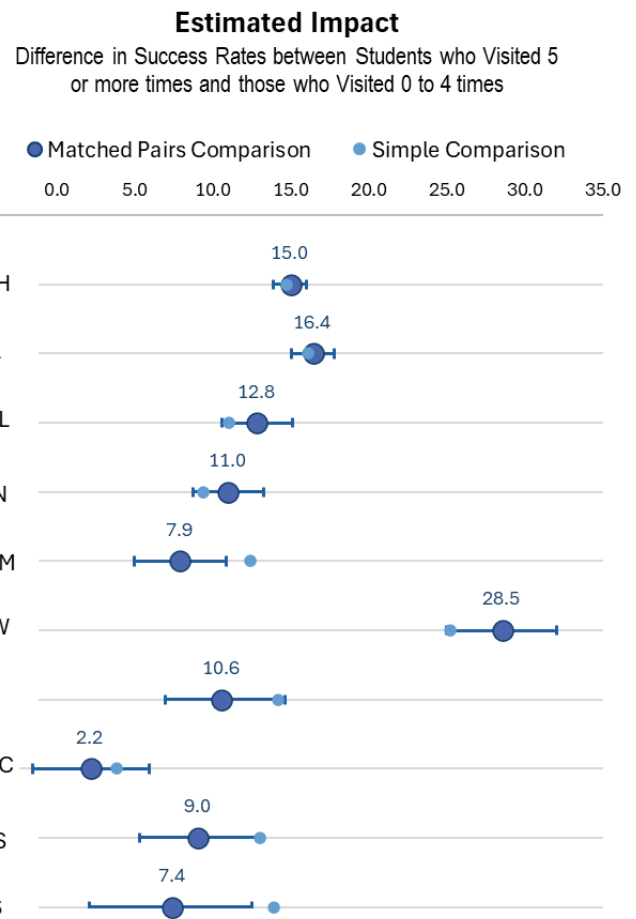| 65%	79%
Visited 0 to 4 times	Visited 5 or more times
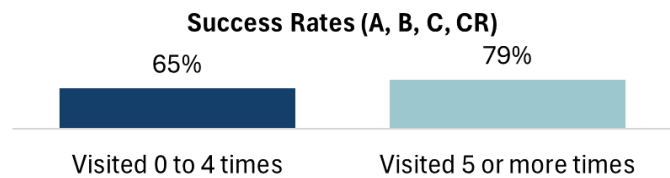
Comparison included roughly 15,000 pairs or about 30,000 course enrollments.

Note: John Doe could have been paired with another white male student who was full-time, TSI met, had a prior cumulative GPA above 3.5, and visited tutoring 0 to 4 times. Since a student could be paired with any student who matched their factors, there was variation in the estimated impact. The bar graph above shows the mean estimated impact, and the dot plot (right) shows the mean and variation (95% interval).

The following subjects accounted for about 80% of course enrollments with 5 or more tutoring visits. The estimated impact for math courses (based on almost 6,000 matched pairs) was about 15 percentage points – meaning that after controlling for numerous factors, students who visited a tutoring center 5 or more times for their math course had a success rate about 15 percentage points higher than their counterparts.

Estimated Impact

Difference in Success Rates between Students who Visited 5 or more times and those who Visited 0 to 4 times

● Matched Pairs Comparison ● Simple Comparison

Subject	Value
MATH	15.0
BIOL	16.4
ENGL	12.8
SPAN	11.0
CHEM	7.9
INRW	28.5
HIST	10.6
COSC	2.2
PHYS	9.0
BCIS	7.4

Conclusion

Based on the findings from the matched pairs analysis, there is stronger evidence to suggest that tutoring may have a causal impact on success. When controlling for course, term, and student's gender, ethnicity, TSI status, full-time status, and beginning GPA group, those who visited tutoring centers 5 or more times had a success rate about 14 percentage points higher than those visited 0 to 4 times. Future research should further delve into the relationship between the number of visits and success to determine if there is a threshold (or specific number of visits) needed to substantially impact success rates. In addition, more research should be conducted to try to better understand what leads students to visit a tutoring center.

Note on Usage: Based on results from the 2023SP Learning Commons Survey, respondents who never used the service or used it once tended to state that they didn't need to use the service or didn't have time.

	Labs	Libraries	Supplemental Instuction
Never Used:	*N = 443*	*N = 310*	*N = 655*
I didn't need to use the service	56.9%	73.5%	58.6%
I didn't have time	25.7%	20.0%	16.9%
I didn't know where it was located/how to access it	25.1%	10.0%	23.4%
Used Once:	*N = 129*	*N = 146*	*N = 82*
I didn't need to use it more than once	48.1%	65.8%	39.0%
I didn't have time	27.9%	17.8%	31.7%

* Tutoring centers included all centers in TracCloud (learning commons and beyond learning commons)
Sources: Enrollment Data by Term (NSOR removed), Academic Info by Term, TracCloud

Cultivating Curiosity:
College For Kids

Introduction

Our previous article on TCC's College for Kids (CFK) program showed comparisons with 8th graders across the state of Texas regarding their matriculation into college courses as well as their rates of completion. Here, we check in again using the same analysis. We also investigate whether students return to TCC as well as the potential influence of STEM CFK courses on later pathway choice.

Comparison with Texas: 6-Year Window

In our first article, rates of college attendance and college graduation were both starkly different between CFK and the comparison groups. College attendance was at **76%** for CFK students versus about **54%** for all Tarrant County students and all of Texas. When looking at CFK students from later cohorts, similar rates emerged, with CFK students having about a 25-percentage-point lead in college attendance.

The percent of CFK students who were dual enrolled at TCC during their high school careers increased from about 1 in 5 in the prior cohorts to about 1 in 4 in the more recent cohorts. When looking at student completion for each of the groups, the CFK students held a commanding nine-percentage-point lead over the Texas and Tarrant County students. Based on these figures, it appears that those who enroll in CFK courses are more likely to both attend an institution of higher education as well as earn a degree or certification after attending. Future research may seek to determine why this is the case.
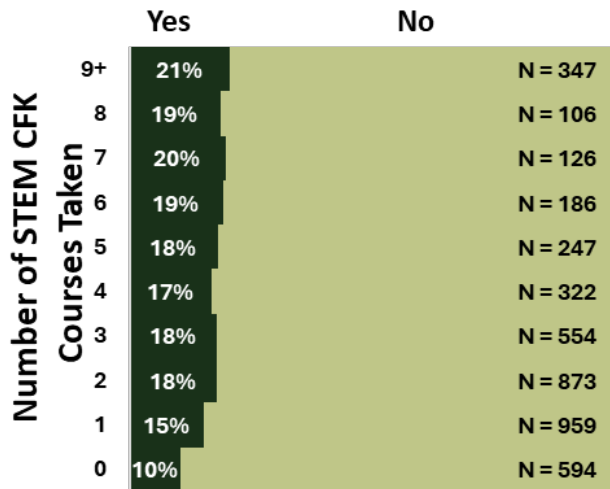

■ All Texas   ■ All Tarrant   ■ College for Kids
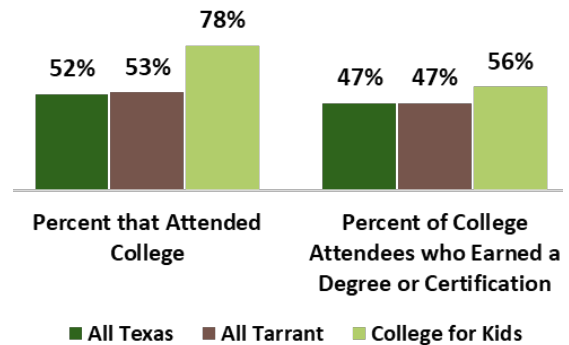
Example: In the summer of 2009 at TCC, there were 295 "rising 8th-graders" who attended CFK. These students comprised the 2010 cohort, as they finished 8th grade in the spring of 2010. Of these students, about 78% attended a two- or four-year post-secondary school in Texas between fall of 2014 and fall of 2020. Additionally, about 58% of the 2010 CFK cohort who attended college completed a degree or certificate fall of 2014 and fall of 2020.

Cohort and Year		8th Graders	Attended College within 6 Years of HS Graduation	%	Earned Degree / Cert within 6 years of HS Graduation	% Earned out of all 8th graders	% Earned out of college attendees
All Texas	2010	346,451	184,484	53%	84,478	24%	46%
	2011	354,244	185,681	52%	86,670	24%	47%
	2012	360,198	187,159	52%	88,291	25%	47%
	2013	366,786	190,642	52%	90,783	25%	48%
	Total	**1,427,679**	**747,966**	**52%**	**350,222**	**25%**	**47%**
All Tarrant County	2010	38,635	20,823	54%	9,644	25%	46%
	2011	39,433	21,024	53%	9,860	25%	47%
	2012	40,368	21,151	52%	10,068	25%	48%
	2013	41,494	21,339	51%	10,252	25%	48%
	Total	**159,930**	**84,337**	**53%**	**39,824**	**25%**	**47%**
College for Kids	2010	295	230	78%	134	45%	58%
	2011	303	237	78%	132	44%	56%
	2012	310	239	77%	137	44%	57%
	2013	295	232	79%	120	41%	52%
	Total	**1,203**	**938**	**78%**	**523**	**43%**	**56%**

STEM Engagement

When looking at the courses offered through CFK, one finds titles such as, "Weird Science", "Lego Robotics", and "Mad Scientist." This sparked the question: Do young students who take more STEM-related CFK courses and who later return to TCC tend to enroll in the STEM pathway?
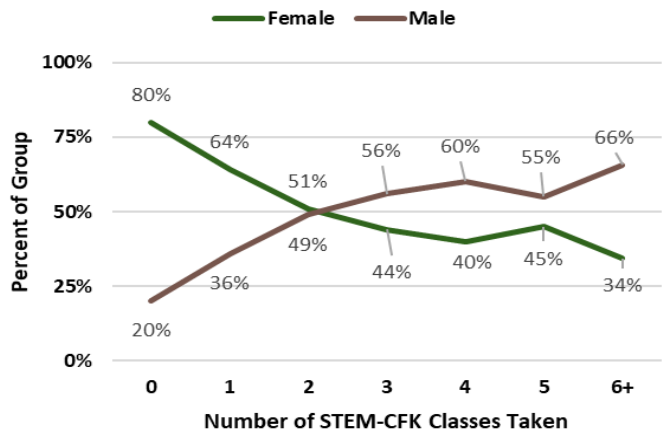

Enrolled in STEM Pathway at TCC

	Yes	No
9+	21%	N = 347
8	19%	N = 106
7	20%	N = 126
6	19%	N = 186
5	18%	N = 247
4	17%	N = 322
3	18%	N = 554
2	18%	N = 873
1	15%	N = 959
0	10%	N = 594

All students, from 3rd to 8th graders, were included in this analysis. After removing "non-programs" (e.g. DTCCD, DTCEU, etc.) and students with no declared pathway, requiring that any enrolled programs must be within 3 years of each student's estimated high school graduation term, and limiting the possible graduation years from 2014SP to 2021SP, the remaining group consisted of **4,314** students.
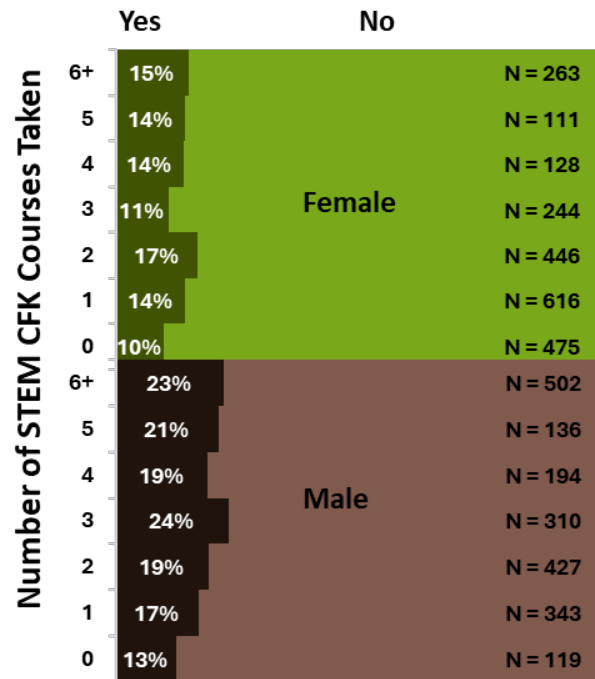
Interestingly, students who had taken 8 or more STEM-CFK courses were **more than twice as likely** to have enrolled in a STEM pathway at TCC than those who hadn't taken any STEM-CFK courses.

When disaggregated by gender, issues of representation become more apparent. While female CFK students account for about **53%** of the total group, they also make up about **80%** of the students who did not take any STEM related CFK courses. This trend continues when looking at the gender breakdown by CFK classes taken.

When disaggregated, the same general correlation between the number of STEM-CFK courses and later STEM enrollment still holds, but it appears to be weaker for female students than for male students.
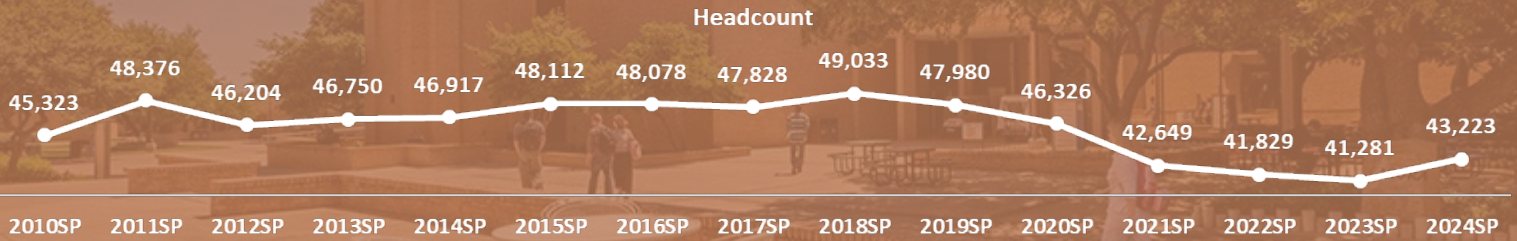
Enrolled in STEM Pathway at TCC

	Yes	No	
6+	15%	N = 263	Female
5	14%	N = 111	
4	14%	N = 128	
3	11%	N = 244	
2	17%	N = 446	
1	14%	N = 616	
0	10%	N = 475	
6+	23%	N = 502	Male
5	21%	N = 136	
4	19%	N = 194	
3	24%	N = 310	
2	19%	N = 427	
1	17%	N = 343	
0	13%	N = 119	

Conclusions

Overall, our exploration has continued to suggest that College for Kids is related to long-term success for students in the form of higher college graduation rates. Additionally, the data suggest that more exposure to STEM-CFK courses is positively correlated to enrolling in a STEM program later, and this effect is more pronounced for male students than it is for female students. A consideration for future research would be to explore why this current gender disparity exists.

SPRING 2024 ENROLLMENT

Headcount

Year	Headcount
2010SP	45,323
2011SP	48,376
2012SP	46,204
2013SP	46,750
2014SP	46,917
2015SP	48,112
2016SP	48,078
2017SP	47,828
2018SP	49,033
2019SP	47,980
2020SP	46,326
2021SP	42,649
2022SP	41,829
2023SP	41,281
2024SP	43,223

Continued Growth

TCC experienced about a 3% growth in students in Fall 2023, and growth from the prior year continued in Spring 2024. **This spring, the college served about 43,000 credit students*- about a 5% increase in headcount from Spring 2023.**

Dual Enrollment – Spurring Increase

Similar to Fall 2023, growth in Spring 2024 can be largely attributed to an increase in dual enrollment. Overall, there was a gain of about 2,000 students from the previous spring. Dual enrollment accounted for almost three-fourths of this gain. However, it is also important to note the 12% increase in transfer-in students.

For both Spring 2023 and Spring 2024, about 91% of dual enrolled students were returning students from the prior fall, and about 9% were new dual enrolled students.

Several ISDs contributed to the overall 15% growth in dual enrollment (8% from ECHS students; 20% from dual credit students). A new ISD to TCC, Granbury, contributed over 100 students. In addition, there was almost a 50% growth in the number of dual enrolled home school students – adding almost 200 new students.
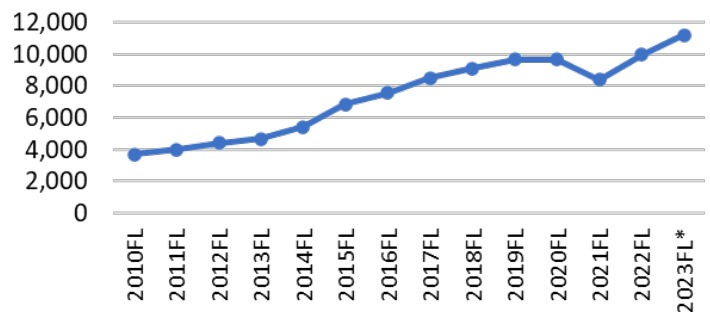
ISDs with over 10% growth:

- Arlington ISD - 22.5%
- Carroll ISD - 20.1%
- Fort Worth ISD - 11.0%
- Hurst Euless Bedford ISD - 153.5%
- Keller ISD - 19.0%
- Kennedale ISD - 71.1%
- Mansfield ISD - 12.0%
- Northwest ISD - 15.5%
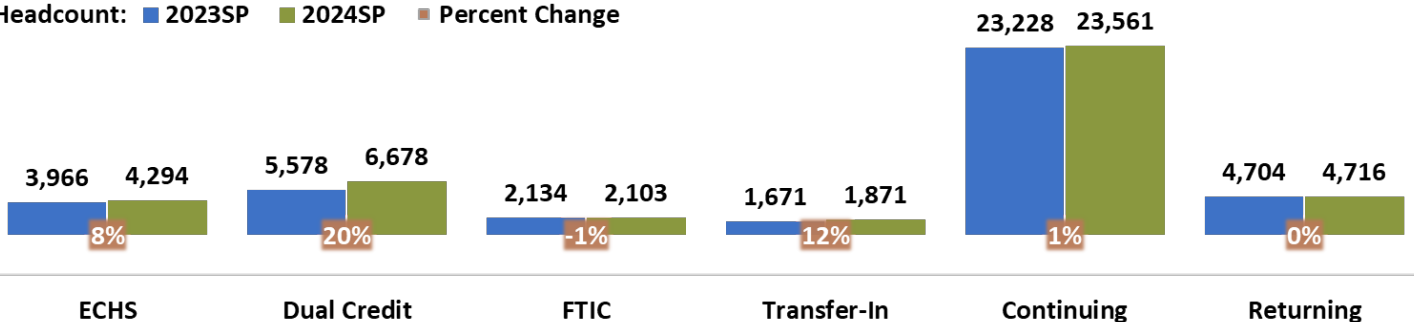- White Settlement ISD - 13.3%

What could have been? / What might be?

If the average growth from 2010FL to 2019FL had continued, TCC would have had over 12,500 dual enrolled students in 2023FL. While dual enrollment has substantially recovered since its low in 2021FL, this historical trend, alongside new legislation (HB 8) and new TCC policies (free tuition for dual enrollment), provides some insight into the potential for large future growth.

Dual Enrollment Headcount

Headcount: ■ 2023SP ■ 2024SP ■ Percent Change

Category	2023SP	2024SP	Percent Change
ECHS	3,966	4,294	8%
Dual Credit	5,578	6,678	20%
FTIC	2,134	2,103	-1%
Transfer-In	1,671	1,871	12%
Continuing	23,228	23,561	1%
Returning	4,704	4,716	0%

Continuing – continued from prior fall; Returning – stop-out who returned

*Source: Stat Handbook; Dual Credit Flipbook (*Census Day)*

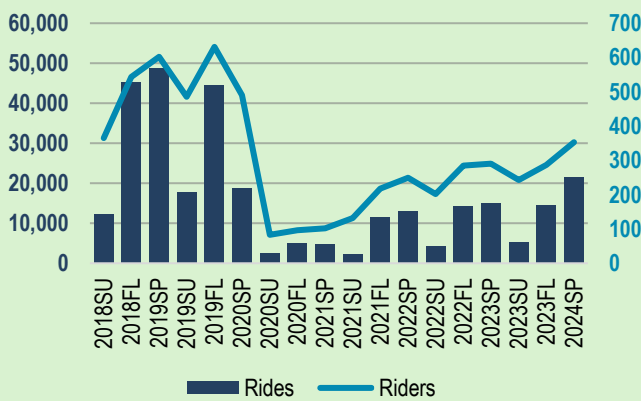# TCC & Trinity Metro EasyRide Program
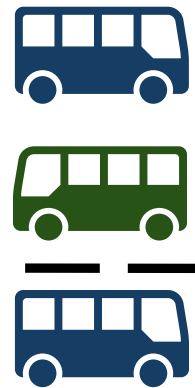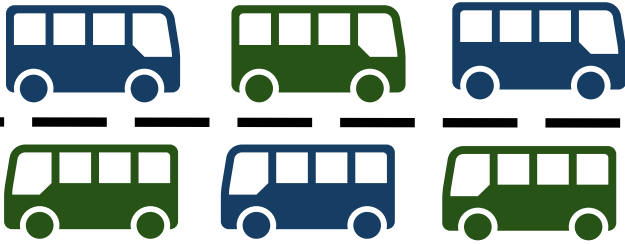
USAGE (7/1/2018 – 5/31/2024)

Total Rides: 300,547   **Total Riders**: 2,609

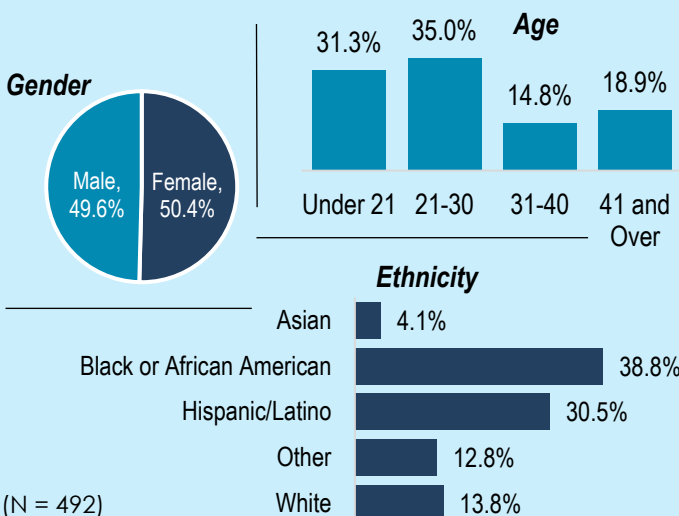**Average Rides Per Rider Per Term***: 57

Trinity Metro Usage by Term

Legend: Rides, Riders

(* FL & SP Only)

ROUTES & CAMPUSES

Campus - Route	Total	
	N	%
Other - 89 - SPUR/East Lancaster	31,772	10.6%
Other - 2 - Camp Bowie	31,661	10.5%
Trinity River - 46 - Jacksboro Hwy	20,527	6.8%
South - 3 - South Riverside/TCC South Campus	20,089	6.7%
Other - 1 - Hemphill	18,520	6.2%
Other - 15 - Stockyards/North Main	17,681	5.9%
Other - 25 - Miller/E. Seminary	15,067	5.0%
Other - 6 - 8th Ave/McCart	15,003	5.0%
South - 5 - Evans Ave/TCC South	12,894	4.3%
Southeast - 67 - TCC Campus	7,455	2.5%

The top 10 routes accounted for about **63%** of all rides taken by TCC students. These routes also accounted for about **63%** of rides taken in 2023-2024. In total, there were **61 routes** used by TCC students.
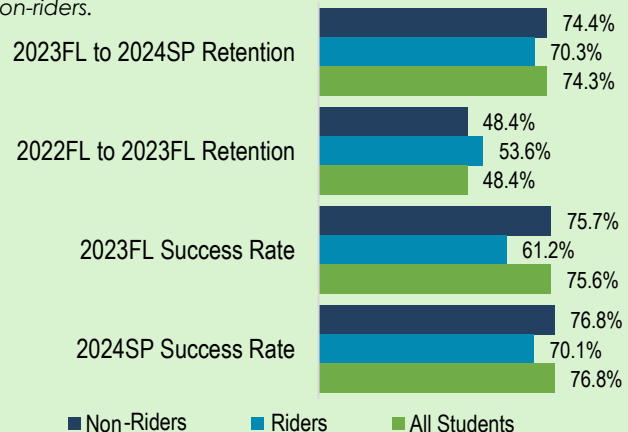
RIDER DEMOGRAPHICS (2023-2024)

14.2% First Generation | **64.6%** Pell Eligible
4.7% Veterans/Dependents | **46.5%** In Poverty

Gender

Male, 49.6%   Female, 50.4%

Age

31.3% Under 21
35.0% 21-30
14.8% 31-40
18.9% 41 and Over

Ethnicity

Asian 4.1%
Black or African American 38.8%
Hispanic/Latino 30.5%
Other 12.8%
White 13.8%

(N = 492)

SUCCESS METRICS

Compared to non-riders, riders had slightly lower 2023FL to 2024SP retention rates, but riders had higher 2022FL to 2023FL retention rates. Riders had lower 2023FL and lower 2024SP course success rates compared to non-riders. *Differences in success/retention may be related to factors such as socioeconomic status and others for which riders vary from non-riders.*

2023FL to 2024SP Retention
- 74.4%
- 70.3%
- 74.3%

2022FL to 2023FL Retention
- 48.4%
- 53.6%
- 48.4%

2023FL Success Rate
- 75.7%
- 61.2%
- 75.6%

2024SP Success Rate
- 76.8%
- 70.1%
- 76.8%

Legend: Non-Riders, Riders, All Students

2024 Student Affairs Retreat
May 23, 2024

2024 TCC Data & Research Summit
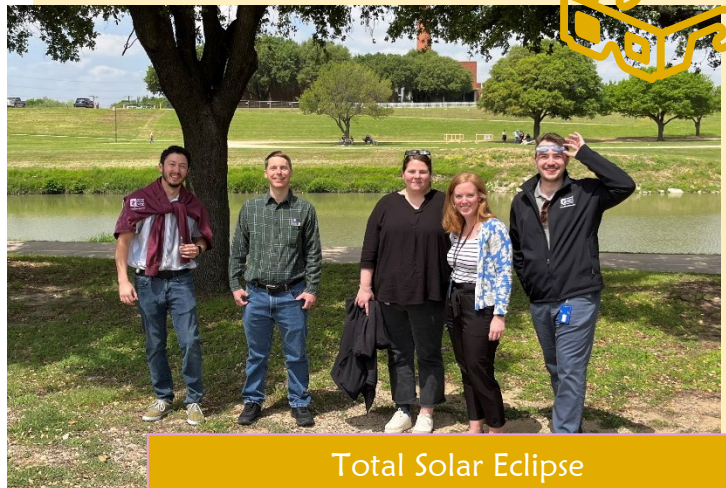April 12, 2024

IR OUT & ABOUT

2024 IR Annual Retreat
May 16, 2024

2024 TAIR Conference
March 26-29, 2024

Total Solar Eclipse
April 8, 2024

CONTACT US

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

> "The summit is what drives us, but the climb itself is what matters."
>
> — *Conrad Anker*

In April 2024, Tarrant County fell directly along the pathway of a once-in-a-lifetime total solar eclipse. Many of Team IR ventured outside to witness the event, with some of us feeling invigorated and even a bit awestruck – as if part of a larger purpose. Perhaps the cosmos served to remind us that at TCC our purpose is student success and community impact, and we each bring valuable contributions towards that goal. "Success" can mean different things to different people, but most importantly, the journey towards success is where relationships are formed, knowledge is shared, and milestones are achieved. In IR, we relish supporting the journey, and we look forward to walking alongside you towards whatever success means to you. Taking a lesson from the eclipse: let's embrace our purpose, and let's ensure our students complete their journeys at TCC – no doubt an accomplishment that may again leave us and our students feeling invigorated and even a bit awestruck.   - Team IR