Dual Credit Pays Off:

Assessing Dallas-Area Dual Credit Students from Education to Workforce

DOCUMENT PURPOSE

This brief highlights key findings of the Research Institute's longitudinal study of educational and financial outcomes of dual credit students in Dallas College's service region. This resource is intended to help inform internal leadership's strategic decision-making and to set the stage for future analyses (e.g., to gauge the effects of HB 505 and HB 8 on dual credit enrollment and its contributions to performance funding). A full report with technical notes available by request.

INTRODUCTION

Longstanding research on dual credit substantiates that participation yields immediate benefits, such as high school achievement and college preparedness, and longer-term benefits, such as an increased likelihood of enrolling in college and completing a degree. However, research does not extensively examine the relationship between dual credit participation and more distal outcomes such as earnings and living wage attainment. To address this knowledge gap within the context of the Dallas College service region, the Research Institute conducted a historical study with the 2011 high school graduating class from 22 area ISDs to observe how dual credit influenced their educational and financial trajectories up to ten years after high school graduation. The foundational questions addressed in the study were a) if the benefits of dual credit persisted from postsecondary to longer-term wage outcomes, and b) if these benefits were equitable across student groups. A sample of 20,858 graduates were studied using person-level administrative data from the Texas Education Research Center through quasi-experimental statistical methods. Housed at the University of Texas at Dallas, the Texas ERC holds longitudinal student- and person-level records from the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB), and Texas Workforce Commission (TWC).

22 Dallas-Area ISDs

Carrollton-Farmers Branch	Highland Park
Cedar Hill	Irving
Cooper	Lancaster
Coppell	Lewisville
Dallas	Mesquite
DeSoto	Midlothian
Duncanville	Northwest
Ferris	Red Oak
Forney	Richardson
Garland	Rockwall
Grand Prairie	Sunnyvale

TIMELINE OF OUTCOMES

SPRING 2011	FALL 2011	2013	~2015	2017	~2021
High School Graduation	Immediate College Going	Delayed College Enrollment	Vertical Transfer	Credential Attainment, Debt	Earnings, Living Wage Attainment
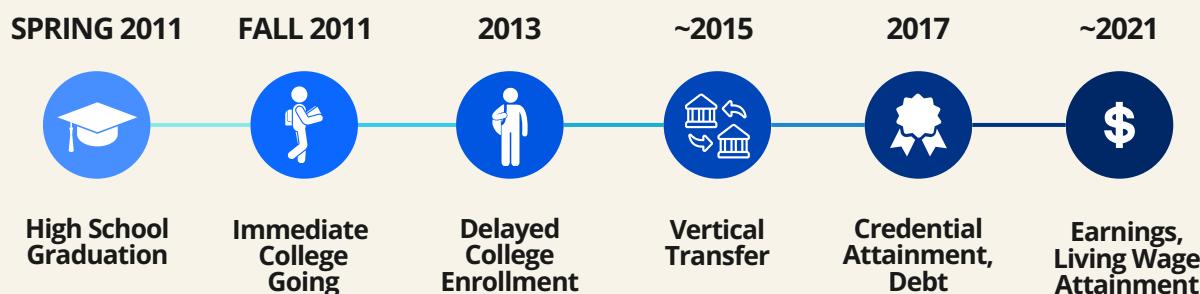
PROPORTIONS OF STUDENT POPULATIONS IN THE STUDY (N = 20,858)

Socioeconomic Status

- 49.8% Not Disadvantaged
- 50.2% Disadvantaged

Gender

- 47.7% Male
- 52.3% Female

Race/Ethnicity

- 5.5% Asian
- 36.2% White
- 21.2% African American
- 36.7% Hispanic
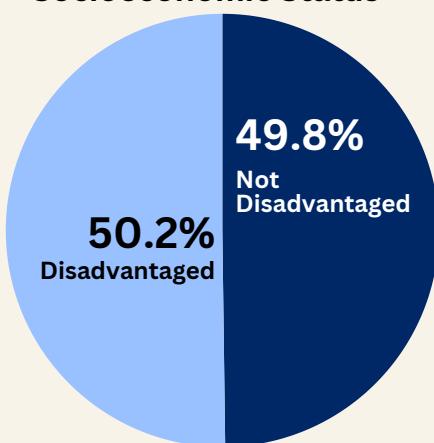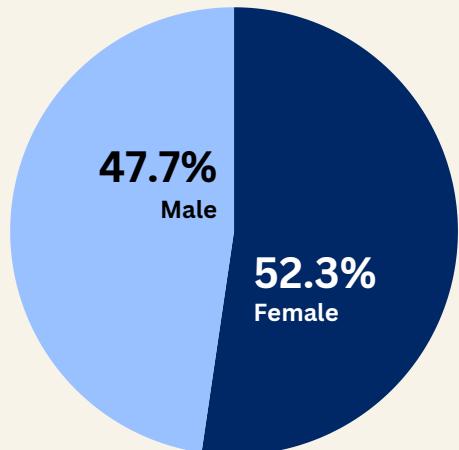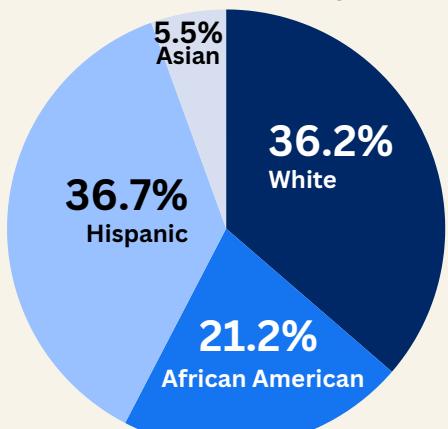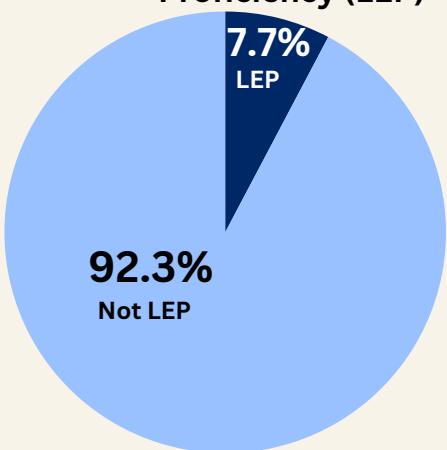
Note: White, African American, and Asian categories are exclusive of Hispanic origin.

Limited English Proficiency (LEP)

- 7.7% LEP
- 92.3% Not LEP

8th-Grade TAKS Test Performance

- 21.5% Failed 1+ Tests
- 41.9% Passed Math & Reading; Commended in 1+
- 36.6% Passed Math & Reading; Commended in Neither
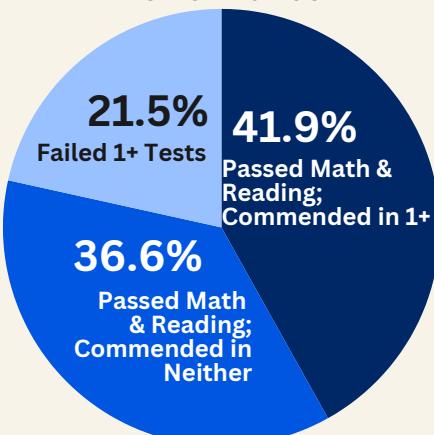
Postsecondary Enrollment & Attainment

- 23.4% Bachelor's Degree or Above
- 30.1% Never Enrolled (within Texas)
- 7.6% Associate Degree or Below
- 38.9% Enrolled, No Credential
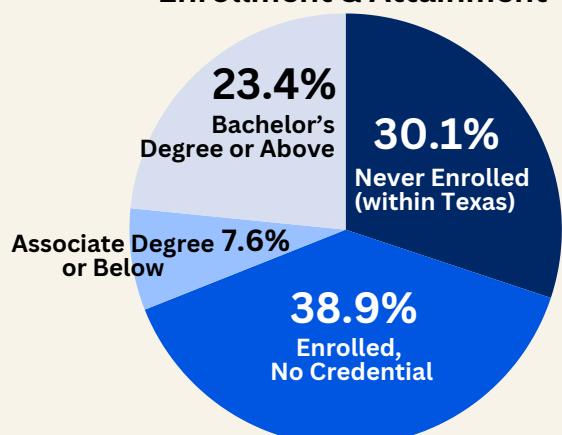
FINDINGS: ACADEMIC OUTCOMES

Which Student Populations Are More Likely to Take Dual Credit?

Greater Odds

- Commended score one or more 8th-grade Texas Assessment of Knowledge and Skills (TAKS) tests
- High school with a high graduation rate
- Early College High School (ECHS) student
- Gifted & Talented
- Asian
- White
- Female

Lower Odds

- Failed at least one 8th-grade Texas Assessment of Knowledge and Skills (TAKS) test
- High school with a Texas Education Agency (TEA) rating other than "Academically Acceptable" (either higher or lower)
- Limited English proficiency
- "At-risk" per TEA criteria
- Special education
- Free/reduced lunch
- Hispanic
- African American
- Male

How Much More Likely Are Dual Credit Participants than Non-Dual Credit Participants to...

105%
...immediately enroll in college after HS graduation?

123%
...enroll in college within 2 yrs after HS graduation?

70%
...transfer from a 2-yr to 4-yr institution?

110%
...attain a postsecondary credential within 6 yrs of HS graduation?

32%
...attain a certificate or associate degree within 6 yrs of HS graduation?

68%
...attain a bachelor's degree or higher within 6 yrs of HS graduation?

FINDINGS: FINANCIAL OUTCOMES

- **Cumulative earnings are 9.4% higher for dual credit participants**, on average, than for nonparticipants during the first decade after high school graduation.

- The **odds of attaining a living wage are 22% greater for dual credit participants** than nonparticipants during the first decade after high school graduation. (Living wage defined as $34,923, the MIT Living Wage calculator threshold for a Texas adult with no children, in 2023 dollars)

- **Dual credit participants had stronger attachment to the Texas labor market** than nonparticipants by an additional 3 quarters of earnings within the ten-year window after high school graduation.

- During the first few years after high school graduation, dual credit participants had lower earnings than nonparticipants. However, **from the sixth year onwards, dual credit students had higher earnings than students who did not participate in dual credit.** Lower wages in the years just after high school are likely due to the higher college enrollment and attainment rates among dual credit students; similarly, their higher wages in the long-run are likely associated with higher postsecondary credentials, and therefore more lucrative job opportunities. The graph below depicts this earnings trajectory.
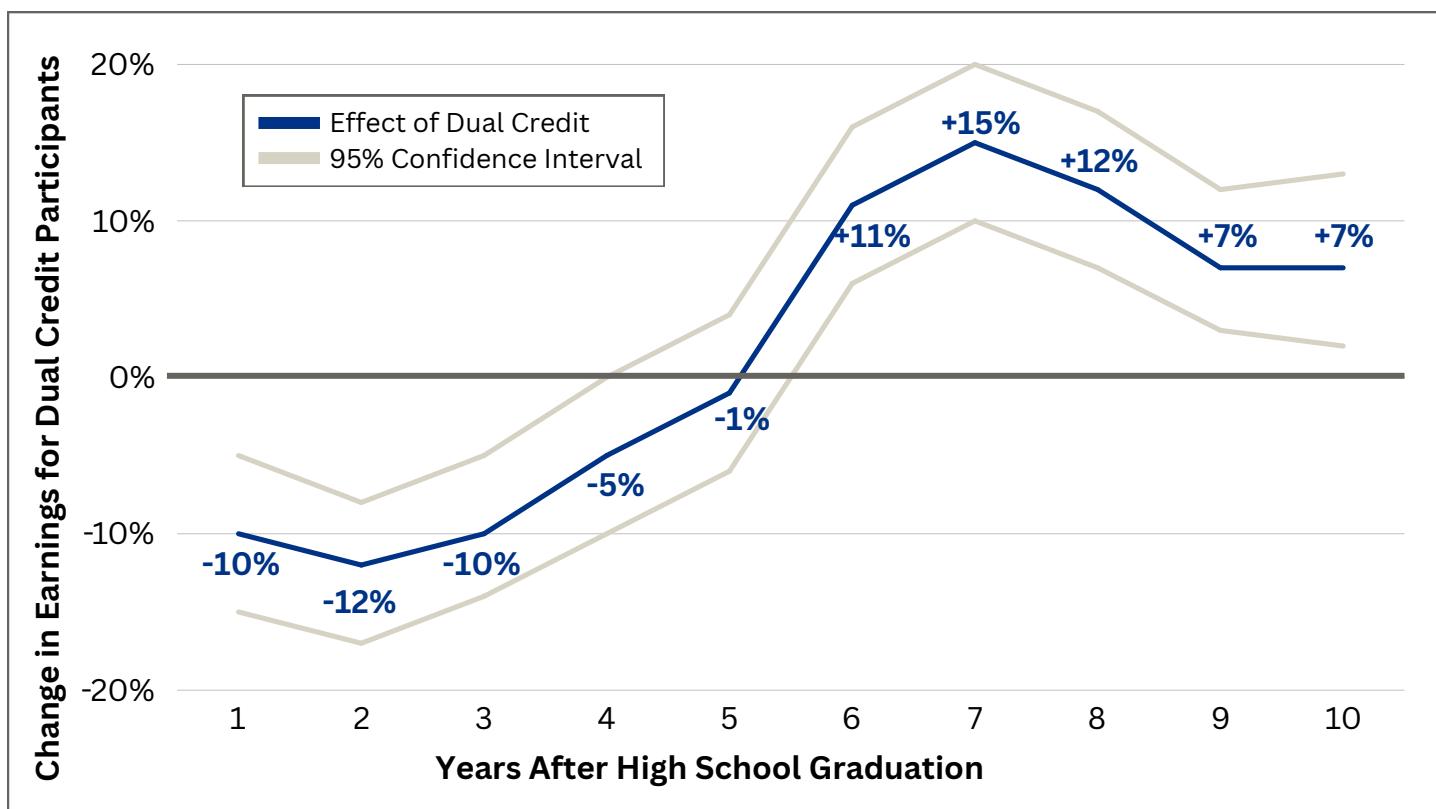
FINANCIAL OUTCOMES BY STUDENT GROUP

- **Dual credit participation had a positive and significant association with cumulative earnings for Not Disadvantaged, White, female, and English proficient student groups.** For example, female dual credit participants were 11% more likely to have higher cumulative earnings over a decade after high school graduation than female nonparticipants.

- **Dual credit participation was also positively associated with cumulative earnings for disadvantaged, Hispanic, and male student groups, but these were not strong statistical relationships.** As an example, Hispanic dual credit participants were 7% more likely to have higher cumulative earnings over a decade after high school graduation than Hispanic nonparticipants; however, this was not a strong relationship.

CUMULATIVE EARNINGS 10 YEARS AFTER HIGH SCHOOL GRADUATION:
GAPS BETWEEN DUAL CREDIT PARTICIPANTS AND NON-PARTICIPANTS, BY STUDENT GROUP

Student Group	Gap
Disadvantaged	+7%**
Not Disadvantaged	+9%*
White	+12%*
African American	+6%**
Asian	+15%**
Hispanic	+7%**
Male	+7%**
Female	+11%*
Passed Math & Reading; Commended in 1+	+12%*
Passed Math & Reading; Commended in Neither	+6%**
Failed 1+ Tests	+6%**
Limited English Proficient	-2%**
Not Limited English Proficient	+9%*

(X axis: -5%, 0%, 5%, 10%, 15%)
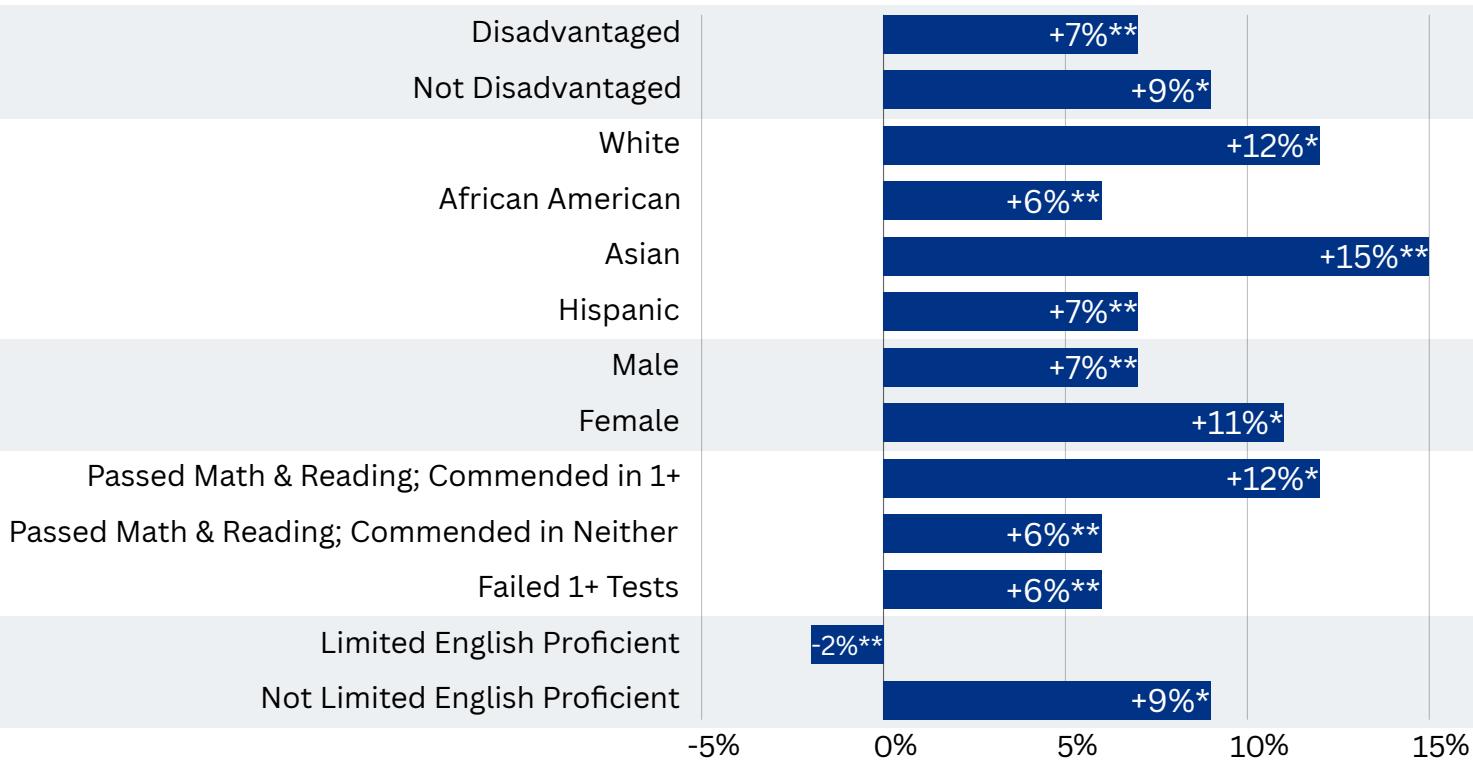
*</= 5% significance level (implies stronger relationship)
**10% significance level or not statistically significant