

Leading to Scale Dual Credit Pathways: Data DEEP Dive

Texas Pathways Institute

Pre-Institute Session, April 12th, 2023

John Fink & Tatiana Velasco, CCRC; Lauren Schudde & Wonsun Ryu, UT-Austin

Bring a laptop and dive into your college's dual credit data using a series of new Tableau dashboards developed by the Community College Research Center (CCRC) and UT-Austin describing dual credit access and outcomes among recent Texas high school graduates.

Session Goals:

1. Participants will identify and apply insights from dual credit dashboards to inform improvement planning to further strengthen their college's dual credit strategy
2. "Beta-test" and provide input and suggestions for further refinement of the dashboards for future use among TX colleges and their K12 school partners

Link to College- and School-level Dashboard: <https://tinyurl.com/CCRC-UT-DCDashboard-Beta>

Statewide Results: <https://tinyurl.com/CCRC-UT-DCDashboard-Statewide>

The CCRC/UT dual credit dashboard draws on statewide, longitudinal, student-level data from the Texas Education Research Center (ERC). Per the requirements of the ERC, results with small cell sizes or otherwise identifiable combinations of released data have been suppressed for privacy (a list of masking condition and corresponding codes is included in the Table 2). As a result, some results may appear blank or otherwise are masked.

What students are included in this dashboard? This dashboard includes data on two cohorts of 9th grade students entering traditional Texas public high schools in fall 2015 and fall 2016 (e.g., the HS classes of 2019 and 2020). This analysis focused dual credit at traditional public high schools, meaning that we excluded Early College High Schools and P-TECHS. The data track students' enrollment in Texas public community colleges or universities through their first year post-high school.

Getting Started

The dashboard is divided up into four tabs:

1. **Summary.** Select your college and see an overview of results for your dual credit students in terms of access and participation in dual credit by student group, top dual credit course enrollments, and top college destinations and majors after high school.
 - a. Start by selecting your college and viewing results across "All HS Partners"
 - b. Switch between disaggregating by race/ethnicity, income, and gender
 - c. Compare your college to the state or your region overall in the upper-right panel
 - d. Switch to another "Outcome Type" (e.g., DC Post-HS Outcomes) to summarize different types of results

2. **College-HS Pair Table.** View results specific to dual credit students from your high school partners, ranked by the number of dual credit students enrolled at your college.
 - a. Use this table to identify and prioritize high schools with substantial enrollments among lower-income students with potential for further growth of dual credit.
3. **DC Coursetaking.** This tab shows information about dual credit students and their coursetaking patterns and outcomes for the selected college and high school pair.
 - a. View the mix of dual credit course location (e.g., at the college or high school) and modality (e.g., face-to-face or online) across all high school partners or for individual high school partners.
 - b. See how course pass rates (C or higher) differ by student group and course modality or location.
 - c. Compare across student groups the average number of credits attempted through dual credit, rate at which dual credit students complete 9 or more credits, and rate at which dual credit students complete college English or math while in high school.
4. **Post-HS Outcomes.** This tab shows college enrollments among former dual credit students within one year of graduating high school.
 - a. See the rates of any college enrollment and enrollment back at your college after high school, disaggregated by student group
 - b. For former dual credit students who enrolled at any college, see disaggregated rates of college persistence in their first year after high school.
 - c. View the top colleges and major former dual credit students enrolled in during the first year after high school.

In the following, we present for each of these four tabs, numbered questions that correspond to sections of the given tab shown on the page following the questions.

Summary Tab – Dashboard Overview

Feedback Survey: <https://tinyurl.com/ccrc-tpi-1>

Access to Dual Credit

1. Which groups of students by race, gender, and income have higher participation rates in DC? How many participate in CTE DC, and do the same gaps exist?
2. How does DC participation compare when including AP/IB coursework?
3. How do we compare to the state and our region on these measures of access?

Post-HS outcomes

4. What colleges are our former DC students enrolling at after high school? How many return to our college?
5. What are the top college majors among our former DC students who went to college after HS? What do we know about DC students' aspirations and plans for college/career and programs of interest?

DC Courses Taken

6. What are the top 10 DC course enrollments across all our high school partners? What are the top 10 DC courses for Black, Hispanic, and low-income students? What's the potential of these courses to be strengthened as on-ramp into college programs? How well aligned are these courses to the colleges and programs students enroll in after high school.

Examine and Benchmark Texas Community College Dual Credit Metrics
Texas Public High School Students, Classes of 2019 and 2020

Dual Credit Participation and Outcomes

Select a College
Lee College

Select High School Partners with 5+ DC students
All HS Partners

Select Outcome Type
Access Outcomes

Disaggregate by
Race/ethnicity

Lee College & All HS Partners (1,886 dual credit students)

Access Outcomes: Percent of high school cohorts who took dual credit, AP, or IB

Outcome Name	All	Asian	Black	Hispanic	Other ra...	White
Took Dual Credit courses	8%	6%	6%	7%	7%	9%
Took Dual Credit CTE courses	2%	≤1%	≤1%	2%	≤1%	2%
Took AP, IB, or DC courses	39%	74%	27%	38%	39%	42%

Top Courses & Colleges: Highlight Results

Legend: All (blue), Black (orange), Hispanic (red), Low income (green)

Top 10 Dual Credit Courses Taken (If blank, not in top 10 for this group)
1,886 students from All HS Partners who took a dual credit course at Lee College

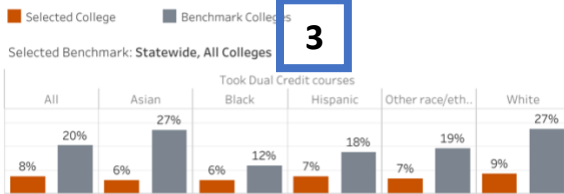
Course Name	All	Black	Hispanic	Low income
ENGL-1301	912	95	317	294
ENGL-1302	818	71	293	262
MATH-1314	632	40	216	155
HIST-1301	624	62	179	157
GOVT-2305	556	40	172	141
HIST-1302	544	46	159	125
ENGL-2322	305	32	101	94
ENGL-2323	263	31	91	80
SOCI-1301	258			
MATH-1342	219			
PSYC-2301		23		63
MATH-2412			92	
WINE-1304			91	76

Benchmark to other Texas Colleges by State Geography

Select Outcome to Benchmark
Took Dual Credit courses

Benchmark Region
Statewide

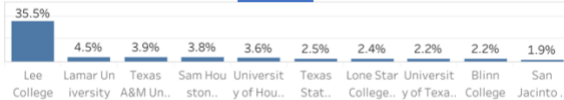
Benchmark Locale
All Settings



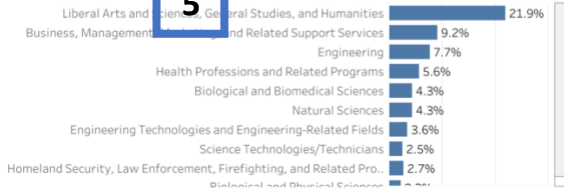
Dual Credit Student College Attendance 1 Year After High School

Texas Public Postsecondary Institutions

Top 10 College Destinations, 1,886 Lee College dual credit students from All HS Partners



Top 10 College Majors, Lee College dual credit students from All HS Partners (N=1,886)



Notes & Key Takeaways: Summary Dashboard

This area is reserved for notes and key takeaways from the dashboard. It is currently blank.

College - High School Pair Tab

4-Question Feedback Survey: <https://tinyurl.com/ccrc-tpi-1>

Access Measures

1. Which of our largest HS partners have the biggest gaps in access to dual credit for Black, Hispanic, and low-income students?
2. Which high school partners do we have the most potential to grow DC enrollments among low-income students?
 - a. Which schools have larger enrollments of low-income students but low DC participation rates?

Top High School Partners (>5 DC Students)

Show results for subgroup:
Multiple values

Pick a College
Lee College

Select Outcome Type
Access Outcomes

Select High Schools
Multiple values

Select outcome
All

Dual Credit Participation and Outcomes

College: Lee College, High School: All

College Name	HS-District Name	Avg. DE Stu Count, All	HS Pct. Low income	Took Dual Credit courses				Took Dual Credit CTE courses				Took AP, IB, or DC courses			
				All	Black	Hispanic	Low income	All	Black	Hispanic	Low income	All	Black	Hispanic	Low income
Lee College	GOOSE CREEK MEMORIAL (GO...	377	52%	29%	23%	32%	25%	5%	2%	7%	6%	38%	32%	41%	32%
	BARBERS HILL H S (BARBERS ..	331	16%	41%	35%	26%	24%	9%	5%	9%	6%	52%	41%	53%	34%
	LEE H S (GOOSE CREEK CISD)	226	77%	22%	7%	26%	20%	1%	5%	12%	1%	40%	21%	46%	38%
	HARGRAVE H S (HUFFMAN ISD)	184	33%	29%	36%	13%	18%	3%	≤1%	3%	3%	45%	50%	39%	32%
	STERLING H S (GOOSE CREEK ..	179	62%	13%	6%	14%	11%	6%	4%	8%	7%	34%	22%	33%	28%
	CROSBY H S (CROSBY ISD)	131	43%	13%	13%	13%	7%	2%	2%	≤1%	≤1%	33%	26%	37%	23%
	DAYTON H S (DAYTON ISD)	107	56%	1%	1%	14%	9%	4%	≤1%	4%	3%	28%	23%	33%	23%
	LIBERTY H S (LIBERTY ISD)	86	56%	26%	23%	19%	14%	7%	9%	7%	6%	38%	32%	30%	24%
	ANAHUAC H S (ANAHUAC ISD)	64	52%	26%	14%	37%	21%	≤2%	3%	≤2%	≤2%	42%	17%	49%	30%
	EAST CHAMBERS H S (EAST C..	47	43%	13%	1%	1%	7%	≤2%	≤2%	≤2%	≤2%	24%	13%	19%	11%
	HARDIN H S (HARDIN ISD)	46	44%	20%	≤2%	9%	7%	3%	≤2%	≤2%	≤2%	23%	≤2%	16%	11%
	HULL-DAISETTA H S (HULL-DAI..	43	64%	41%	44%	43%	34%	11%	≤2%	14%	13%	49%	56%	43%	43%
	WEST HARDIN H S (WEST HAR..	31	51%	30%			23%	8%			4%	30%			23%
	KOUNTZE H S (KOUNTZE ISD)	18	41%	9%	7%	18%	4%	≤2%	≤2%	≤2%	≤2%	23%	13%	27%	16%
	SAGINAW H S (EAGLE MT-SAG..	-2	47%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	59%	45%	60%	53%
	RICHLAND H S (BIRDVILLE ISD)	-2	44%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	32%	19%	33%	23%
	PERMIAN H S (ECTOR COUNTY..	-2	38%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	36%	25%	32%	26%
	MOUNT PLEASANT H S (MOUN..	-2	75%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	41%	20%	43%	38%
	LUMBERTON H S (LUMBERTO..	-2	26%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	32%	≤1%	26%	13%
	FORNEY H S (FORNEY ISD)	-2	19%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	32%	17%	37%	28%
	CY-FAIR H S (CYPRESS-FAIRBA..	-2	36%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	46%	24%	38%	27%
	CLEAR SPRINGS H S (CLEAR C..	-2	18%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	50%	33%	40%	32%
	CLEAR FALLS H S (CLEAR CREE..	-2	18%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	≤1%	52%	33%	43%	30%

Notes & Key Takeaways: Access to Dual Credit by HS Partner

Blank area for notes and key takeaways.

Dual Credit Coursetaking Tab

4-Question Feedback Survey: <https://tinyurl.com/ccrc-tpi-2>

Course Location & Modality

1. What are the primary course location and delivery modalities for DC across our HS partners? How does this vary by student race, income, and gender? Which types of courses are Black, Hispanic, and low-income students overrepresented in?

DC Course Success & Momentum

2. What are the success rates for DC students, and how does this vary by course location and modality? Which types of DC courses have the lowest success rates? Why might that be, and what other information do we need to better understand this?
3. What are the success rates for students by race, income, and gender? Which groups need more support in these courses to be successful?
4. On average how many credits do DC students attempt while in high school, and to what extent are students meeting key milestones like completing 9 or more college-level credits, completing college English, or completing college math through DC? What gaps exist?

DC Courses Taken

5. What are the top 10 DC course enrollments across all our high school partners? What are the top 10 DC courses for Black, Hispanic, and low-income students? What's the potential of these courses to be strengthened as on-ramp into college programs?

Texas Dual Credit Coursetaking and Outcomes

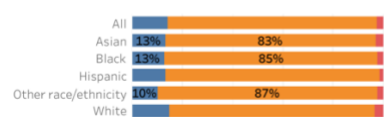
Texas Public High School Students, Classes of 2019 and 2020

Select a College: Lee College
Select High School Partners with 5+ DC students: All HS Partners
Disaggregate by: Race/ethnicity

Lee College & All HS Partners (1,886 dual credit students) **1**

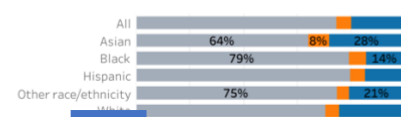
Dual Credit Course Location

College High School Other Place



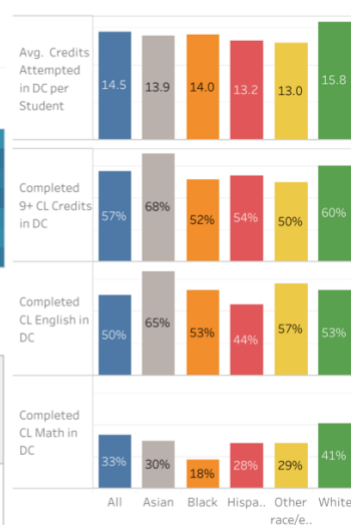
Dual Credit Course Modality

Face-to-face Hybrid Online



Dual Credit Momentum

Subgroup: All, Asian, Black, Hispanic, Other race/ethnicity, White



Dual Credit Course Pass Rates

	All	Asian	Black	Hispanic	Other race/ethn...	White
Location: at College (Pass Rate)	82%	91%	81%	82%	63%	81%
Location: at High School (Pass Rate)	90%	96%	85%	91%	87%	91%
Location: Other Place (Pass Rate)	88%	100%	83%	88%	100%	88%
Modality: Face-to-face (Pass Rate)	92%	97%	88%	92%	91%	92%
Modality: Hybrid (Pass Rate)	85%	92%	80%	87%	50%	85%
Modality: Online (Pass Rate)	82%	94%	67%	82%	66%	83%
Overall Dual Credit Course Pass Rate	89%	96%	84%	90%	84%	89%

Top 10 Dual Credit Courses Taken (If blank, not in top 10 for this group)
1,886 students from All HS Partners who took a dual credit course at Lee College

Course Name	All	Black	Hispanic	Low income
EN U-1301	912	95	317	294
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MA 4-1314	632	40	216	155
HIST-1301	624	62	179	157
GOVT-2305	556	40	172	141
HIST-1302	544	46	159	125
ENGL-2322	305	32	101	94
ENGL-2323	263	31	91	80
SOCI-1301	258			

Notes & Key Takeaways: Dual Credit Coursetaking & Momentum

Post-HS Outcomes Tab

4-Question Feedback Survey: <https://tinyurl.com/ccrc-tpi-3>

1. What percent of former DC students enrolled at any college within 1 year after high school? And what percent of former DC students reenrolled at our college after high school?
2. Which groups of students by race, income, and gender have higher rates of college enrollment, and which groups are more likely to persist in college? Are there gaps by race, income, or gender in first-year college persistence for our former DC students?
3. What are the other top colleges are our former DC students attending after high school? What college majors are our former DC students enrolling in after high school?
4. How could we use this information to strengthen our DC offerings as on-ramps to programs of interest for students?
 - a. How could we work with faculty and others in our various program areas to strengthen recruitment of DC into our programs when they leave HS?
 - b. How can we help students who enroll in Liberal/General Studies choose and plan a path to more specific major fields?

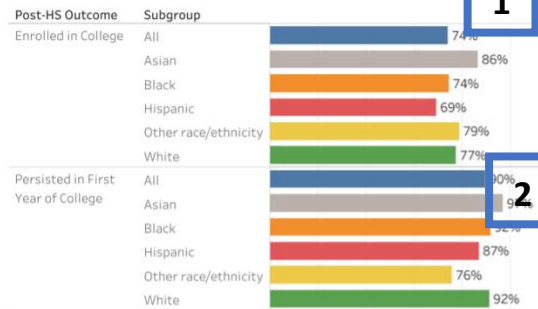
Texas Dual Credit Student Outcomes, One Year After High School

Select a College
Lee College

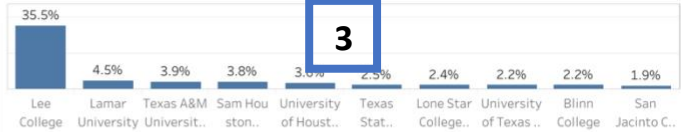
Select High School Partners with 5+ DC students
All HS Partners

Disaggregate by
Race/ethnicity

Lee College & All HS Partners (1,886 dual credit students)



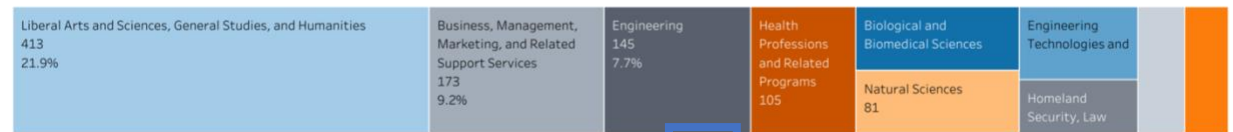
Top 10 College Destinations, 1,886 Lee College dual credit students from All HS Partners



Top 10 College Destinations by Student Group (If blank, not in top 10 for this group)

College	All	Black	Hispanic	Low income
Lee College	669	60	318	224
Lamar University	84	9	25	28
Texas A&M University—College	73		10	9
Sam Houston State University	72	10		12
University of Houston	67	5	33	26

Top 10 College Majors (TX Public Postsecondary Institutions), Lee College dual credit students from All HS Partners (N=1,886)



Top 10 College Majors by Student Group, Lee College dual credit students from All HS Partners (If blank, not in top 10 for this group)

Major	All	Black	Hispanic	Low income
Liberal Arts and Sciences, General Studies, and Humanities	413	31	147	107
Business, Management, Marketing, and Related Support Services	173	11	53	39
Engineering	145	12	61	42
Health Professions and Related Programs	105	9	29	20
Natural Sciences	81	7	46	30
Biological and Biomedical Sciences	81	10	31	28

Notes & Key Takeaways: Post-High School College Enrollments and Outcomes

Blank area for notes and key takeaways.

Table 1. Data Elements and Outcome Definitions

Data Element	Definition
High school student cohort	Number of students ever enrolled at the HS within 4 years from HS entrance (2015-2016 HS freshman cohort)
Dual Credit participation	Percent of students—in the HS cohort—who attempted any dual credit (DC) courses through the HS-CC pairing within 4 years from HS entrance
CTE Dual Credit participation	Percent of students—in the HS cohort—who attempted any CTE DC courses through the HS-CC pairing within 4 years from HS entrance
AP/IB/DC participation	Percent of students—in the HS cohort—who attempted any AP, IB, or DC courses through the HS-CC pairing within 4 years from HS entrance
Results disaggregated by student characteristics:	
Gender	Student sex (male/female) as provided by TEA
Race/ethnicity	Student race or ethnicity as provided by TEA
Income	Students categorized as low-income if they were ever eligible for Free or Reduced Price Lunch, as provided by TEA
Among students who took DC courses via the high school-community college (HS-CC) pairing:	
Pct. Of DC by Location	DC credits attempted at the college, high school, or another location (e.g., multi-institution teaching center) as a percent of DC credits attempted through the HS-CC pairing
Pct. Of DC by Modality	DC credits attempted face-to-face, online, or hybrid as a percent of DC credits attempted through the HS-CC pairing
DC Course Pass Rates	Percent of DC courses completed (Pass, C, or above) among DC courses attempted via the HS-CC pairing
Completed 9+ CL Credits in DC	Percent of high school students who took any DC who completed 9 or more college-level DC credits in the HS-CC pairing prior to HS graduation
Completed CL English in DC	Percent of high school students who took any DC who completed a college-level English DC course in the HS-CC pairing prior to HS graduation
Completed CL Math in DC	Percent of high school students who took any DC who completed a college-level math DC course in the HS-CC pairing prior to HS graduation
Avg. Credits Attempted in DC per Student	Average number of DC credits attempted via the HS-CC pairing per student in the HS-CC pairing
Attended any college post-HS	Percent of high school students who took any DC via the HS-CC pairing who enrolled at any postsecondary institution after HS by the end of the first academic year
Re-enrolled at DC college	Percent of high school students who took any DC via the HS-CC pairing who enrolled at the same DC college by the end of the first academic year after HS graduation
College persistence in first year	Percent of college-going high school students who took any DC via the HS-CC pairing who continued enrolling in through the end of the first academic year after HS graduation
Top College Destinations	Top colleges that high school students who took any DC via the HS-CC pairing enrolled at during the first academic year after HS graduation
Top College Majors	Top majors that high school students who took any DC via the HS-CC pairing enrolled in during the first academic year after HS graduation

Table 2. Masking Rules

Condition	Assigned Masking Values		
	Numerator	Denominator	Percent
Denominator is < 5 including 0	-1	-1	-1
Numerator is < 5 including 0	-2	-2	%
Percent is 100% or rounds to 100% (Rounding depends on the group size)	-3	-3	Top Code %
Percent is 0% or rounds to 0% (Rounding depends on the group size)	-4	-4	Bottom Code %
Percent is 100% or 0% and the group size is < 10	-5	-5	-5
The difference between the numerator and the denominator is < 3	-6	-6	%
Cell with possibility of reverse calculation of the original masked value	-7	-7	%
Any other cell with fewer than 5 students	-8	-8	%
Not applicable	-9	-9	-9