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DUAL-CREDIT DOSAGE DESIGN: EXAMINING STUDENT PROFILES AND SCHOOL STRUCTURES

LonestaRP3 Connect Virtual Event

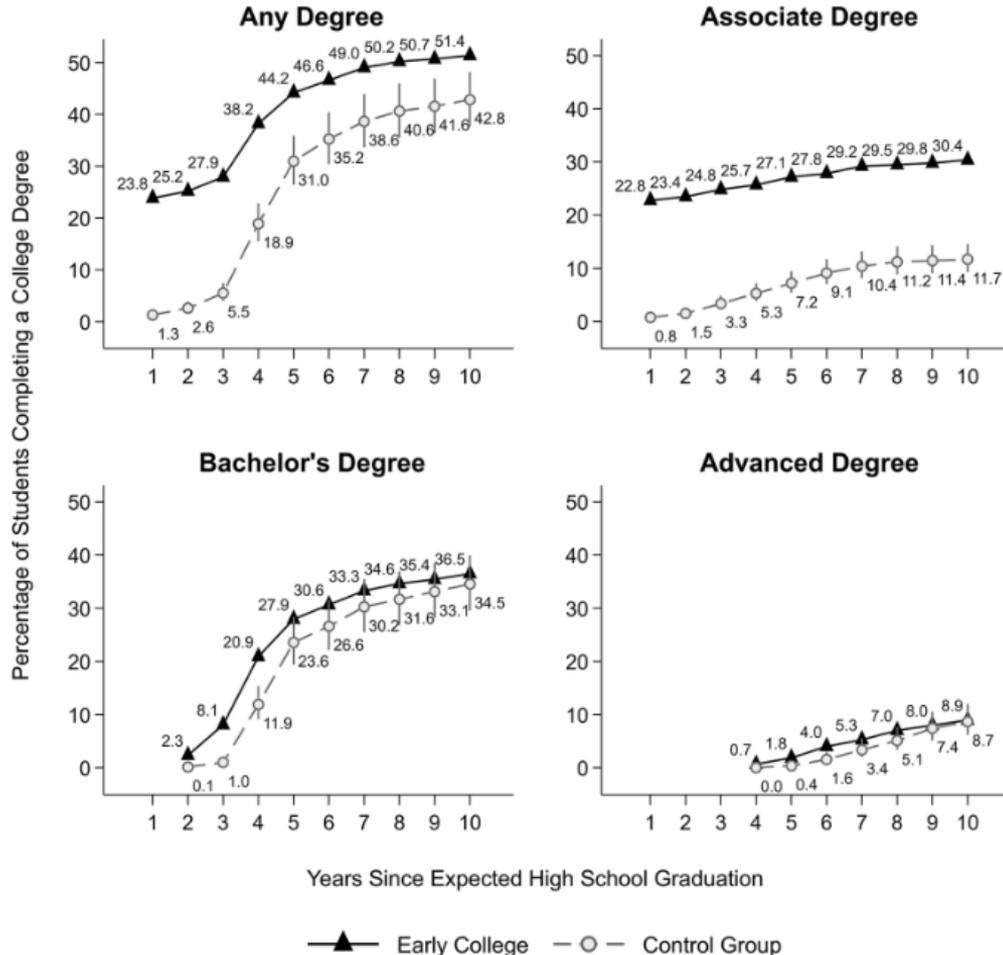
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What do we know about dual-credit?

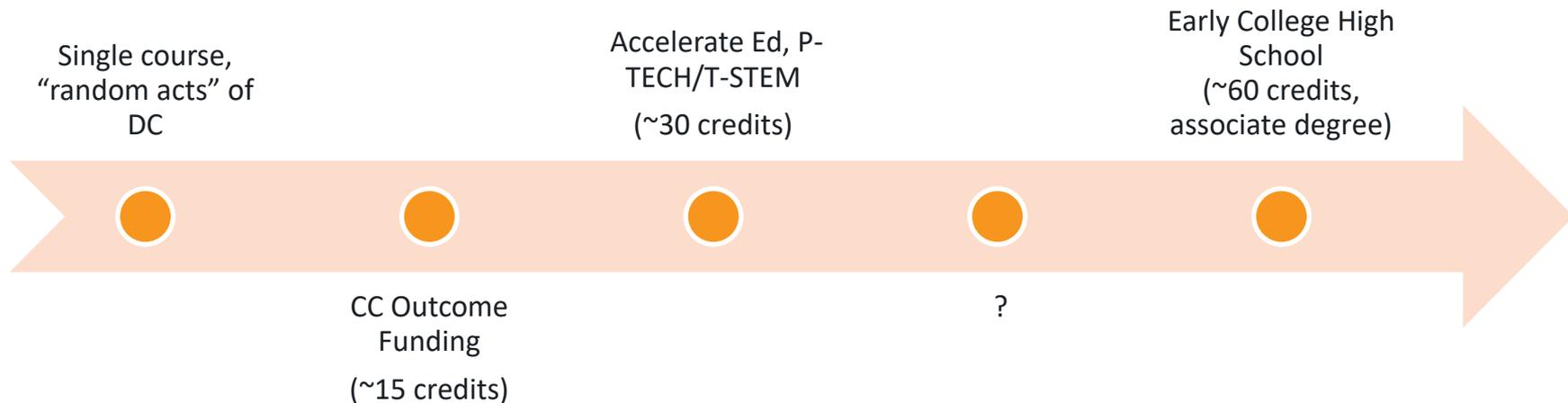
- DC is positively related to students' postsecondary outcomes
- Participation in DC is stratified by race/ethnicity, SES, etc.
- Intensive DC models, such as early college high schools (ECHS), accelerate bachelor's attainment but may not increase it



- ECHS increase degree attainment
- However, this is largely through associate degrees
- ECHS may not increase bachelor's or grad degrees

Source: Song, M., Neering, K., Zeiser, K. L., Schwarzhaupt, R., & Mitchell, S. (2024). Accelerated postsecondary pathways: The longer-term impact of the Early College High School model on postsecondary degree attainment. *American Educational Research Journal*, 61(6), 1272-1307.

Dual-Credit Dosage Design



*The other key dimension of DC is the type/subject of courses students are taking

What don't we know about DC?

- The actual patterns of students' DC participation
- How actual patterns relate to school models/structures
- How these patterns have changed over time
- Which DC patterns and pathways are most beneficial and why (future research)

Research Questions

- 1) How much dosage of DC do students engage in during high school, and how has this changed over time?
- 2) What are the latent profiles of students' DC dosage?
- 3) How do students' DC profiles relate to their demographic characteristics and school structures?

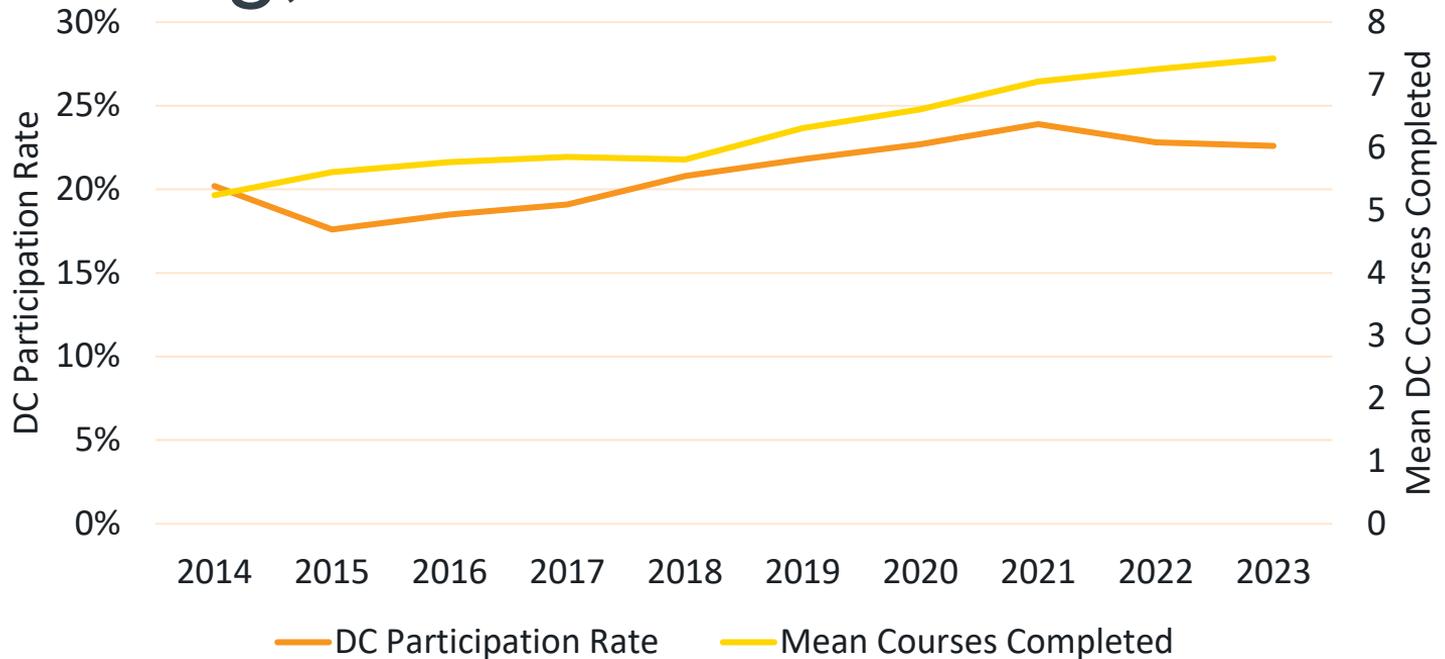
Methods

- Used data housed in the ERC
- 2014-2023 HS graduate cohorts
- Created measures of DC credits earned by subject using THECB's course data
- Used latent profile analysis (LPA) to create profiles of students by DC credits
- Examined how DC profiles vary across demographics, school structures, etc.

Findings

1. DC participation and dosage are increasing, but still modest

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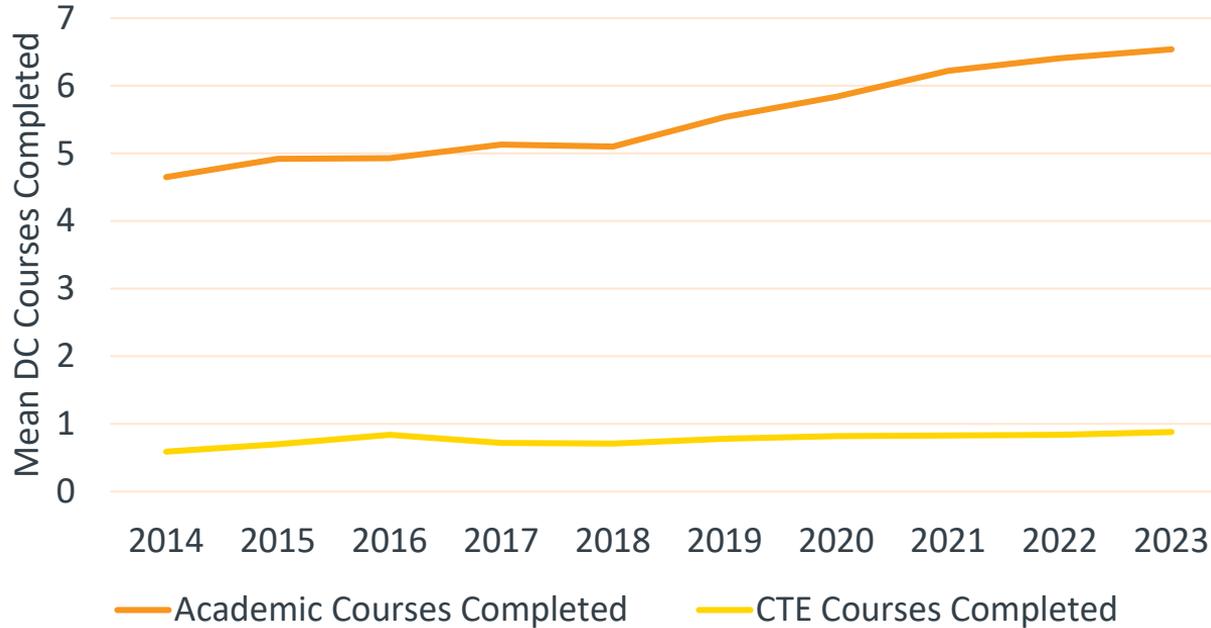


Source: Giani, M. S., Andrews, M. E., & Agarwal, R. (forthcoming). Dual-enrollment dosage design: Conceptualization and measurement of student profiles and school structures.

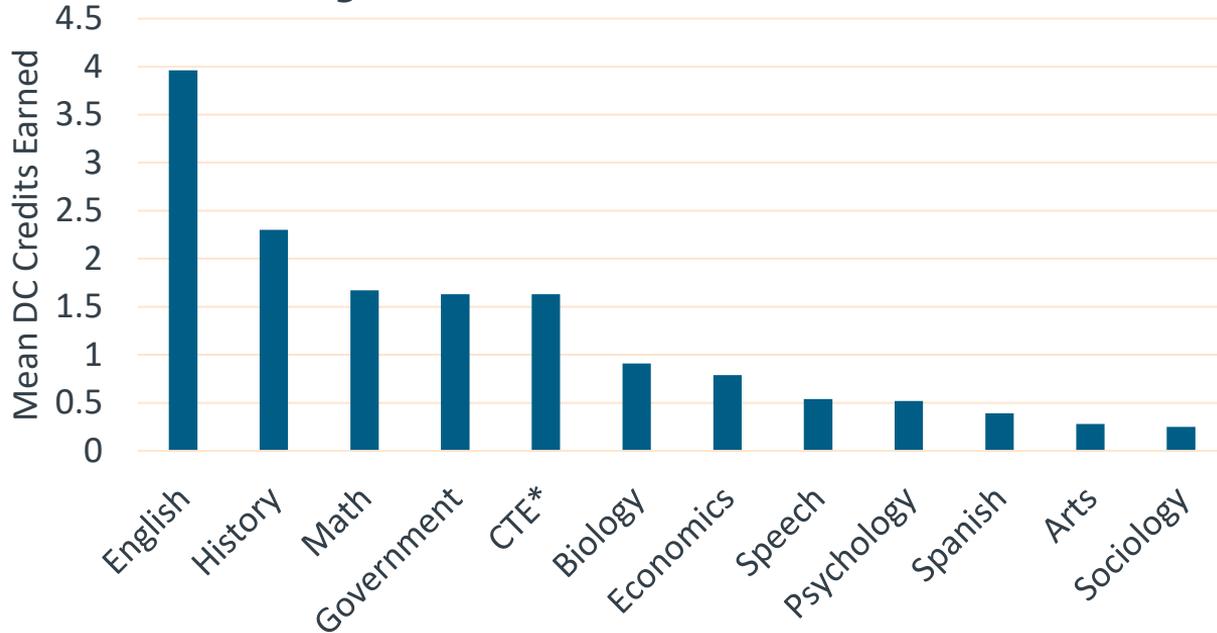
Findings

1. DC participation and dosage is increasing, but still modest
2. DC coursetaking is still largely in academic subjects

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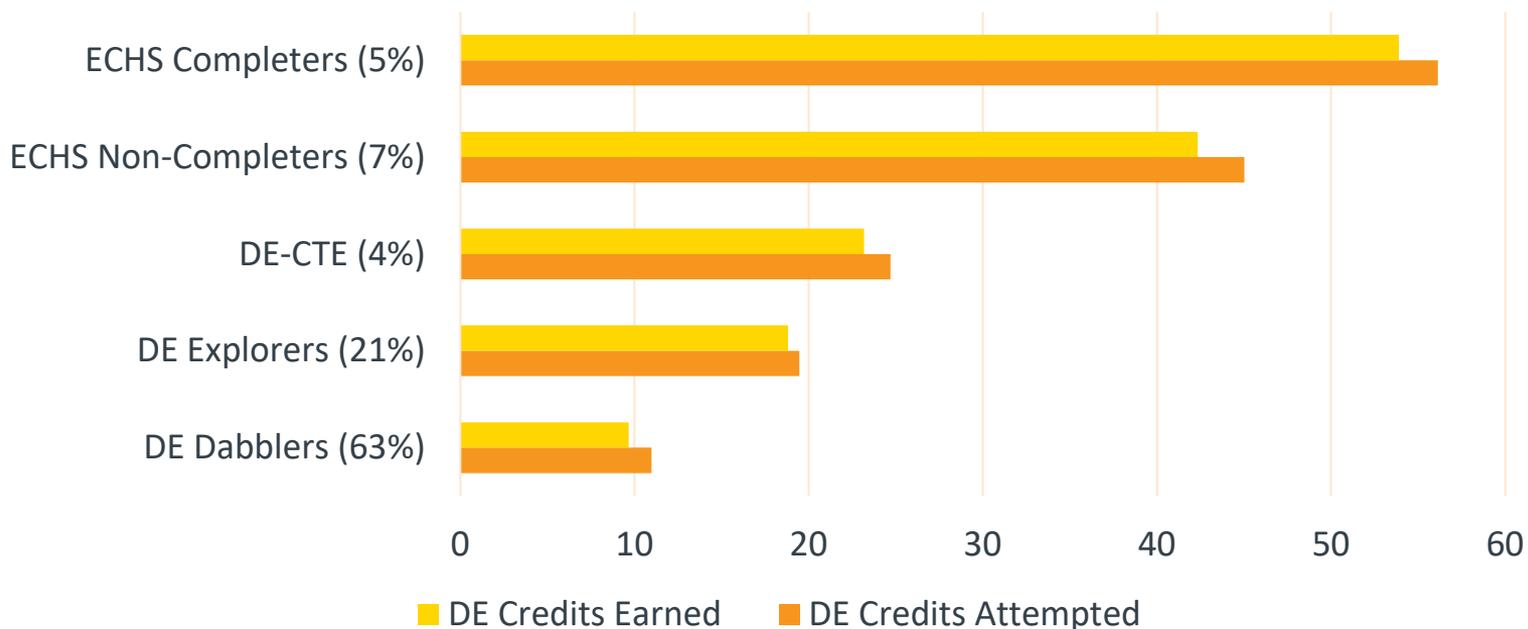
Rank	Course Code	Participants	Percentage of DC Enrollments
1	English 1301	425,258	9.8%
2	English 1302	374,042	8.6%
3	Government 2305	314,789	7.1%
4	History 1301	286,975	6.5%
5	History 1302	286,248	6.5%
6	Economics 2301	188,307	4.3%
7	Math 1314	171,676	3.9%
8	Government 2306	106,286	2.3%
9	Psychology 2301	104,999	2.3%
10	English 2322	90,348	2.0%
11	Speech 1315	77,252	1.7%
12	English 2323	65,204	1.5%
13	Sociology 1301	65,204	1.5%
14	Arts 1301	63,333	1.3%
15	Math 2412	59,621	1.3%
16	Biology 1406	58,493	1.3%
17	Speech 1311	54,507	1.2%
18	Math 1414	48,947	1.1%
19	Education 1300	48,825	1.0%
20	Biology 1407	44,748	1.0%
Total	Top 20 Courses	2,935,062	66.2%

- Mostly courses in core curriculum
- No technical courses
- Top 20 course comprise 2/3 of all DC courses

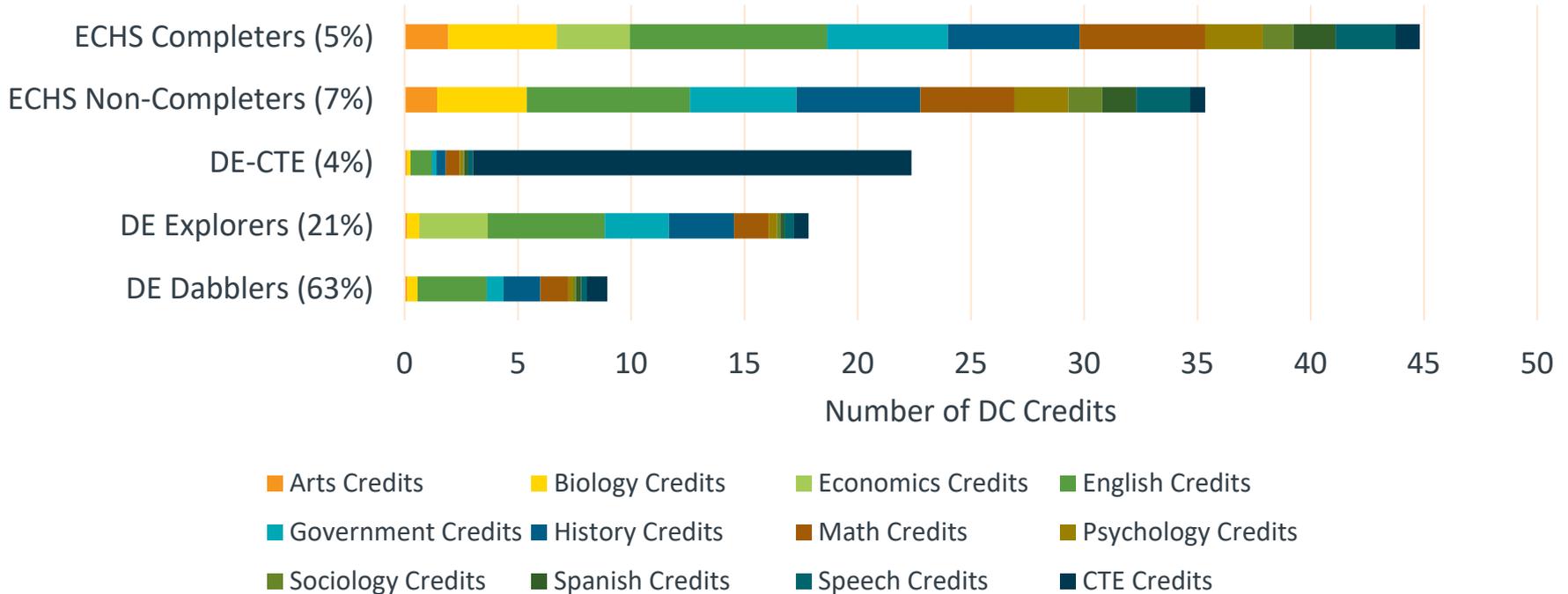
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1. DC participation and dosage is increasing, but still modest
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3. **There are five common DC profiles**

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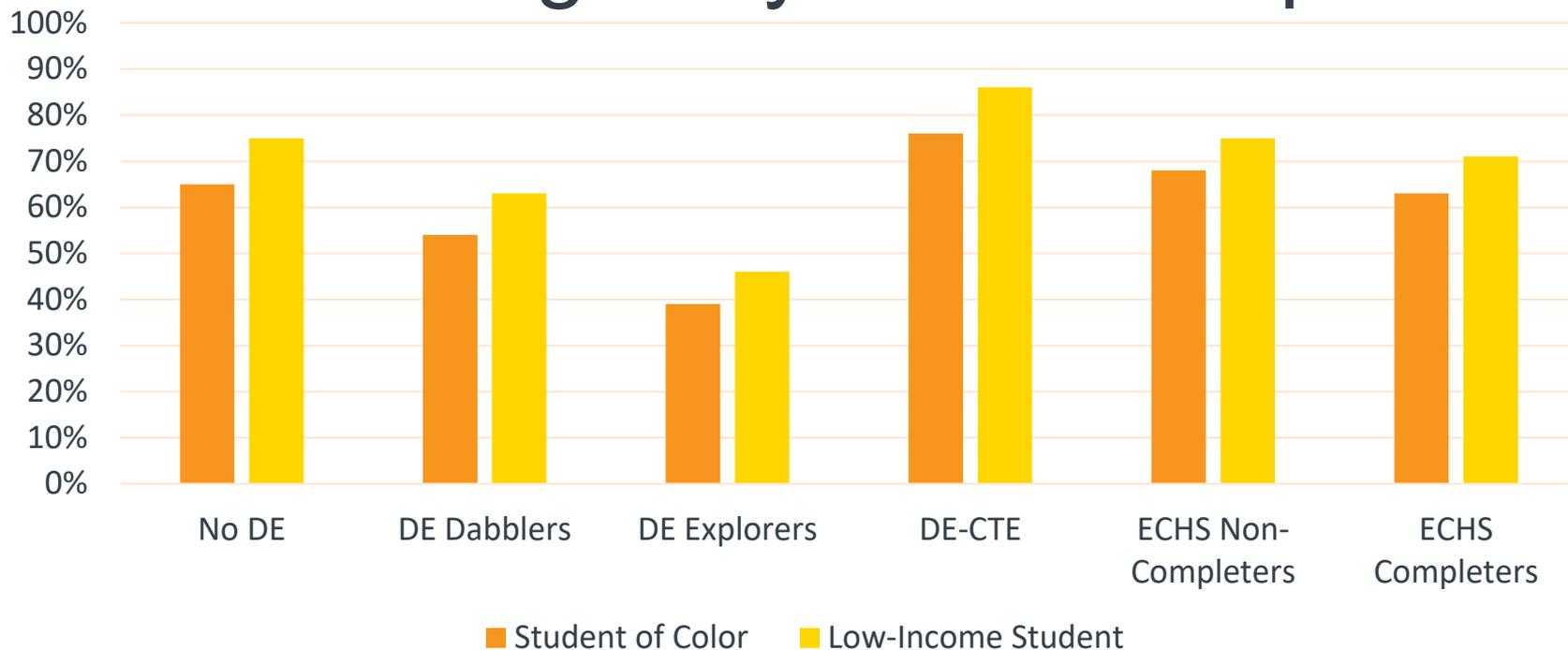


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4. **Student demographics vary across DC profiles**

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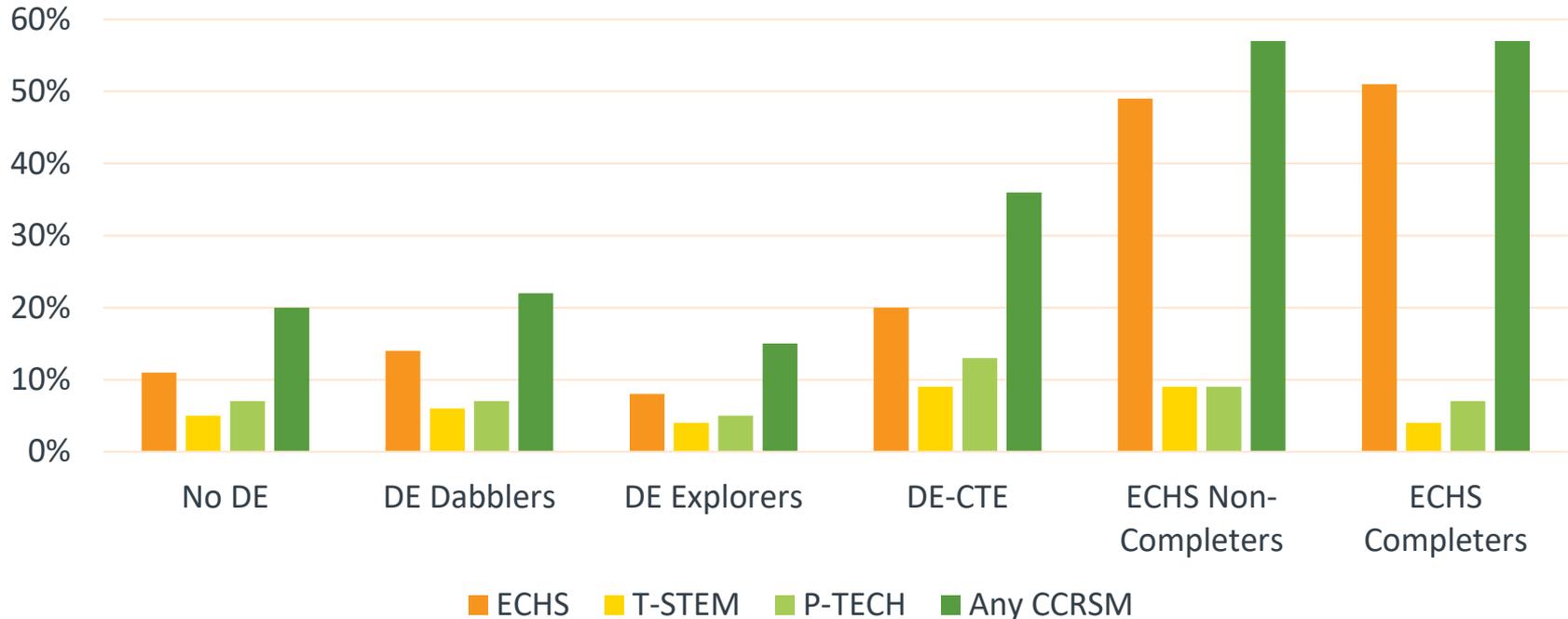


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Findings

1. DC participation and dosage is increasing, but still modest
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3. There are five common DC profiles
4. Student demographics vary across DC profiles
5. School structures relate to, but do not fully explain, variation in DC profiles

School structures and DC profiles



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Discussion and Next Steps

- Most important finding – $\frac{3}{4}$ of students complete no DC courses
- School structures relate to, but don't fully explain, variation in DC profiles
- What partnerships, strategies, resources, and practices facilitate DC profiles?
- Why are DC profiles stratified, particularly DE Explorers vs. DE-CTE?
- How do DC profiles shape students' postsecondary outcomes?