IR CORNER

June 2023 Issue 6



From a Tarrant County ISD to TCC

Serving as the path from high school to a four-year school or the workforce

The Demographic Cliff What does it mean for TCC?

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Stretching the Limits of Data

Holly Stovall

Innovation requires us to push the bounds of what is thought to be possible. Without this growth in knowledge and capabilities, our understanding of the world around us becomes outdated and potentially inaccurate. Continually creating and refining research methodology and uses of data here at TCC pushes us to remain aware of the ever-evolving needs of our students and prominent changes impacting higher education as a whole.

"Stretching the limits" of data should never come at the cost of blatant misuse of data, but it does require questioning definitions, enhancing methods for analyzing data, considering varying data sources, and presenting a more holistic picture by combining results and creating a thorough data narrative.

In this issue, we use several external data sets to better understand students' journeys before and after TCC. We examine how many students from Tarrant County ISDs attend TCC as dual enrolled students and how many continue at TCC after dual enrollment. Both dual credit and early collegiate high school students are tracked to determine their success at four-year schools. In addition, we combine several data points to help share TCC's story and collect information such as birthrates and the number of high school graduates to consider potential factors influencing future college enrollments.

We're excited to support efforts that challenge us to learn more and grow in our uses of data and hope you'll join us on the venture. Let these articles be just a start!

inspIRe

"The only way of discovering the limits of the possible is to venture a little way past them into the impossible."*

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FROM THE DATA DESK



Diving into the Success of TCC Dual Credit & ECHS Students at 4-Year Institutions

SUCCESS OF TCC DUAL CREDIT STUDENTS AT 4-YEAR SCHOOLS

The aim of this report is to investigate the success of students following their dual credit experience at Tarrant County College (TCC). Texas Education Agency (TEA) guidelines for birthdates provided a definition for senior "class of" and anticipated graduation. Students from Tarrant ISDs' Classes of 2010 to 2022 who had attended TCC as a dual credit student were tracked for six years to determine attendance and graduation from a four-year institution. The cohort sizes ranged from about 3,000 students (Class of 2010) to about 4,500 students (Class of 2020).

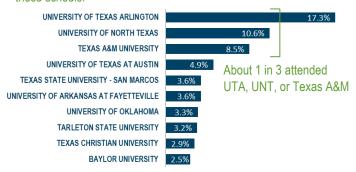
Continuing to Four-Year Institution

Continuing First Fall Term after Dual Credit:

On average, about 55% of TCC's dual credit students attended a four-year school the fall term following their high school graduation.

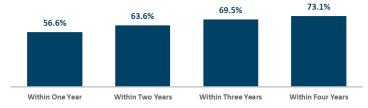
- Dual credit students completed 12 hours, on average, by the end of their senior year. Thus, they entered the four-year school with almost one semester completed.
- About 3 in 4 dual credit students attended TCC or a four-year school the following fall after their senior year.

Top Schools: Of those at four-year schools the first fall after their senior year, about 60% of dual credit students attended one of these schools.



Continuing Within Four-years after Dual Credit:

On average about 70% of dual credit students attended a four-year school within two years of graduating high school, and almost 75% attended a four-year school within four years.



 Overall, about 90% of students attended TCC or a four-year school within four years.

Bachelor's Degree in 6 Years

On average about 35% of dual credit students earned a Bachelor's degree within four years of their high school graduation, and about 55% earned a Bachelor's degree within 6 years.

Almost **80%** of students who attended a four-year school the first fall term after dual credit at TCC earned a Bachelor's degree within six years.



- Of the students who attended a four-year school the first fall term following their high school graduation, almost 55% earned a Bachelor's degree in four years, and almost 80% earned a Bachelor's degree in six years.
- Of the students who attended a four-year school the first fall term following their senior year, roughly 5% earned an advanced degree (Master's, Doctorate, etc.) within six years.
- Overall, about 40% of students earned a degree/certificate at TCC or a Bachelor's degree within four years of their high school graduation, and about 60% earned a degree/certificate at TCC or a Bachelor's degree within six years of their high school graduation.

Relationship between Hours Earned through Dual Credit and earning a Bachelor's in 4 years:

Percent who Earned a Bachelor's Degree in 4 years by Hours Completed at the End of Last Dual Credit Term



 Once students completed about three or four dual credit courses, the likelihood of earning a Bachelor's degree in four years remained around 40% or more.

APPENDIX:

Dual Credit Students who continued at Four-Year School

	Number of	Within (One Term	Within	Within One Year		wo Years	Within Three Years		Within Four Years	
Class of	Students	N	%	N	%	N	%	N	%	N	%
2010	2,929	1,672	57.1%	1,720	58.7%	1,885	64.4%	1,899	64.8%	2,014	68.8%
2011	2,980	1,679	56.3%	1,711	57.4%	1,889	63.4%	2,053	68.9%	2,150	72.1%
2012	3,107	1,810	58.3%	1,854	59.7%	2,032	65.4%	2,200	70.8%	2,294	73.8%
2013	3,497	2,034	58.2%	2,084	59.6%	2,297	65.7%	2,475	70.8%	2,568	73.4%
2014	3,632	2,040	56.2%	2,076	57.2%	2,273	62.6%	2,498	68.8%	2,606	71.8%
2015	3,428	1,958	57.1%	2,009	58.6%	2,221	64.8%	2,439	71.1%	2,532	73.9%
2016	3,526	2,122	60.2%	2,164	61.4%	2,382	67.6%	2,588	73.4%	2,679	76.0%
2017	3,887	2,276	58.6%	2,324	59.8%	2,568	66.1%	2,788	71.7%	2,877	74.0%
2018	4,051	2,321	57.3%	2,374	58.6%	2,658	65.6%	2,855	70.5%	2,955	72.9%
2019	4,182	2,124	50.8%	2,160	51.6%	2,447	58.5%	2,676	64.0%		
2020	4,481	2,277	50.8%	2,326	51.9%	2,608	58.2%				
2021	4,339	2,073	47.8%	2,119	48.8%						
2022	3,661	1,699	46.4%								

Source: National Student Clearinghouse data and Student Demographics

Dual Credit Students who earned a Bachelor's Degree at Four-Year School

	Number of	4 Y	'ears	6 Y	ears
Class of	Students	N	%	N	%
2010	2,929	941	32.1%	1,551	53.0%
2011	2,980	923	31.0%	1,581	53.1%
2012	3,107	1,057	34.0%	1,699	54.7%
2013	3,497	1,207	34.5%	1,917	54.8%
2014	3,632	1,222	33.6%	1,899	52.3%
2015	3,428	1,219	35.6%	1,945	56.7%
2016	3,526	1,326	37.6%	2,042	57.9%
2017	3,887	1,444	37.1%		
2018	4,051	1,458	36.0%		

Source: National Student Clearinghouse data and Student Demographics

DEFINITIONS:

Class Of Years: Class of years were 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, White Settlement

Please note that the NSC does not have information on every student, thus, missing data are expected. However, NSC-participating colleges and universities enroll nearly all of students in the U.S.; thus, NSC often provides the best overall estimates for student transfers, concurrent/previous enrollments, or degrees completed at outside institutions.

SUCCESS OF TCC ECHS STUDENTS AT 4-YEAR SCHOOLS

The aim of this report is to investigate the success of students following their early collegiate high school (ECHS) experience at Tarrant County College (TCC). Texas Education Agency (TEA) guidelines for birthdates provided a definition for senior "class of" and anticipated graduation. Students from Tarrant ISDs' Classes of 2014 to 2022 who had attended TCC as an ECHS student were tracked for six years to determine attendance and graduation from a four-year institution. In total about 3,800 students were tracked.

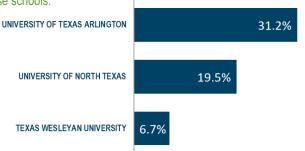
Continuing to Four-Year Institution

Continuing First Fall Term after ECHS Experience:

On average, about 46% of TCC's early college high school students attended a four-year school the fall term following their high school graduation.

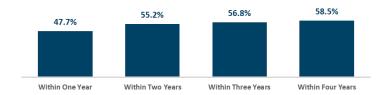
- ECHS students completed almost 50 hours, on average, by the end of their senior year. Thus, they entered the four-year school with over three semesters completed.
- Almost 65% of ECHS students attended TCC or a four-year school the following fall term after their senior year.

Top Schools: Of those at four-year schools the first fall term after their senior year, about 60% of ECHS students attended one of these schools.



Continuing Within Four-years after ECHS Experience:

On average about 55% of ECHS students attended a four-year school within two years of graduating high school, and almost 60% attended a four-year school within four years.

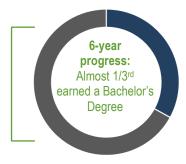


 Overall, about 80% of students attended TCC or a four-year school within four years.

Bachelor's Degree in 6 Years

On average one-fourth of ECHS students earned a Bachelor's degree within four years of their high school graduation, and almost one-third earned a Bachelor's degree within 6 years.

About **60%** of students who attended a four-year school the first fall term after ECHS at TCC earned a Bachelor's degree within six years.



- Of the students who attended a four-year school the first fall term following their high school graduation, almost 50% earned a Bachelor's degree in four years, and about 60% earned a Bachelor's degree in six years.
- Overall, about 60% earned a degree/certificate at TCC or a Bachelor's degree within six years of their high school graduation.

APPENDIX:

ECHS Students who continued at Four-Year School

	Number of	Within One Term		Within One Year		Within	Within Two Years		Three Years	Within Four Years	
Class of	Students	N	%	N	%	N	%	N	%	N	%
2014	14	0	0.0%	0	0.0%	3	21.4%	4	28.6%	4	28.6%
2015	129	53	41.1%	58	45.0%	69	53.5%	76	58.9%	80	62.0%
2016	170	76	44.7%	82	48.2%	93	54.7%	101	59.4%	104	61.2%
2017	228	102	44.7%	104	45.6%	120	52.6%	126	55.3%	128	56.1%
2018	451	209	46.3%	223	49.4%	245	54.3%	257	57.0%	264	58.5%
2019	579	266	45.9%	274	47.3%	317	54.7%	328	56.6%		
2020	635	324	51.0%	337	53.1%	370	58.3%				
2021	705	294	41.7%	312	44.3%						
2022	871	396	45.5%								

Source: National Student Clearinghouse data and Student Demographics

ECHS Students who earned a Bachelor's Degree at Four-Year School

	Number of	4	4 Years		6 Years	
Class of	Students	N	%	N	%	
2014	14	3	21.4%	4	28.6%	
2015	129	25	19.4%	40	31.0%	
2016	170	38	22.4%	53	31.2%	
2017	228	62	27.2%			
2018	451	109	24.2%			

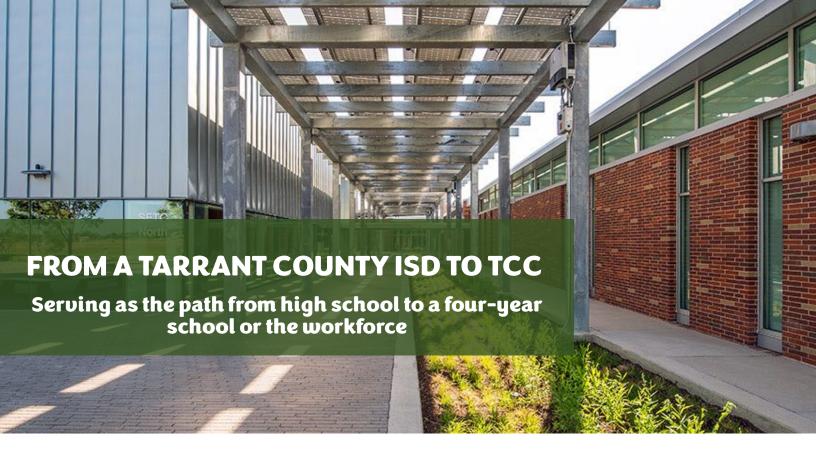
Source: National Student Clearinghouse data and Student Demographics

DEFINITIONS:

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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, White Settlement

Please note that the NSC does not have information on every student, thus, missing data are expected. However, NSC-participating colleges and universities enroll nearly all of students in the U.S.; thus, NSC often provides the best overall estimates for student transfers, concurrent/previous enrollments, or degrees completed at outside institutions.



While there is no doubt that Tarrant County College (TCC) is positioned to play a vital role in the DFW metroplex by providing the education and training needed, understanding the scale at which TCC serves the community sheds light on the magnitude of its impact. Among its many roles, TCC functions as a pathway for high school students to transition from high school to a four-year university or to the workforce. Based on an analysis of Texas Education Agency (TEA) data alongside internal data, it is evident that TCC was and will continue to be a part of the educational journeys for a large percentage of students at Tarrant County ISDs.

SERVING TARRANT HIGH SCHOOL STUDENTS

For the past several years, approximately 25,000 high school seniors attended Tarrant County ISDs each year. Some of the students attended TCC prior to their anticipated high school graduation as dual credit/early collegiate high school (ECHS) students. Other students attended TCC in the summer or fall term following their anticipated high school graduation, and some did both.

Methodology: Senior "Class of" sizes were determined based on TEA's Texas Academic Performance Reports (TAPR). Since TCC data does not contain "Class of" designation for each student, a birthdate range of September 1st to August 31st of the following year was used to define "Class of" (senior year). For example, any student enrolled at TCC with a birthdate between September 1, 1997, and August 31, 1998, was defined as Class of 2016.

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For each Tarrant ISD senior class:

Attended TCC: dual credit/ ECHS

Almost one in five students attended TCC as a dual credit/ECHS student by the end of their senior year.

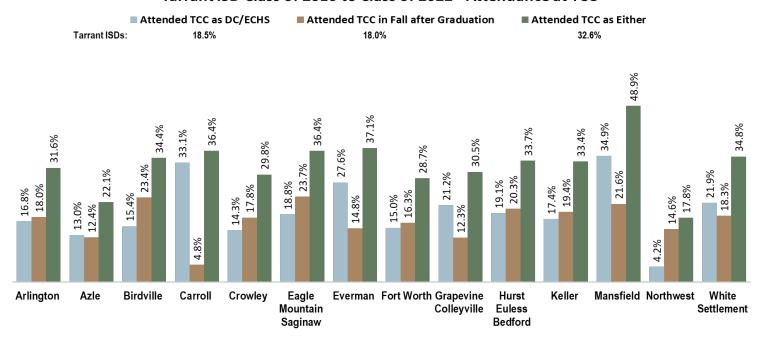
Attended TCC: by fall following senior year

Almost one in three students attended TCC as a dual credit/ECHS student by the end of their senior year or as a student in the summer or fall following their senior year.

BY ISD

Overall, Mansfield ISD had the highest number of students who attended TCC (almost 50%) followed by Everman, Eagle Mountain-Saginaw, and Carroll ISDs (all near 37%). Eagle Mountain-Saginaw ISD had the largest gain between those attending as dual credit/ECHS and those attending just after their anticipated high school graduation. About 20% of their students attended as dual credit/ECHS students, and an additional 17% nondual credit/ECHS students attended after their anticipated high school graduation. Carrol ISD students attended TCC mainly as dual credit/ECHS. About one-third of their students attended as dual credit/ECHS, and only an additional 3% non-dual credit/ECHS attended after their anticipated high school graduation.

Tarrant ISD Class of 2016 to Class of 2022 - Attendance at TCC



			Attended				Attended				Attended				Attended	
		Attended	TCC in Fall	Attended		Attended	TCC in Fall	Attended		Attended	TCC in Fall	Attended		Attended	TCC in Fall	Attended
	Seniors	TCC as	after	TCC as	Seniors	TCC as	after	TCC as	Seniors	TCC as	after	TCC as	Seniors	TCC as	after	TCC as
ISD	(TEA)	DC/ECHS	Graduation	Either	(TEA)	DC/ECHS	Graduation	Either	(TEA)	DC/ECHS	Graduation of 2018	Either	(TEA)	DC/ECHS	Graduation	Either
Total Tarrant	22.687	16.3%	of 2016 20.5%	33.3%	23.439	17.5%	of 2017 20.9%	34.5%	24.200	18.6%	19.7%	34.5%	24.811	19.1%	of 2019 19.3%	34.2%
Arlington	3.858	18.3%	21.7%	36.2%	3,958	17.5%	20.3%	34.2%	3,954	18.4%	18.7%	34.3%	3,881	18.1%	19.3%	34.1%
Arington	400	33.8%	16.5%	42.5%	3,936	31.9%	18.1%	41.9%	401	14.2%	14.7%	24.7%	382	6.8%	12.8%	18.1%
Birdville	1,625	10.3%	24.1%	30.8%	1,590	12.0%	28.2%	36.7%	1,714	14.6%	25.3%	35.8%	1,682	16.3%	25.8%	37.3%
Carroll	626	36.6%	3.8%	39.9%	670	36.1%	4.8%	39.0%	714	34.7%	7.0%	39.2%	642	36.6%	4.0%	39.6%
Crowlev	930	11.2%	24.3%	33.1%	938	10.4%	25.2%	33.4%	1.003	7.7%	18.7%	25.0%	1.015	12.5%	18.7%	29.6%
Eagle Mountain Saginaw	1,207	10.4%	25.8%	32.8%	1,294	16.2%	26.3%	37.1%	1,391	18.4%	26.1%	39.0%	1,311	20.2%	26.6%	39.7%
Everman	329	16.1%	17.0%	27.7%	305	21.3%	18.7%	35.4%	335	31.3%	13.1%	39.7%	379	24.3%	20.1%	38.5%
Fort Worth	4,052	12.7%	19.2%	29.4%	4,317	14.6%	19.5%	31.0%	4,437	15.3%	19.2%	31.4%	4,704	16.1%	18.0%	31.2%
Grapevine Colleyville	1,134	11.9%	14.6%	25.6%	1,118	16.3%	14.8%	29.1%	1,055	21.2%	13.3%	30.5%	1,110	22.5%	12.3%	31.5%
Hurst Euless Bedford	1,513	17.7%	20.6%	33.4%	1,569	18.2%	21.0%	33.5%	1,564	17.0%	21.7%	33.6%	1,654	17.5%	23.3%	34.3%
Keller	2,438	16.0%	21.9%	35.2%	2,585	16.0%	22.0%	35.0%	2,665	19.0%	21.3%	36.4%	2,775	18.1%	19.6%	33.8%
Mansfield	2,377	31.8%	25.2%	49.1%	2,373	35.7%	25.1%	52.0%	2,512	35.8%	23.6%	52.2%	2,535	36.5%	22.7%	51.0%
Northwest	1,194	0.3%	15.3%	15.4%	1,299	0.5%	17.0%	17.4%	1,402	0.2%	16.1%	16.3%	1,576	4.4%	14.3%	17.8%
White Settlement	418	12.0%	22.5%	31.1%	456	20.0%	18.4%	34.2%	424	25.7%	17.7%	38.4%	516	27.3%	20.9%	39.1%
ISD		Class	of 2020			Class	of 2021			Class	of 2022			To	tal	
Total Tarrant	24,755	20.4%	16.3%	32.1%	25,829	19.5%	13.5%	29.2%	25,205	17.9%	16.3%	30.9%	170,926	18.5%	18.0%	32.6%
Arlington	3,834	17.4%	16.8%	30.4%	4,006	14.8%	12.1%	24.0%	3,702	13.1%	17.2%	28.1%	27,193	16.8%	18.0%	31.6%
Azle	432	2.8%	10.6%	12.7%	413	1.2%	6.1%	7.3%	372	1.1%	8.1%	8.9%	2,782	13.0%	12.4%	22.1%
Birdville	1,657	19.1%	20.5%	33.6%	1,697	18.4%	18.1%	32.3%	1,644	16.8%	22.0%	34.1%	11,609	15.4%	23.4%	34.4%
Carroll	704	32.7%	5.8%	36.4%	701	30.5%	4.0%	33.2%	661	24.7%	3.6%	27.4%	4,718	33.1%	4.8%	36.4%
Crowley	1,001	15.2%	15.7%	27.9%	1,103	20.3%	11.2%	28.5%	1,069	21.2%	12.9%	31.6%	7,059	14.3%	17.8%	29.8%
Eagle Mountain Saginaw	1,415	23.7%	23.0%	38.6%	1,479	21.6%	18.5%	33.6%	1,465	19.3%	20.6%	33.8%	9,562	18.8%	23.7%	36.4%
Everman	380	33.2%	12.6%	39.7%	378	30.4%	9.5%	34.9%	379	34.3%	13.7%	42.7%	2,485	27.6%	14.8%	37.1%
Fort Worth	4,773	15.5%	11.6%	25.1%	4,929	15.0%	11.9%	24.7%	4,620	15.5%	15.8%	29.0%	31,832	15.0%	16.3%	28.7%
Grapevine Colleyville	1,128	26.4%	11.6%	34.6%	1,224	29.0%	10.2%	34.7%	1,221	20.7%	9.4%	27.7%	7,990	21.2%	12.3%	30.5%
Hurst Euless Bedford	1,591	22.4%	18.1%	33.9%	1,627	21.0%	16.3%	31.8%	1,608	19.7%	20.8%	35.3%	11,126	19.1%	20.3%	33.7%
Keller	2,695	18.0%	19.3%	33.1%	2,751	19.2%	15.6%	30.9%	2,767	15.6%	16.8%	29.8%	18,676	17.4%	19.4%	33.4%
Mansfield	2,597	39.7%	22.4%	52.1%	2,800	34.8%	16.4%	44.0%	2,822	30.6%	17.6%	42.9%	18,016	34.9%	21.6%	48.9%
Northwest	1,495	5.3%	16.6%	20.0%	1,635	8.5%	12.6%	19.1%	1,743	7.5%	11.6%	17.7%	10,344	4.2%	14.6%	17.8%
White Settlement	456	21.9%	15.4%	33.1%	464	22.8%	14.0%	31.9%	468	22.4%	19.4%	35.0%	3,202	21.9%	18.3%	34.8%

Although included in the Total Tarrant row, ISDs with "Class of" sizes with fewer than 250 students, on average, were suppressed from the table above. Thus, Castleberry, Kennedale, and Lake Worth ISDs are not shown.

Attended TCC as DC/ECHS – enrolled at TCC as a dual credit/ECHS student in the spring term of their senior year or prior

Attended TCC in Fall after Graduation – enrolled at TCC as a non-dual credit/ECHS student in the summer or fall term following their senior year

Attended TCC as Either – enrolled at TCC as DC/ECHS student or the summer or fall term after high school graduation

Note: A student can be in both the "DC/ECHS" column and the "Fall after Graduation" column but is only counted once in the "Either" column.

SUCCESS RATES IN DUAL CREDIT/ECHS

For Tarrant ISD students who attended TCC as dual credit/ECHS students, the success rate during their time in a dual enrollment program was about 89%. The success rate ranged from 78% (Everman ISD) to 99% (Carroll ISD).

ENROLLED AS DUAL CREDIT/ECHS & RE-ENROLLED AFTER GRADUATION

For Tarrant ISD students who attended TCC as dual credit/ECHS students, about 21% re-enrolled at TCC in the summer or fall after their anticipated graduation. This re-enrollment rate ranged from about 5% (Carroll ISD) to about 32% (Eagle Mountain Saginaw ISD).

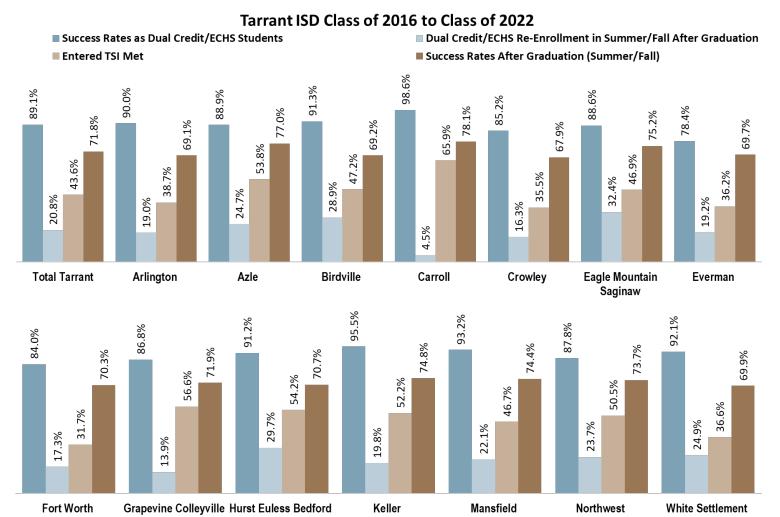
ENTERING TSI MET

For Tarrant ISD students who attended TCC in the fall after their anticipated graduation, about 44% entered TSI met. This rate ranged from about 32% (Fort Worth ISD) to about 66% (Carroll ISD).

SUCCESS RATES AFTER GRADUATION

For Tarrant ISD students who attended TCC after their anticipated graduation, the success rate during the summer and fall after graduation was about 72%. The success rate ranged from 68% (Crowley ISD) to 78% (Carroll ISD).

Sources: TAPR reports, Enrollment by term (credit type N excluded), Student Demographics



Although included in the Total Tarrant, ISDs with "Class of" sizes with fewer than 250 students, on average, were suppressed from the graphic above. Thus, Castleberry, Kennedale, and Lake Worth ISDs are not shown.

TSI status is based on fall term. For example, 2016FL status was used for the Class of 2016 who attended TCC in 2016SU/2016FL. The percentage is the number of TSI met divided by number with a TSI status in Fall ODR.

SUCCESS RATES AS DC/ECHS STUDENTS

5555255 117 1125	Attended TCC as	Success Rate (A, B, C,	Attended TCC as	Success Rate (A, B, C,	Attended TCC as	Success Rate (A, B, C,	Attended TCC as	Success Rate (A, B, C,
	DC/ECHS	CR)	DC/ECHS	CR)	DC/ECHS	CR)	DC/ECHS	CR)
ISD	Class	of 2016	Class	of 2017	Class	of 2018	Class	of 2019
Total Tarrant	17,770	90.9%	20,907	91.7%	26,416	89.2%	30,291	89.7%
Arlington	2,290	91.1%	2,754	93.4%	4,721	87.4%	4,729	91.2%
Azle	419	90.5%	446	89.0%	155	85.8%	58	93.1%
Birdville	475	91.2%	632	91.0%	802	91.9%	863	93.7%
Carroll	929	98.9%	995	99.1%	997	99.2%	954	98.2%
Crowley	463	95.9%	501	93.6%	352	85.5%	668	85.5%
Eagle Mountain Saginaw	346	82.7%	745	87.4%	981	90.3%	1,156	90.5%
Everman	275	88.4%	362	76.5%	1,004	77.3%	863	78.0%
Fort Worth	4,668	84.6%	5,339	86.5%	6,007	85.3%	8,601	85.3%
Grapevine Colleyville	526	98.3%	779	91.7%	2,097	81.0%	2,224	85.4%
Hurst Euless Bedford	1,010	92.2%	1,085	91.9%	930	89.6%	1,116	92.0%
Keller	1,791	95.8%	1,943	96.2%	2,557	96.6%	2,529	95.6%
Mansfield	3,879	95.1%	4,645	95.6%	4,859	94.4%	5,303	94.1%
Northwest	8	100.0%	13	53.8%	9	100.0%	139	92.1%
White Settlement	177	82.5%	382	92.1%	459	97.8%	621	90.5%
ISD	Class	of 2020	Class	of 2021	Class	of 2022	Т	otal
Total Tarrant	32,028	89.8%	32,593	87.2%	31,423	86.6%	191,428	89.1%
Arlington	4,603	91.8%	4,394	89.2%	3,995	87.8%	27,486	90.0%
Azle	27	63.0%	11	100.0%	11	100.0%	1,127	88.9%
Birdville	1,187	92.3%	1,154	89.3%	1,177	90.2%	6,290	91.3%
Carroll	970	98.6%	857	98.0%	662	97.9%	6,364	98.6%
Crowley	1,599	86.2%	2,047	82.6%	1,998	82.3%	7,628	85.2%
Eagle Mountain Saginaw	1,453	89.1%	1,433	89.5%	1,336	86.6%	7,450	88.6%
Everman	1,389	82.5%	1,209	74.1%	1,508	77.5%	6,610	78.4%
Fort Worth	7,690	85.0%	7,531	82.4%	7,737	79.9%	47,573	84.0%
Grapevine Colleyville	2,362	88.2%	2,915	86.9%	2,547	87.8%	13,450	86.8%
Hurst Euless Bedford	1,199	92.9%	1,074	86.6%	1,088	92.7%	7,502	91.2%
Keller	2,386	94.6%	2,444	94.5%	2,146	95.3%	15,796	95.5%
Mansfield	5,971	93.6%	6,462	90.5%	6,022	91.1%	37,141	93.2%
Northwest	233	83.7%	381	86.4%	319	91.5%	1,102	87.8%
White Settlement	429	93.0%	402	91.5%	417	91.8%	2,887	92.1%

SUCCESS RATES IN SUMMER/FALL AFTER GRADUATION

JOCCESS KATES	IN SUMMER/FA	ALL AT TEN GIVA	DOATION					
	Attended TCC in Fall after Graduation	Success Rate (A, B, C, CR)	Attended TCC in Fall after Graduation	Success Rate (A, B, C, CR)	Attended TCC in Fall after Graduation	Success Rate (A, B, C, CR)	Attended TCC in Fall after Graduation	Success Rate (A, B, C, CR)
ISD	Class	of 2016	Class	of 2017	Class	of 2018	Class	of 2019
Total Tarrant	18,300	71.1%	18,530 71.8%		18,122 72.9%		18,278 73.0%	
Arlington	3,283	67.6%	3,043	68.9%	2,770	70.9%	2,847	70.1%
Azle	264	75.4%	245	80.0%	235	80.4%	195	83.6%
Birdville	1,581	70.1%	1,785	67.5%	1,734	68.9%	1,735	70.1%
Carroll	89	82.0%	92	76.1%	160	82.5%	74	67.6%
Crowley	875	67.0%	904	71.1%	727	72.5%	705	66.0%
Eagle Mountain Saginaw	1,282	73.6%	1,319	76.0%	1,418	76.4%	1,382	80.5%
Everman	201	76.6%	201	77.1%	164	62.8%	266	74.1%
Fort Worth	2,966	69.9%	3,130	72.5%	3,184	74.4%	3,205	70.6%
Grapevine Colleyville	623	69.3%	613	71.1%	484	72.9%	511	73.0%
Hurst Euless Bedford	1,245	68.8%	1,221	68.1%	1,316	69.1%	1,472	72.4%
Keller	2,103	74.9%	2,187	73.1%	2,124	73.6%	2,069	75.4%
Mansfield	2,391	73.7%	2,227	73.5%	2,292	74.6%	2,162	74.9%
Northwest	727	71.0%	860	74.9%	878	72.0%	892	79.7%
White Settlement	379	72.6%	333	74.5%	301	73.1%	409	66.5%
ISD	Class	of 2020	Class	of 2021	Class of 2022		To	otal
Total Tarrant	15,944	68.1%	12,682	75.2%	15,314	70.9%	117,170	71.8%
Arlington	2,628	65.4%	1,767	76.1%	2,326	66.9%	18,664	69.1%
Azle	181	65.7%	89	74.2%	119	75.6%	1,328	77.0%
Birdville	1,375	64.1%	1,179	71.5%	1,425	72.4%	10,814	69.2%
Carroll	123	78.9%	88	72.7%	81	81.5%	707	78.1%
Crowley	596	64.6%	397	69.3%	475	62.3%	4,679	67.9%
Eagle Mountain Saginaw	1,308	69.6%	1,022	77.0%	1,187	73.0%	8,918	75.2%
Everman	176	51.7%	127	73.2%	174	68.4%	1,309	69.7%
Fort Worth	2,094	65.7%	2,119	70.3%	2,679	66.7%	19,377	70.3%
Grapevine Colleyville	475	67.4%	436	77.1%	456	73.7%	3,598	71.9%
Hurst Euless Bedford	1,134	68.4%	972	76.9%	1,204	72.1%	8,564	70.7%
Keller	2,099	73.3%	1,510	79.1%	1,765	75.6%	13,857	74.8%
Mansfield	2,315	73.1%	1,698	78.4%	1,858	73.8%	14,943	74.4%
Northwest	979	66.8%	746	77.5%	744	75.1%	5,826	73.7%
White Settlement	294	61.6%	241	69.7%	361	71.2%	2,318	69.9%

Although included in the Total Tarrant, ISDs with "Class of" sizes with fewer than 250 students, on average, were suppressed from the graphic above. Thus, Castleberry, Kennedale, and Lake Worth ISDs are not shown.



The "demographic cliff" is a term that has been coined to describe the predicted decline in the number of college students due to lower birth rates during and after the 2008 Great Recession. The potential result of this decline in birthrates could begin to affect colleges about two decades later, the mid-2020s, as the population of traditional college-aged individuals decreased. Are there indicators that this cliff is looming for Tarrant County College (TCC), and if so, is TCC better positioned to maintain/increase enrollment than other institutions?

BIRTH RATES

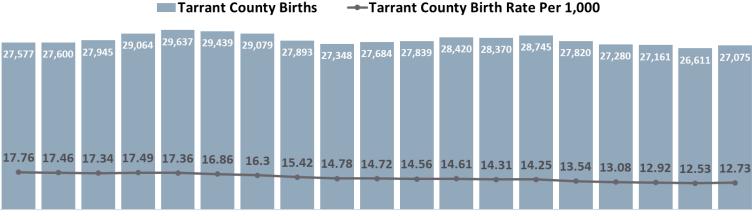
While Tarrant County and Texas experienced a more rapid decline in birthrates than the nation since 2003, both have a rate of about 13 babies per 1,000 residents in 2021 compared to about 11 nationally. For about the last two decades almost 30,000 babies were born in Tarrant County. Since the number of births remained consistent compared to substantial increase in population from about 1.5 million in 2003 to over 2 million in 2021, the birth rate decreased. About 18 babies were born in 2003 for every 1,000 residents compared to about 13 babies for every 1,000 residents in 2021. [1]

HIGH SCHOOL GRADUATES

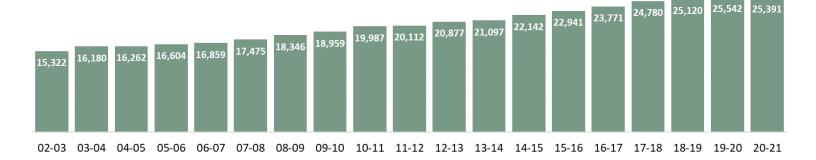
The number of high school graduates from Tarrant County ISDs increased by about two-thirds (about 10,000 students) from about 15,000 graduates in 2002-2003 to about 25,000 graduates in 2020-2021. However, most recently, the number of graduates seems to have plateaued near 25,000 graduates – reaching roughly that number in 2017-2018. Tarrant County's increase in the number of high school graduates outpaced the state which had a 50% increase in the number of graduates from 2002-2003 to 2020-2021; however, like Tarrant County's pattern, the number of graduates in the state has not increased as much in the last few years and is potentially leveling near 360,000 graduates.

EDUCATIONAL ATTAINMENT

The percentage of Tarrant County residents aged 18 to 24 who have earned high school diploma/equivalency or higher increased about 5.5 percentage points from over 80% in 2010 to almost 86% in 2021. Similarly, the percentage with some college or higher increased about 3.5 percentage points from about 48% in 2010 to over 51% in 2021. [3]



2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 12 | IR Corner June 2023



IMPLICATIONS & OPPORTUNITIES

Since the Tarrant County births did not increase in a way that would lead to a potential for more students in the mid-2020s and beyond, future TCC students must include a large population of those who were not born in Tarrant County or even in Texas.

Unlike other large states such as California and New York, Texas had a net gain in migration during the pandemic – second only to Florida (2020-2021), and the Dallas-Fort Worth area led the state. Moreover, 2021 data suggests new arrivals to Texas tend to be young with "movers" almost twice as likely as the Texas population to be ages 20 to 29. [4][5]

Based on the Texas Demographic Center's more conservative model (0.5 migration scenario), Tarrant County's population is projected to grow by about 8% or about an additional 170,000 residents between 2020 and 2030. [6]

The key for TCC may be to continue to avoid defining "traditional" college-age students as there may be prospects to gain from dual credit/early collegiate high school students, recent high school graduates, as well those currently in the workforce.

- Of all Tarrant ISD seniors, about two in three students have not attended TCC as a dual credit/ECHS student by the end of their senior year or as a student in the summer or fall following their senior year – an opportunity with high school students/recent graduates.
- Of Tarrant County residents aged 18 to 24, about one in two have not attended college and about 15% do not have a high school diploma/equivalency – an opportunity to further their education and reskill or upskill the current workforce.

Sources:

- [1] CDC data: https://wonder.cdc.gov/natality.html
- [2] Texas Education Agency data;https://tea.texas.gov/texas-

 $\underline{schools/accountability/academic-accountability/performance-reporting/texas-academic-performance-reports}$

[3] ACS data

 $\frac{\text{https://data.census.gov/table}? q=Educational+Attainment+Tarrant+County\&tid=ACSST5Y}{2021.S1501}$

[4] Federal Reserve Dallas <u>Largest Texas Metros Lure Big-City, Coastal Migrants During Pandemic - Dallasfed.org</u>

[5] Federal Reserve Dallas Migration to Texas Fills Critical Gaps in Workforce, Human Capital - Dallasfed.org

[6] Texas Demographic Center data

Educational Attainment (Population 18 to 24 Years) - Tarrant County High School or Higher Some College or Higher

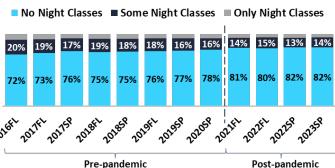




While some peoples' vision of college probably involves young students busily walking across a grassy quad on a bright day or sitting in class before lunch, for a subset of TCC students college looks quite different. These students could be parents or caregivers or are working professionals who only have time for school when they are away from their daytime non-academic obligations.

Who is Where, and When?

Here, "night-student" refers to a student who had a course enrollment in a section with a start time at or after 6 p.m., and data includes all fall and spring terms from Fall 2016 to Spring 2023 except "Covid" terms, Fall 2020 and Spring 2021. Pre-pandemic, the average number of students who took at least one of their classes after 6 p.m. was about 12,500 (about 25%). This shifted to a mean of about 8,000 (about 19%) after Fall 2020 and Spring 2021. Pre-pandemic, the average number of students who took all of their classes after 6 p.m. was about 3,500 (about 7%). This shifted to a mean of about 2,000 (about 5%) after Fall 2020 and Spring 2021.



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Post-pandemic

Notably, the average age of a TCC student was about 24 years old, while the average age of a solely night student was about 30 years old. Night students also differed by their full-time/part-time status, with about 97% of solely night students being classified as **part-time** compared to about 74% of the general student population. Female students comprised around **55%** of **solely night** students whereas, they comprised almost 60% of the general student population.

What Is Offered?

As a general overview for classes taught from Fall 2016 to Spring 2023 (excluding Covid terms):

About 12% of course enrollments were in 'night courses' where at least part of the course was taught after 6 p.m.

Top 10 C	asses with Late Sec	ctions from Course	Enrollments
Course Name	Total Sections	Night Sections	% Night Sections
ENGL-1301	4,638	399	9%
BIOL-2401	1,155	275	24%
MATH-1314	2,273	239	11%
STSC-0111	1,632	228	14%
GOVT-2306	1,683	225	13%
GOVT-2305	2,418	212	9%
MATH-0361	899	204	23%
ENGL-1302	2,965	185	6%
HIST-1301	2,517	183	7%
PSYC-2301	1,589	167	11%

Student Attitudes

In the Fall 2021 and Fall 2022 Students' Scheduling Preferences Survey, students responded to

questions regarding what time of day students preferred to take their classes. Students who answered that their top choice for a time was in the evening were:

- **18%** more likely to indicate they were a parttime student.
- 9% more likely to indicate that they were working a job in addition to their role as a student.
- **10%** more likely to indicate that they cared for dependents.

Comments provided by this subset of students gave additional perspective regarding the reasons these students preferred evening classes:

"...not all of the courses were offered in the evening/night or on the weekend. I have had to use vacation time from work in order to take some of these..."

- TCC Student

"As someone who has to work full time and works Monday – Friday from 7-4PM, I am not available till the late evening." – TCC Student

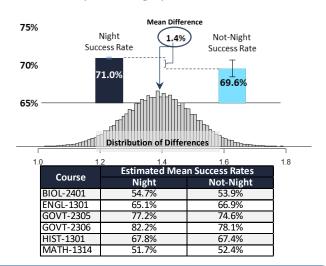
"Naïve" Comparison of Buccess

Using a basic approach, the success rate (A, B, C, CR) in all night courses was compared to the success rate in all courses that were not at night. **Night courses** had a **72.8%** success rate, while **courses not at night** had a success rate of **74.7%**. However, comparing courses with a simple 'night' or 'not night' grouping risks ignoring possible confounding factors (e.g., age, course load, etc.) that are correlated to success rates. For example, students under 18 had a very high success rate and almost all of them had no night classes. To mitigate this, a matched pairs approach was employed.

Matched Pairs Analysis

About 150,000 course enrollment records were matched on student age, gender, full-time status,

course, and term. For example, Jack and John were "matched" because both were 18 to 25 years old male students, took MATH-1314 in Fall 2017, and were part-time; Jack took his class as a night course, and John did not take his class at night. Jack could have also been matched with Steve who was also an 18- to 25-year-old male who took MATH-1314 in Fall 2017 not at night with a part-time courseload. Since various matched pairs can be created, there is variation in the estimated difference in success rates. After controlling for confounding factors, students in night courses outperformed their counterparts by an estimated 1.4 percentage points.



Conclusions

From this analysis, it is evident that night courses are an important offering to TCC students. District-wide, pre-pandemic, about one in four TCC students took a night course, and in the last few terms about one in five students took a night course. The students who exclusively took night courses were, on average, about 6 years older and much more likely to be part-time when compared to an average TCC student. When controlling for confounding factors using matched pairs, the estimated success rate in night courses was about 1.4 percentage points higher than the success rate in courses not at night. Importantly, the distribution of differences does not contain 0, which is stronger evidence that students perform slightly better in courses scheduled at night.

Sources: ST Enrollment & Demographics, SA Section Audit, SFU Responses, DA Degrees



SELECTING COURSES

Who is dropped for non-payment?

You fill your Amazon cart with your selections, but do you ultimately check out? The items in your cart are essentially "on hold" until you complete the payment process. By analogy, students select their courses during registration, but their enrollment is not complete until they complete the payment process. Those who do not complete the payment process either through full payment, establishing a payment plan, or having financial aid funds are eventually de-registered (dereged) from their courses for non-payment.

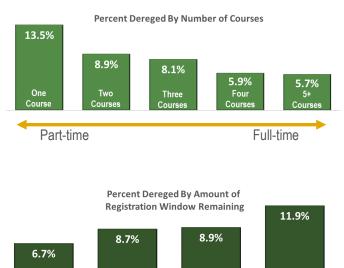
In this article, several questions are considered. First, do students who have no intention of completing their enrollment through payment use the dereg process to "empty their cart"? Second, who is at risk of being dereged? Lastly, what is the likelihood that a student who is dereged will re-enroll and remain enrolled on census day?

Choosing to be Dereged - Spring 2023

In Spring 2023, there was a grace period between the January 9th payment deadline and deregistration on January 12th. In an effort to keep students who had registered for Spring 2023 but had not paid, a call campaign provided students with information and assistance regarding the payment deadline and payment plans and directed students to the appropriate support services where possible. Edamerica, an external agency, called 2,331 students who were in danger of being dropped for non-payment - de-registered (dereg) - in the two days between the payment deadline and the dereg date. Of these 2,331 students, the Edamerica staff spoke to 21% (484). Of the 484 students who spoke with Edamerica staff, 15% responded "Not Attending". This non-negligible percentage (15%) of students who were enrolled but had missed the payment deadline - in danger of dereg - and were directly contacted by Edamerica staff had no intention of remaining enrolled. Thus, most of this group were using the dereg process as their method for dropping a class instead of manually dropping the class.

Indicators for Dereg

Registration data from the fall and spring terms from 2018 to 2023 were used to examine potential risk factors for being dereged. The number of courses in which the student was enrolled just prior to dereg was associated with the likelihood that the student was dereged. Students enrolled in four or more courses were much less likely to have been dereged. The amount of time remaining in the registration window (the period between open enrollment and the dereg date) when the student first registered was also correlated with the likelihood of being dereged. Students who registered with at least 75% of the registration window remaining were much less likely to have been dereged. At the extreme, there was about a 16% chance that students who were registered in one course with 25% or less of the registration window remaining were dereged.



.5 to .25

.25 to 0

Registered Late

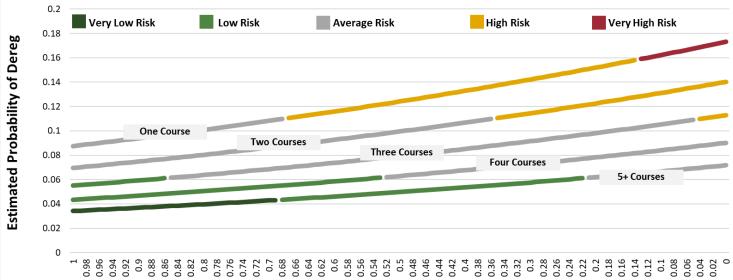
.75 to .5

1 to .75

Registered Early

The probability that being dereged was estimated, using a logistic regression model with the number of courses and percentage of time remaining to the dereg date as predictors. These estimated probabilities were then used to create risk groups.





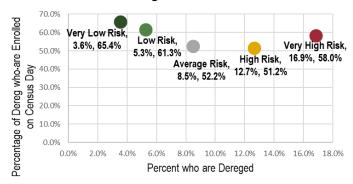
Percentage of time remaining before Dereg Date

For example, students enrolled in five or more classes who registered with roughly 70% or more of the registration window remaining (e.g., full-time students who registered early) were at *very low risk* of being dereged. Students enrolled in one class who registered with roughly 15% or less of the registration window remaining (e.g part-time students who registered late) were at *very high risk* of being dereged.

Dereg to Re-Enroll

Students who were at a *very low risk* of being dereged were over 2 times less likely to be dereged than those at *average risk*. Moreover, *very low risk* students who were dropped were about 1.25 times more likely than those at *average risk* to re-enroll and remain enrolled on census day. Of the *very low risk* group who were dereged, about 65% were enrolled on census day, whereas about 51% of the *high risk* group and about 58% of the *very high risk* group who were dereged were enrolled on census day. In other words, a smaller percentage of the *very low risk* group were dereged, and those in this dereged group were more likely to return.





Ultimately, about 98% of students who had an enrollment at the time of the dereg date – just prior to the dereg process – and who had a *very low risk* of being dereged were still enrolled on census day. In contrast, about 87% of students who had an enrollment at the time of the dereg date and who had a *very high risk* of being dereged were still enrolled on census day.

IMPLICATIONS

In sum, data from Edamerica suggested that a non-negligible percentage of students may choose to let the dereg process remove them from their courses instead of manually dropping. In the future, formally recording these students' decision to not enroll in the current term and whether they plan to enroll in a later term may help with efficiency. Then efforts during the registration window can be centered on students who plan to enroll in the current term, and efforts outside of the registration window can be aimed at students who plan to enroll in a future term.

The number of courses in which a student enrolls and when the student enrolls helps predict the risk that a student will be dereged with full-time students who register early being at *very low risk*. These students are less likely to be dereged, and those who are dereged are more likely to be enrolled on census day. If resources are limited, knowing these risks factors may help focus efforts.

Source: Registration Activity Data, Edamerica Report

PATHWAYS

Aligning program of study with career interest



OVERVIEW

A few years ago TCC began work on guided pathways, a concept in which degrees/certificate programs with curriculum designed to teach similar skills and lead to careers staffed by those with similar interests were grouped into career areas. The five career areas developed, called pathways, align with Texas high school endorsements and include: Arts & Humanities, Business & Industry, Health Science, Human & Public Services, and Science, Technology, Engineering & Math (STEM). By getting students on a Pathway well-aligned with their career interests, the goal is to promote a faster time to degree/certificate completion with fewer excess coursework or credits outside of their program of study.

Using data from 2017 to 2021 fall terms, students were tracked for one year to determine progress within their pathway and success in their coursework.

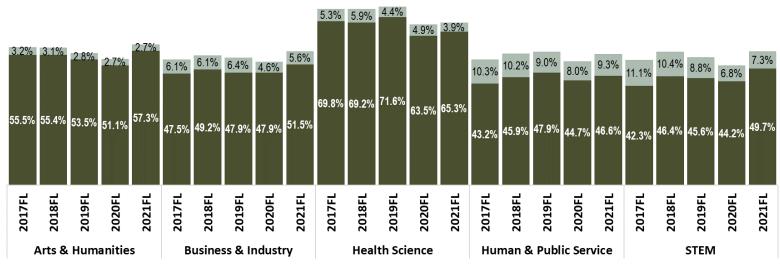
PATHWAY PROGRESSION

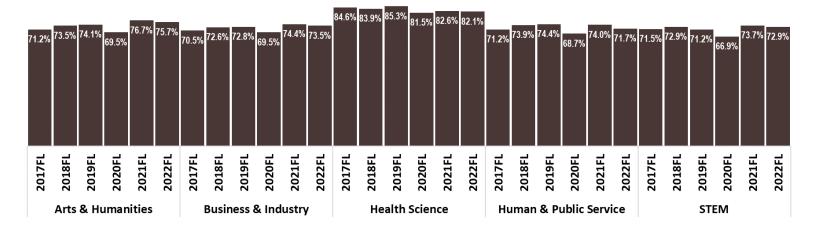
Students in a pathway progressed in pathway if they remained in that pathway at TCC the following fall or graduated from TCC in that pathway during the academic year. Students in a pathway progressed in different pathway if they remained at TCC the following fall but were not in the same pathway or graduated from TCC in different pathway during the academic year.

Students in the health science pathway had the highest progression in pathway rate – about 70%, on average, while students in the human & public service pathway and students in the STEM pathway had the lowest rate – both about 45%, on average. Note that for both the human & public service pathway and STEM pathway roughly 10% of students progressed in different pathway at TCC. The higher progression rate within the health science pathway is likely due to admission criteria for the programs within this pathway.

■ Progressed in Pathway

■ Progressed in Different Pathway





OVERALL COURSE SUCCESS

Except for health science students, overall success rates did not differ markedly by pathway. The success rate for health science students was about 83% which was about ten percentage points higher than the success rate for students on other pathways (about 72%/73%). (Note that all coursework was included in the chart above. For example, a STEM student might have taken three stem courses and one art course. The success rate was based on student's pathway not the type of course.)

Overall course success rates were correlated with progression. The success rate for those who ultimately progressed at TCC was about 20 to 30 percentage points higher than students who did not progress and TCC.

Sources: Student Programs (no credit type N), Enrollment by term (no credit type N), and Texas Accountability System

Success (A, B, C, CR) Rates by Pathway (2017 to 2021 Falls) by Student's Pathway and Progression Status

		Progressed in
	Did Not Progress at	Pathway or Different
	TCC	Pathway
Arts & Humanities	59.0%	82.0%
Business & Industry	54.9%	84.0%
Health Science	58.0%	91.5%
Human & Public Service	56.9%	83.2%
STEM	57.3%	80.9%

IN SUM

Students on the health science pathway had the highest progression and overall course success rate. Students on the human & public service or STEM pathways were more likely to progress in a different pathway. Outcomes aligned with the goals of pathways, quicker time to completion and fewer excess credit have shown some improvement.

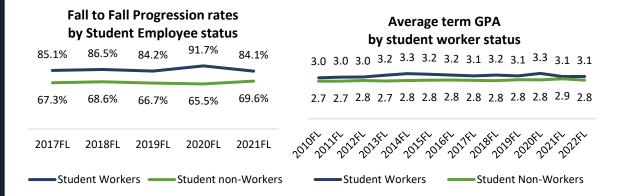
- Semester Credit Hours in Excess of Program Requirements (Same Institution)
- Time to Associate Degree (in years)
- Graduates With No More Than 3 Excess Hours (Associate Degrees)



2018 2019 2020 2021 2022

Employment while at TCC - Student Employees

Recent research into how student employees are performing in their classes led to some interesting insights into student learning outcomes by student employment status. Student employees tend to outperform students not employed by the college across several metrics including average GPA, average credit hours completed per semester, persistence rates, and graduation rates. The charts below illustrate these trends.

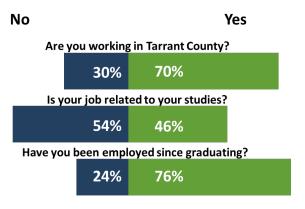


Progression in the chart above is defined as persisting or graduating. The number of student employees each fall ranged from about 100 (2020FL) to almost 500 (2017FL). The lower number of student employees during COVID (2020FL) may mean that this group of student employees differed from other years and help explain the higher progression rate for student employees from the 2020FL term.

Employment After Graduation From TCC

A huge indicator for success as an institution of higher education is student employment outcomes after they have finished their studies. Ultimately, this metric is one way to answer the question: "How well did your education prepare you for life after school?" Further, we would hope that what a student studies would have some influence on the type of career they pursue post-graduation.

In March of 2023, student workers in the TCC Contact Center reached out to last year's spring graduates calling about 2,300 who graduated with an associate degree to determine the answer to this question. Following the call campaign, the same group of students were tracked to determine whether they were enrolled at a four-year at the time of the call campaign. Of the students who answered regarding their employment status, about 3 in 4 reported being employed since graduation. Notably, when these



employed students were asked if their job was related to what they had studied in school, the result was roughly an even split, with slightly more students reporting that their job did not relate to their schoolwork. Whether a graduate was still enrolled in post-secondary education after their graduation from TCC appeared to be related to whether they were working at a job related to their field of study. **About 41%** of students who were **still enrolled** at an institution of higher education post-TCC graduation reported that their job was related to their field of study, compared to **about 50%** of graduates who were **not enrolled** in college. Overall, about 92% were working or enrolled one year after earning their Associate degree.

FIELDS OF STUDY

how TCC students specialize their associate's degrees

Monitored by the Texas Higher Education Coordinating Board (THECB), Fields of Study (FOS) were created as a way for students to seamlessly transfer from a two-year institution to a four-year institution within Texas for a specific major. "If a student successfully completes a Field of Study curriculum developed by the Board, that block of courses may be transferred to a general academic teaching institution and must be substituted for that institution's lower division requirements for the degree program for the field of study into which the student transfers, and the student shall receive full academic credit toward the degree program for the block of courses transferred." As a supplement to the core curriculum, FOS allow for TCC students to specialize their transfer coursework into a subject. Regarding FOS completions, FOS are not degrees or certificates and are simply noted on a TCC transcript.

TCC STATS

Between 2004FL and 2023SP, there were over **5,200 TCC unduplicated students** enrolled in a FOS. During that time, **programs** included:

- Architecture
- Communications (Speech, General)
- Journalism (General, Teacher, Mass Communication)
- Broadcasting Journalism/Radio & Television
- Advertising & Public Relations
- Computer Science & Information Technology
- Computer Science
- Engineering (General, Civil, Electrical, & Mechanical)
- Psychology
- Criminal Justice
- Social Work
- Drama
- Music
- Health & Wellness
- Nursing
- Business/Business Administration & Management
- Child Development/Early Childhood Education/Grade 4-8 Certification

The most popular FOS (by unduplicated headcount) were Business/Business Administration and Management (about 35%), Nursing (about 17%), and Psychology (about 11%).

There have been over **1,600 FOS designations awarded** through 2023SP, with over **80%** being **Business/Business Administration and Management**.

HOME RUNS

As the goal of FOS is to seamlessly and successfully transfer credits to a fouryear institution, students who earned a FOS designation at TCC in Business/Business Administration & Management or Nursing (the top-two FOS majors at TCC) were tracked for enrollment at and graduation from a four-year school. *

ENROLLMENT MAJOR

For TCC's Business/Business Administration & Management majors, top four-year majors were:

- Business Administration and Management, General 54% FOS designations
- Business/Commerce, General 20% FOS designations
- Accounting 17% FOS designations

For TCC's Nursing majors, top four-year majors were:

- Nursing/Registered Nurse 58% FOS designations
- Biology/Biological Sciences, General 10% FOS designations

GRADUATION MAJOR AT FOUR-YEAR

For TCC's Business/Business Administration & Management majors, top four-year graduation majors were:

- Business Administration and Management, General 29% FOS designations
- Accounting 14% FOS designations
- Banking and Financial Services 8% FOS designations

For TCC's nursing majors, top four-year graduation majors were:

- Nursing/Registered Nurse 23% FOS designations
- Biology/Biological Sciences, General 12% FOS designations

FUTURE OF FIELDS OF STUDY

In March of 2021, the THECB introduced Texas Direct and the Texas Transfer Framework: "Students who complete the Texas Core Curriculum and Field of Study at any public two-year institution automatically qualify to receive an associate degree – the Texas Direct Transfer Degree. They are also qualified to transfer their courses as a block applied directly to their selected major." FOS included in Texas Direct are Business Administration, Criminal Justice, Political Science, Social Work, and Sociology. Other subjects are being revised and are monitored on the THECB website.²

^{*} CIP codes were utilized to connect TCC and four-year school majors for students who were both a TCC FOS major and enrolled at four-year between 2010FL & 2022FL 1 chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://reportcenter.highered.texas.gov/training-materials/presentations/field-of-study-a-texas-transfer-initiative-community-state-technical-college-liaison-meeting-10-2018/



TARRANT COUNTY COLLEGE SHARING OUR STORY

Enrollment

Between 2014 and 2022, the number of students at Texas community colleges (annual headcount) dropped by over 300,000 students or about 23%. During this same time period, TCC dropped similarly by about 25%.[1] The pandemic exacerbated the decline, and TCC experienced a substantial decline in enrollment during 2020 and 2021 like most institutions of higher education. [2] However, Fall 2022 enrollment brought signs of recovery and hope for potential growth. Comparing fall terms, enrollment increased about 7% from Fall 2021 to Fall 2022 which meant that about half the enrollment lost between Fall 2020 and Fall 2021 was recovered (approximately 3,000 from the nearly 6,000 lost). [2]

As suggested by national research, dual credit/ECHS enrollment mitigated what could have been a more substantial decline in enrollment. Nationally, high school students made up nearly a fifth of community college enrollment. [3] TCC was in line with this statistic. For the past several fall semesters, dual enrollment (DC/ECHS students) comprised about one-fifth of the total headcount. [4]

Access & Affordability

TCC ranked second in affordability among Texas' big ten community colleges (2022 tuition & fees, 30 SCH). Compared to public universities in Texas, TCC graduates finished with less debt (2021 percent of undergraduates completing with debt: 28% for TCC, 55% for public universities; 2021 average debt of graduates with loans: \$15,635 for TCC, \$24,774 for public universities). TCC's graduates had less debt as a percentage of the first-year wages compared to public university graduates (2019 debt as a percentage of first-year wages for graduates: 36% for TCC, and 56% for public universities). [1]

Student Experience

Based on results from a survey administered nationally (SENSE Fall 2022), an estimated 97% of first time TCC students would recommend TCC with an estimated eight in ten feeling welcome at TCC. [5] TCC should strive to increase awareness of and better connect students with TCC resources since their usage was correlated with higher engagement and success. For example, students with a high sense of belonging to TCC were about two times more likely to have worked with an advisor to choose their course of study^[5], and students in supplemental instruction (SI) supported sections who participated in SI out performed those who did not participate by over ten percentage points in Fall 2022. [6]

Progression & Completion

For about the last five first time in college (FTIC) cohorts, about six in ten progressed from their first fall term to the following year (i.e., retained at TCC/other higher education institution or graduated). However, most recently for the Fall 2021 FTIC cohort almost seven in ten students progressed.^[7]

About 30% of TCC's FTIC students earned a credential from any institution of higher education within six years of starting at TCC.^[5] Roughly one in ten FTIC students earned a Bachelor's degree within six years. ^[8]

Recently, about nine in ten students graduating from technical programs with state reported licensure rates passed their licensure exam. [9] Lastly, since 2015, about nine in ten graduates were working or enrolled within one year after their award. [1]

^[1] Texas Higher Education Accountability System

^[2] Fall Statistical Handbooks

^[3] U.S. community colleges reeling from plummeting enrollment.

^[4] Dual credit flipbooks

^[5] Leveraging the Early Experience of First Time Students – Fall 2022 Survey of Student Engagement (SENSE)

^[6] Supplemental Instruction Report 2022FL

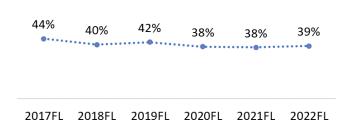
^[7] National Student Clearinghouse (shown in student-life cycle metrics report)

^[8] Transfer Success of FTIC Students



TCC has had about 30,000 applicants each fall term since 2017, and about 40% became TCC students by enrolling in courses in the fall term in which they applied. This conversion of applicant to enrolled student is often referred to as the applicant-to-enrolled yield rate.

Yield Rate - Past Fall Terms



APPLICANT PROFILE

About 56% of applicants were female and about 44% were male and the yield rate did not differ by gender. This gender distribution of applicants somewhat mirrored the fall student population, which was about 60% female and 40% male. The largest ethnicity group within applicants was Hispanic/Latino applicants (34%) followed by White applicants (30%). Black/African Americans applicants comprised about 20%, and Asian applicants comprised about 5% of applicants. Similar to gender, the ethnicity distribution of applicants was somewhat similar to ethnicity distribution in the student population. However, yield rates differed substantially by ethnicity. Asian applicants had the highest yield rate (50%)followed by White applicants (45%). Hispanic/Latino applicants had a yield rate of about 41%, and Black/African American applicants had a yield rated of about 31%.

IMPACT OF PHYSICAL ADDRESS

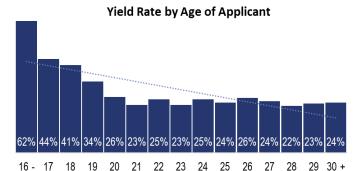
Roughly 80% of applicants were in Tarrant County and an additional 10% were in surrounding counties (shown on the map of Texas). Interest in online courses appeared related to location. About 4% of in-county applicants selected TCC Connect Campus on their application; whereas, about 7% of "surrounding-county" applicants selected TCC Connect. Roughly one in five "all-other-county" applicants selected TCC Connect campus.

The yield rate for in-county applicants (45%) was about 16 percentage points higher than "surrounding-county" applicants (29%) and about 37 percentage points higher than "all-other-county" applicants (8%).



IMPACT OF AGE

Roughly 60% of applicants were 18 and under when they applied, and roughly 10% were 19 or 20 when they applied. The yield rate for those 18 and under who were likely applying as dually enrolled students, was almost 50%. The yield rate for those 19 or 20 who were likely applying as recent high school completers was closer to 30%. The yield rate for over 20 was just under 25%.



CONNECTION WITH APPLICATION DATE

18 & Under

About one-fifth of applicants 18 and under applied more than six months before the start of the term. At the other extreme, almost one-tenth of applicants 18 and under applied less than one month before the start of the term. Applicants 18 and under were less likely to enroll if they applied very early (more than six months prior to the start of term) and very late (less than one month prior to the start of term or after the start of the term).

Approximate Time		
between Application	% of Total Applicants 18	
and Start of Term	and Under	Yield Rate
After Start of Term	3%	15%
Less than One Month	9%	47%
One Month	7%	54%
Two Months	9%	62%
Three Months	11%	55%
Four Months	12%	54%
Five Months	13%	55%
Six Months	17%	50%
More than Six Months	20%	38%

Over 18

Applicants over 18 were more likely to apply closer to the start of the term with about one-quarter applying less than one month before the start of the term. Those who applied one or two months before the start of the term had the highest yield rate – over 30%.

Approximate Time between Application and Start of Term	% of Total Applicants Over 18	Yield Rate
After Start of Term	11%	9%
Less than One Month	25%	28%
One Month	19%	34%
Two Months	13%	31%
Three Months	12%	25%
Four Months	6%	27%
Five Months	4%	22%
Six Months	4%	18%
More than Six Months	5%	18%

IMPLICATIONS

- Since yield rates differed by ethnicity, investigate sub-populations to determine potential barriers in the application process that these groups may be disproportionately encountering. Using this information, connect these students with TCC resources through targeted outreach to highlight these resources.
- Market online options heavily to applicants outside of Tarrant County.
- Ultimately, about one-fifth of applicants applied late (less than one month prior to start of the term or after the start of the term), and only slightly higher than one in four enrolled at TCC. This late applicant pool was about 5 to 6 thousand each fall. Opportunities may exist to increase the yield rate for these applicants and increasing the rate by 10 to 15 percentage points would result in over 500 students.

Sources: Applicants and Admissions, Enrollment by Term (no credit type N)

DATA'S ANATOM finale Summer 2023 ETLES Season 8



Thanks for the memories!

SON 8 TOPICS

Who keeps stealing Dan's parking spot?

(Topic: Appropriate Data Uses)

How does Daphne feel about the cold weather?

(Topic: Freezing Files)

How does Dan handle the Will the team get coffee machine not working? (Topic: Classifying Campus)

a new intern?

(Topic: One College Reporting)

Data's Anatomy is IR's in-house video series, made to clarify important data terminology, calculations, and refresher tips on easily confused data concepts. Find them on our website!!



CONTACTUS



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

The word "limit" is defined as "a point or level beyond which something does not or may not extend or pass." Relating this definition to data analysis and research, data are bound by the method of collection, the specific information it yields, its ethical use, and its appropriate interpretation. Stretched beyond its limit, errors and misinterpretation can occur. However, in research, perceived limits are meant to be tested and pushed. Curiosity and innovation drive the advancement of the body of knowledge by those who ask what could be. Take airflight as an example: the Wright Brothers took their first flight in 1903, and only 66 years later Apollo 11 landed on the moon. Team IR is here to provide accurate, ethical, and timely data to best support your research needs while also hoping to plant seeds of "what if" towards future analysis. Although data may feel confining at times, the human imagination is limitless. We look forward to exploring and supporting your ideas – the sky is not the limit!









"You do not rise to the level of your goals. You fall to the level of your systems.

— James Clear









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www.tccd.edu/about/research/institutional~intelligence~and~research

1 – Oxford Dictionary