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DUAL CREDIT IN ILLINOIS:

Mapping Increased Participation and Persistent Participation Gaps

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External Review

This report was reviewed by experts to ensure that its contents are rigorous, accurate, and useful to educators and policymakers with varying levels of background knowledge. The reviewers of this report included:

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Executive Summary

A growing share of high school students participate in dual credit (DC), a type of coursework that allows students to earn high school and college credits simultaneously. DC participants are more likely to enroll in and complete college, on average. Yet access to DC in Illinois and nationwide has historically been uneven. The same student groups underrepresented among college enrollees and completers, including Latino and Black students, students with individualized education plans (IEPs), English learners (ELs), and students from low-income families, also have experienced lower rates of DC participation.

The current study examines DC participation trends in light of work by Illinois state legislators and educators to increase DC opportunities for all students and close participation gaps. In recent years, these efforts have included broadening the pool of postsecondary institutions that accept DC course credits, strengthening partnerships between high schools and community colleges, expanding course eligibility requirements, and improving institutional capacity to offer DC coursework.

Using data from the Illinois State Board of Education (ISBE), this study analyzes district DC participation rates from the 2017-18 school year (SY18) through SY22. It describes participation overall and among student subgroups, breaking down statewide participation gaps into two parts: (1) gaps due to differences in student demographic composition *between* districts with different DC participation rates; and (2) gaps due to differences in demographic subgroup participation *within* districts. This analysis reveals the following primary findings:

Findings:

1. From SY18 to SY22, **participation increased overall and among all underrepresented racial/ethnic subgroups as well as students with IEPs, English learners (ELs), and low-income students**. Participation was highest and increased the most among White and Asian students, resulting in **widened statewide participation gaps**.
2. When comparing *between* districts, participation was higher and increased more at districts serving more White students and fewer students with IEPs, ELs, and low-income students. Districts with the highest participation rates tended to be located in **towns and rural locales**.
3. When comparing *within* districts, participation was highest among Asian and White students, and it **increased most rapidly among Asian, American Indian/Alaska Native, Latino, and EL students**. Participation increased more slowly among other racial/ethnic subgroups and among students with IEPs and low-income students.

While Illinois has progressed at expanding DC participation, these improvements have not been experienced evenly. This study shows that the nature of work needed to address these disparities must be multidimensional. On one hand is a need for more efforts to increase DC coursework offerings overall, especially at urban and suburban districts and districts serving higher proportions of underrepresented student subgroups. On the other hand is a need within districts to examine equity of access in the DC coursework they already offer and attend to barriers to participation among underrepresented subgroups.

Districts have already made incremental progress toward closing within-district participation gaps for American Indian/Alaska Native, Latino, and EL students. More drastic improvements across a wider range of districts will be needed to ensure that increased opportunities for rigorous coursework are equitably shared.

Background

What is Dual Credit?

Dual credit (DC) courses provide high school and college credit via partnerships between high schools and community colleges or, less commonly, four-year colleges. Although the term *dual credit* is often used interchangeably with *dual enrollment* or *concurrent enrollment*, the Illinois Community College Board (ICCB) uses *dual credit* to refer specifically to courses that provide both high school and college credit. *Dual enrollment* is reserved for courses that provide high school students with college credit, but not high school credit.[1,A] Students most commonly participate during their junior and senior years of high school, but freshmen and sophomores may participate depending on their schools' policies and offerings.

DC courses can be taught in any subject area by qualified high school teachers, college faculty, or college adjuncts, and they can be located on high school campuses, college facilities, or online. In Illinois and nationally, over two-thirds of DC students attend courses located within their high schools.[3,4] The remaining DC students in IL are split between those who attend at college facilities (15%), those who attend virtually (5%), and those who attend in some other or unknown location.[4] Just 3% of DC students participate in courses offered by public four-year universities; the remaining 97% participate in community college courses.[B] High schools offer these courses primarily through partnerships with community colleges within their assigned community college district(s). In turn, the amount and types of DC course offerings within a K-12 district are strongly influenced by the DC policies and programs of their community college district(s).

DC is similar to other types of advanced coursework, including Career and Technical Education (CTE), Advanced Placement (AP), and International Baccalaureate (IB). CTE courses are designed to prepare students for competitive careers by combining academic coursework with training in career-relevant knowledge and skills. CTE programs of study provide students with opportunities to earn postsecondary credentials, often via DC. Indeed, over one-third of DC courses offered by Illinois community colleges are CTE.[4]

AP and IB, on the other hand, are distinct programs that do not overlap with DC (although students may participate in more than one or all of these programs, depending on what is offered by their schools). While DC, AP, and IB all provide college-level coursework to high school students, the AP program is run nationally by the College Board and the IB Diploma Programme is run internationally by the International

[A] According to the ICCB Dual Credit Administrative Rules, it is up to the high school and school district to determine whether college coursework taken by high school students is eligible for high school credit.[2]
[B] This estimate was calculated using figures from the ICCB annual report on dual credit in fiscal year 2022 and the IBHE First Look – Fall Enrollment 2022-23 report,[5] which includes DC participation numbers for fiscal year 2022.

Baccalaureate rather than offered by specific colleges or universities. Eligibility for participation in DC coursework for college credit depends on criteria determined by the partnership between the high school and postsecondary institution, and any eligible student who passes the DC course can receive college credit from the partner institution (which may or may not be accepted for transfer by other postsecondary institutions). College credit for AP students, on the other hand, depends on their score on a national AP exam as well as specific eligibility criteria at the college they attend. For IB students, college credit depends on the grade they earn in an IB course and eligibility criteria at the college they attend.

Dual Credit Improves College Affordability, Access, and Completion

The DC model offers a number of advantages to students, not least of which is the potential to alleviate the financial burdens of soaring college costs. Stagnation in the proportion of young adults enrolled in college,[6] despite the increasing prevalence of postsecondary credential requirements for high-quality jobs,[7] reflects in part student and parent concerns about college debt.[8,9] DC courses are generally offered with reduced tuition and fees compared to traditional college courses, with many Illinois community colleges providing DC courses completely free of charge to students.[10] Depending on whether students ultimately attend a college that accepts DC course credits, participation can help students and families save on college costs.[11]

DC coursework is designed to offer high school students a rigorous learning environment that can enhance academic behaviors and mindsets and provide access to content areas that would not otherwise be available at their high schools. Through DC courses, students learn how to navigate interactions with college instructors, actively engage in course content, and practice effective study habits, potentially improving college readiness and feelings of self-efficacy.[12] The early accumulation of college credits may also enhance academic momentum, motivating students to persist in college.[12,13] Through these mechanisms, DC students experience positive impacts on a number of academic outcomes.

Many rigorous studies, including studies implementing experimental or quasi-experimental methods, have estimated DC's causal effects on academic outcomes. Studies that employ these types of methods are considered to provide the strongest types of evidence for evaluating the efficacy of educational interventions.[14] Such studies have shown that, on average, DC improves high school performance and completion,[15,16] college readiness,[16] college enrollment,[15–23] credit accumulation,[19,23] and college degree attainment.[15,16,19–21,23,23–26] The largest effects are those related to college outcomes,[27] and impacts on college enrollment and persistence are especially strong for students who attend two-year colleges.[12,24] Evidence for how DC impacts enrollment in four-year colleges is mixed. Some studies find small or null average impacts on four-year college enrollment, while others have found positive impacts concentrated among first-generation, Black, and Latino student populations.[23,28]

Other studies, though not causal, show promising correlational relationships between DC and additional academic outcomes. These studies have found that DC potentially improves high school attendance,[16] reduces participation in remedial coursework,[29,30] and decreases overall time to postsecondary degree

completion.[21,25,30] Analyses by ICCB have found that prior DC participation among Illinois community college students is associated with higher rates of graduation and advancement.[4] Researchers have calculated that DC's impacts on educational attainment have economic benefits not only for individual students, but also for taxpayers, as the public returns to a more highly educated workforce exceed the costs of public investment into DC programming.[11]

Given these benefits, it is vital that all students have access to DC coursework. Unfortunately, major participation disparities exist across racial/ethnic and socioeconomic student groups.

Participation in Dual Credit is Not Equitable

Participation in DC has expanded rapidly over the past two decades, increasing nationally by over 70% since the 2002-03 school year (SY03).[31] In SY18, approximately 82% of U.S. high schools offered DC,[32] and an estimated 9% of high school students participated in DC that year.

Despite DC's expansion, disparities in access across racial/ethnic and socioeconomic groups have persisted or become even more exacerbated.[31,33,34] DC coursework offerings tend to be less prevalent in urban areas, in districts with more than 75% of students eligible for Free and Reduced-Price Lunch,[35] and in districts with higher proportions of Latino and Black students.[36,37] In addition to demographic differences *between* districts by the amount of DC courses offered, there are differences *within* districts in the demographics of students most likely to participate in DC. Compared to other student groups, within-district participation tends to be lower among low-income, Latino, Black, and low-achieving students, ELs, students with disabilities, foster youth, and youth experiencing homelessness..[31,38,39]

Some of the very policies to expand DC overall may also widen participation gaps. For example, prior research has found state accountability mandates related to DC participation are associated with participation increases concentrated in the White student population.[40] White students may be better positioned to benefit from DC expansion efforts, on average, for a number of reasons. As summarized by Xu and colleagues,[40] these reasons include having more access to accelerated instruction prior to high school, greater family resources to pay for DC tuition and transportation, and a higher likelihood of attending a district with high-quality counseling, among other reasons. In turn, efforts to expand DC must intentionally consider potential impacts across demographic subgroups if they are to close gaps in access and ensure gains are distributed equitably.

Advancing Equity in Dual Credit Participation in Illinois

Historically, Illinois has had a slightly lower proportion of schools that offer DC than the national average, with 77% of public schools serving grades 9-12 statewide offering DC in SY18 (compared to 82% nationally).[32] As seen nationally, small districts in rural areas of Illinois have led the state in DC student participation, and White and Asian students have had higher statewide participation rates than Latino and Black students.[41-42]

These trends contrast with statewide AP participation trends. Illinois historically has had a higher-than-average proportion of students passing AP exams with a 3 or higher compared to other states, and AP coursework tends to be more prevalent in urban schools.[41] The state's success in offering AP coursework is in part attributable to long-standing state commitments to fund district implementation of AP coursework and reduce AP exam fees, as manifest in the College and Career Success for All Students Act of 2006.

Students, families, and educators across Illinois also recognize the benefits of DC programs and support their implementation.[42] Reflecting these sentiments, Illinois legislators have passed a number of recent laws to strengthen DC and improve equitable participation statewide. The Education and Workforce Equity Act of 2021 (Public Act 101-0654) acknowledges:

> "[…] that inequitable access to advanced coursework and enrollment in accelerated placement programs exists between children enrolled in different school districts and even within the same school district and more must be done to eliminate the barriers to access to advanced coursework and enrollment in accelerated placement programs for all children."

The Education and Workforce Equity Act, along with the Dual Credit Quality Act (DCQA) and the Postsecondary and Workforce Readiness Act (PWR), set forth a wide range of provisions to ensure the rigor and transferability of DC courses and expand DC access. Additionally, the latest state budget passed by the IL General assembly (Illinois State Budget Fiscal Year 2024) includes for the first time an appropriation for DC grants and administration. This legislation is summarized in the callout box, *Dual Credit Legislation in Illinois*.

The Current Study

Leading DC researchers have identified the need for additional work on equity in DC. Specifically, DC research and policy would benefit from a deeper understanding of how access to DC varies across students from intersecting subgroups, including racial/ethnic, socioeconomic, and geographic groups[39,41] In Illinois, there is a need for updated research on equity in DC that reflects recent years' growth in DC coursework and the ongoing enactment of new DC legislation. The current study asks:

1. How has high school student participation in DC coursework in Illinois changed from SY18 to SY22 among student demographic subgroups, including racial/ethnic subgroups, students with IEPs, ELs, and low-income students?
2. Within this timeframe, how have participation rates changed:
    a. across districts with varying student demographic compositions?
    b. within districts by student demographic subgroup?

DUAL CREDIT LEGISLATION IN ILLINOIS

Dual Credit Quality Act (DCQA)
Passed in 2010, and amended in 2018 and 2021, the DCQA was designed to strengthen DC by improving articulation, expanding institutional capacity, and broadening access.

Articulation/Course Transfer

- All DC courses with an existing Illinois Articulation Initiative (IAI) code must be recognized as credit-bearing college-level coursework.
- All Illinois public colleges and universities must accept credits from DC courses under the IAI.

Institutional Capacity

- Community colleges must enter into a DC agreement with any requesting high school in their community college district.
- Model Partnership Agreement (MPA) is provided as a template, becoming default agreement if an agreement cannot otherwise be reached.
- Funding is awarded to community colleges for DC expansion.
- High school instructors who do not yet qualify to teach DC courses according to the Higher Learning Commission, but are on track to do so, may teach DC with an approved professional development plan.

Student Access

- Student eligibility is to be determined through "multiple appropriate measures," e.g. GPA growth, Freshman-On-Track status, and pre-requisite coursework in addition to test scores.
- Students who do not meet eligibility criteria may enroll in DC courses located within their high schools, only for high school credit.
- Institutions may provide options for Pass/Fail and/or late withdraw in order to protect students' academic standing.
- Students with disabilities (SWD) who take DC courses on high school campuses must receive the accommodations and aids outlined in their IEP, while SWD who take courses on college campuses must receive the accommodations and aids outlined in the partnership agreement.

Postsecondary and Workforce Readiness Act (PWR)
Passed in 2016 and amended in 2018, the PWR Act was designed to enhance students' college and career readiness. As part of the PWR, school districts can award College and Career Pathways Endorsements (CCPE) on students' high school diplomas, which can be met in part by completing DC courses in a career-focused instructional sequence.

Education and Workforce Equity Act
This act, passed in 2021, requires that by the SY24, students who meet or exceed State standards on annual state assessments may be automatically enrolled in the "next most rigorous level of advanced coursework." For seniors, this coursework in English and math must be a dual credit, Advanced Placement (AP), or International Baccalaureate (IB) course.

Illinois State Budget Fiscal Year 2024
Funding DC programs is challenging for community colleges in IL and nationally.[10,43] The Illinois 2024 State Budget includes $3.15 million to community colleges for DC grants and administration.

Methods

Data

Data for this study comes primarily from the Illinois Report Card, released annually by the Illinois State Board of Education (ISBE), for SY18 through SY22. The Report Card provides information reported by districts about the number of students in each school who participated in at least one DC course that year, disaggregated by demographic subgroup. In order to protect student confidentiality, publicly available report card data does not report participation counts for groups smaller than 10 in any school or district, preventing analysis of small demographic subgroups (e.g. Native Hawaiian/Other Pacific Islander). However, through a data partnership with ISBE, we received files with unsuppressed data for small groups, allowing reporting of subgroup participation trends.

Data was analyzed for all districts that report DC participation data, which include districts with regular public schools (including neighborhood, magnet, and selective schools) and charter schools that serve grades 9, 10, 11, or 12. In total, the dataset included 480 districts. Six of the included districts, all of which were charter districts, were either established or closed within the five years of study (SY18 to SY22) and did not have data for all years. The variables collected included:

District Dual Credit Participation

District DC participation is measured as the proportion of students in grades 9-12 who participate in at least one DC course. This variable reflects data reported to ISBE directly from districts on DC participation and does not include other types of early college coursework students may participate in, such as *dual enrollment* (coursework taken by high school students that counts for college credit but not high school credit).

DC data is disaggregated for the following racial/ethnic subgroups: American Indian/Alaska Native, Asian, Black, Latino, Native Hawaiian/Other Pacific Islander, two or more races, and White.[C] Data was also disaggregated for students with IEPs, ELs, and students classified as low-income. ISBE classifies students as low-income if they are eligible to receive free or reduced-price meals, if they or their household receives public aid, or if they are classified as homeless, migrant, runaway, Head Start, or foster children. School-level DC and overall enrollment numbers for each demographic subgroup were aggregated to the district level and used to create the district proportion variables.

Because this study uses school-level data, it is not able to track DC participation among individual students over time. In turn, this study is not able to report the proportions of students who *ever* participate in DC during their time in high school, which is higher than the proportion of students who participate in any given year. Students who participate in more than one year (for example, both their junior and senior years) will be included multiple times in district estimates.

[C] In this report, "Black" is used to refer to ISBE's category of "Black or African American," and "Latino" is used to refer to the category of "Hispanic or Latino."

District Locale

A measure of district urbanicity was drawn from the National Center for Education Statistics (NCES).[44] NCES draws on designations from the U.S. Census Bureau to classify the areas in which districts are geographically located, which can be grouped into four primary locales: City, Suburban, Town, and Rural. In Illinois and nationally, districts in rural areas have historically tended to have higher rates of DC participation,[35,41] making this variable important for understanding statewide trends.

Community College District

The Illinois Community College Board (ICCB) provides information on the community college district(s) to which each school district is assigned. Illinois operates 48 community colleges within 39 community college districts. Each public K-12 school is assigned to a community college district or districts based on the geographic locations of its students' residences. Schools that sit on the borders between two or more community college districts are often assigned to multiple districts.

Analysis

This study describes high school student DC participation in Illinois from SY18 to SY22, disaggregating trends by demographic subgroup. It first reports statewide trends in DC participation over time, identifying changes across student subgroups as well as changes in participation gaps for subgroups historically underrepresented in DC. For racial/ethnic subgroups, participation gaps are defined as the difference in participation rate relative to White and Asian students, who have historically had the highest DC participation in Illinois and nationally. White and Asian is set as the reference not because these subgroups' participation rates represent an ideal for all racial/ethnic subgroups to achieve, but rather because having a participation rate as high or higher than White and Asian students is an important signal of equitable opportunity. Likewise, for students with IEPs, ELs, and low-income students, who have historically had below-average DC participation, participation gaps are defined as the difference in participation rate relative to average student participation.

The report then presents DC participation trends between school districts. These trends are displayed graphically in the form of maps displaying district participation rates statewide. Districts are shaded based on the following categories of mean DC participation rates over all five years of data: 0-5%, 6-15%, 16-25%, 25-40%, greater than 40%. Included are maps of community college districts overlaid upon school district participation maps. While we do not have data that would allow us to display overall DC rates of participation by community college district, the overlay maps allow us to visualize how DC rate varies among the school districts within each community college district's geographic borders. The maps are accompanied by data on the average demographic characteristics of districts for the same period in each shaded participation category. Districts are then organized into quintiles based on DC participation change from SY18 to SY22, and district demographic characteristics are displayed for each quintile.

Finally, within-district participation trends for student demographic subgroups are reported. Data is presented on average district subgroup participation rates from SY18 to SY22 and change in within-

district subgroup participation gaps for historically underrepresented groups. A map is used to display change in within-district racial/ethnic subgroup participation geographically.

Data from the six districts that were established or closed between SY18 and SY22 was included when averaging participation rates over all years, with missing years excluded. These districts were excluded when averaging district growth in DC from SY18 to SY22.

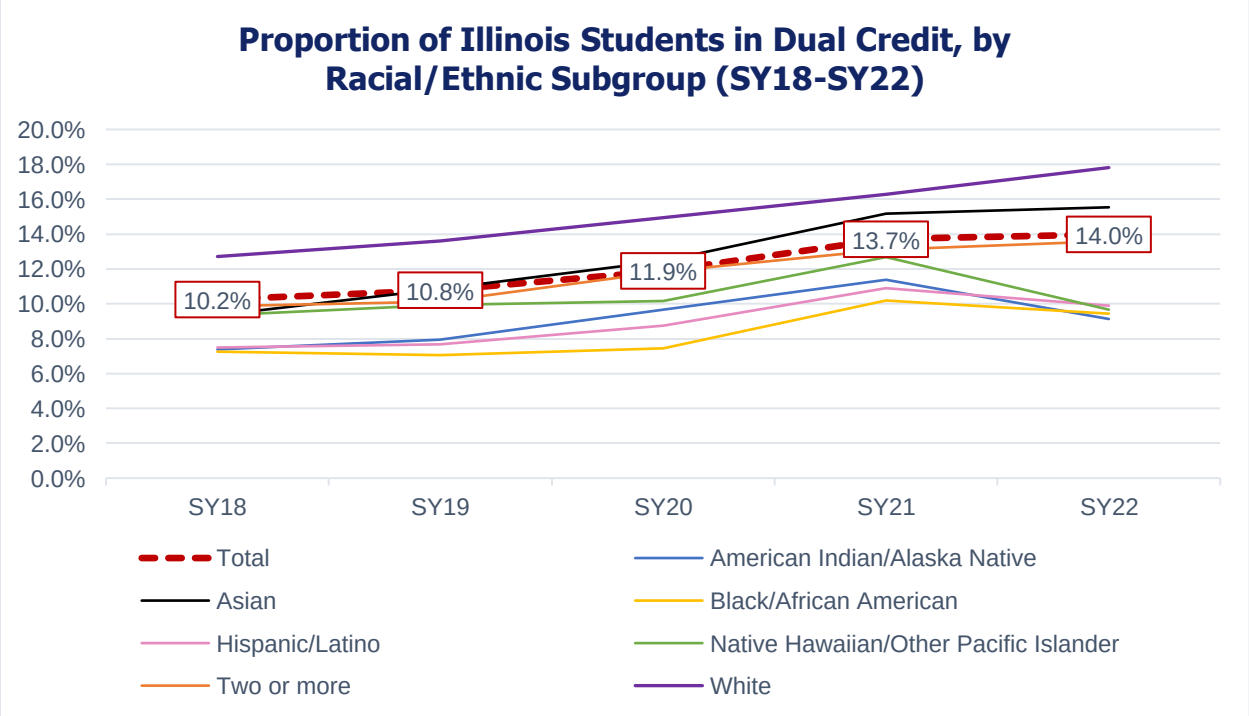
Findings

Finding 1: Statewide, DC participation increased overall and among all demographic subgroups from SY18 to SY22. However, all pre-existing participation gaps also increased in the same timeframe.

DC Participation Statewide

As shown in Figure 1, the overall Illinois student participation rate changed from 10.2% of high school students in SY18 to 14.0% of high school students in SY22, an increase of 3.8 percentage points. Statewide, participation also increased for each racial/ethnic subgroup. Increases were highest for Asian and White students, whose participation increased by 6.2 and 5.1 percentage points, respectively. Participation among students who identify with two or more races increased by about the same amount as the statewide average of 3.7 percentage points.

Figure 1. Proportion of Illinois students in DC, by racial/ethnic subgroup (SY18-SY22)



For all other racial/ethnic subgroups, the increase in participation was smaller than the average participation increase statewide. These subgroups with lower-than-average participation increases saw an increase in participation from SY20 to SY21, then a decline from SY21 to SY22. Closer examination of the data revealed that this increase, then decline was driven by students in Chicago Public Schools. Participation rates for each subgroup by year, as well as change from SY18 to SY22, are displayed in Appendix Table A1.

Figure 2. Proportion of Illinois students in DC, by IEP, EL, low-income status (SY18-SY22)

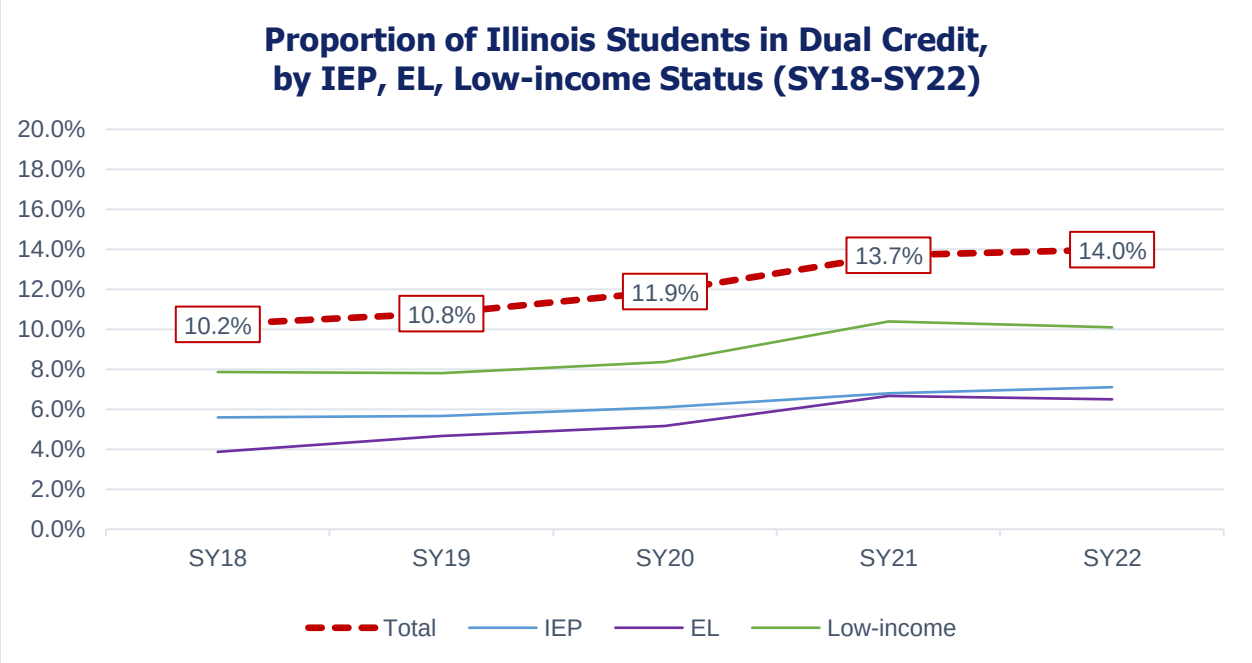


Figure 2 shows statewide participation rates for students with IEPs, ELs, and low-income students relative to the overall student population from SY18 to SY22. All subgroups increased during this timeframe, but the increase in participation was smaller than the average statewide participation increase. As observed with underrepresented racial/ethnic subgroups, there was a jump in participation from SY20 to SY21 for ELs and low-income students. Appendix Table A1 displays subgroup participation by year.

Statewide Participation Gaps

Table 1 displays data on participation gaps across demographic subgroups by year. For American Indian/Alaska Native, Black, Latino, Native Hawaiian/Other Pacific Islander students and students of two or more races, the gap is calculated yearly as the difference in DC participation rate relative to the weighted average of White and Asian student participation rates. For students with IEPs, ELs, and low-income students, the gap is calculated as the difference in DC participation rate relative to the state average participation rate.

The table shows that for underrepresented racial/ethnic subgroups, gaps in participation relative to White and Asian students grew from SY18 to SY22 by 2.7 percentage points, a 56.7% increase. When

examining the percent change in gaps in relation to SY18 participation rates, the increase was similar across Black, Latino, and two or more race students, ranging from 56.3% to 58.9%. The percent increase was highest for Native Hawaiian/Other Pacific Islander students at 157.5%.

Gaps for students with IEPs, ELs, and low-income students also grew relative to the statewide average. Growth in the gap was smallest for EL students, whose gap in participation relative to the statewide average grew by 1.1 percentage point (17.6%). Growth in gaps for students with IEPs and low-income students, at 47.8% and 62.0%, respectively, was similar to the increase in the average gap for underrepresented racial/ethnic subgroups.

Table 1. Changes in statewide DC participation gaps, SY18-SY22

	SY18	SY19	SY20	SY21	SY22	Change in Gap, SY18-SY22 (percentage points)	Change in Gap, SY18-SY22 (percent)
Statewide DC Participation Gap Compared to White/Asian Students (percentage points)							
All underrepresented racial/ethnic subgroups	4.8	5.7	6.2	5.4	7.6	2.7	56.8%
American Indian/Alaska Native	5.0	5.4	5.0	4.8	8.4	3.4	68.3%
Black/African American	5.1	6.3	7.2	6.0	8.2	3.0	58.9%
Hispanic/Latino	4.9	5.7	5.9	5.3	7.7	2.8	56.3%
Native Hawaiian/Other Pacific Islander	3.1	3.4	4.5	3.5	7.9	4.8	157.5%
Two or More Races	2.5	3.2	2.8	3.1	4.0	1.4	56.8%
Statewide DC Participation Gap Compared to General Student Population (percentage points)							
IEP	4.7	5.1	5.8	6.9	6.9	2.2	47.8%
EL	6.4	6.1	6.7	7.0	7.5	1.1	17.6%
Low-income	2.4	3.0	3.5	3.3	3.9	1.5	62.0%

Differences across demographic subgroups in participation and participation increases over time can be explained, in part, by how students are organized in districts. If a particular subgroup is concentrated in districts that offer a high number of DC courses, we can expect to see higher statewide participation for that subgroup. The next stage of this analysis examines how student subgroups are distributed across districts with varying levels of growth in DC participation.

Finding 2: When comparing *between* districts, participation was higher and increased more at districts serving more White students and students not classified as IEP, EL or low-income. Districts with the highest participation tended to be located in towns and rural locales.

Average Participation Rates Between Districts

The between-district analysis first categorizes districts according to their DC participation rates. Figure 3 shows the average proportion of high school students who participated in DC from SY18 to SY22 by school district. Districts displayed in white averaged a participation rate between 0% and 5% during this time span. Districts with no DC participation are not identified separately from other districts with participation less than or equal to 5% in order to protect student confidentiality. However, of the districts shaded in white, about one-fourth (24 districts) had no DC participation during any of the years of data collected. As the shades of green and blue on the map darken, average DC participation over the 5-year study timespan increases. Districts in the darkest shade of blue averaged a participation rate of greater than 40%.[D] All maps in this report use school district shapefiles from the National Center for Education Statistics for SY22.[46] A map displaying districts in Chicago and its surrounding suburbs in greater detail can be found in Appendix Figure A1.

Districts in southern IL tended to have higher DC participation (as noted by dark blue) than districts in other parts of the state. These southern districts are located primarily in towns and rural areas. The top 5 districts with the highest average DC participation from SY18 to SY22 were: Staunton CUSD 6 (60% average participation rate), Carlinville CUSD 1 (58%), Nashville CHSD 99 (57%), Salem CHSD 600 (57%), and Ridgewood CHSD 234 (55%).

[D] Districts shaded in gray are elementary districts with no high school population.

Figure 3. Mean proportion of students participating in DC, SY18-SY22, by school district

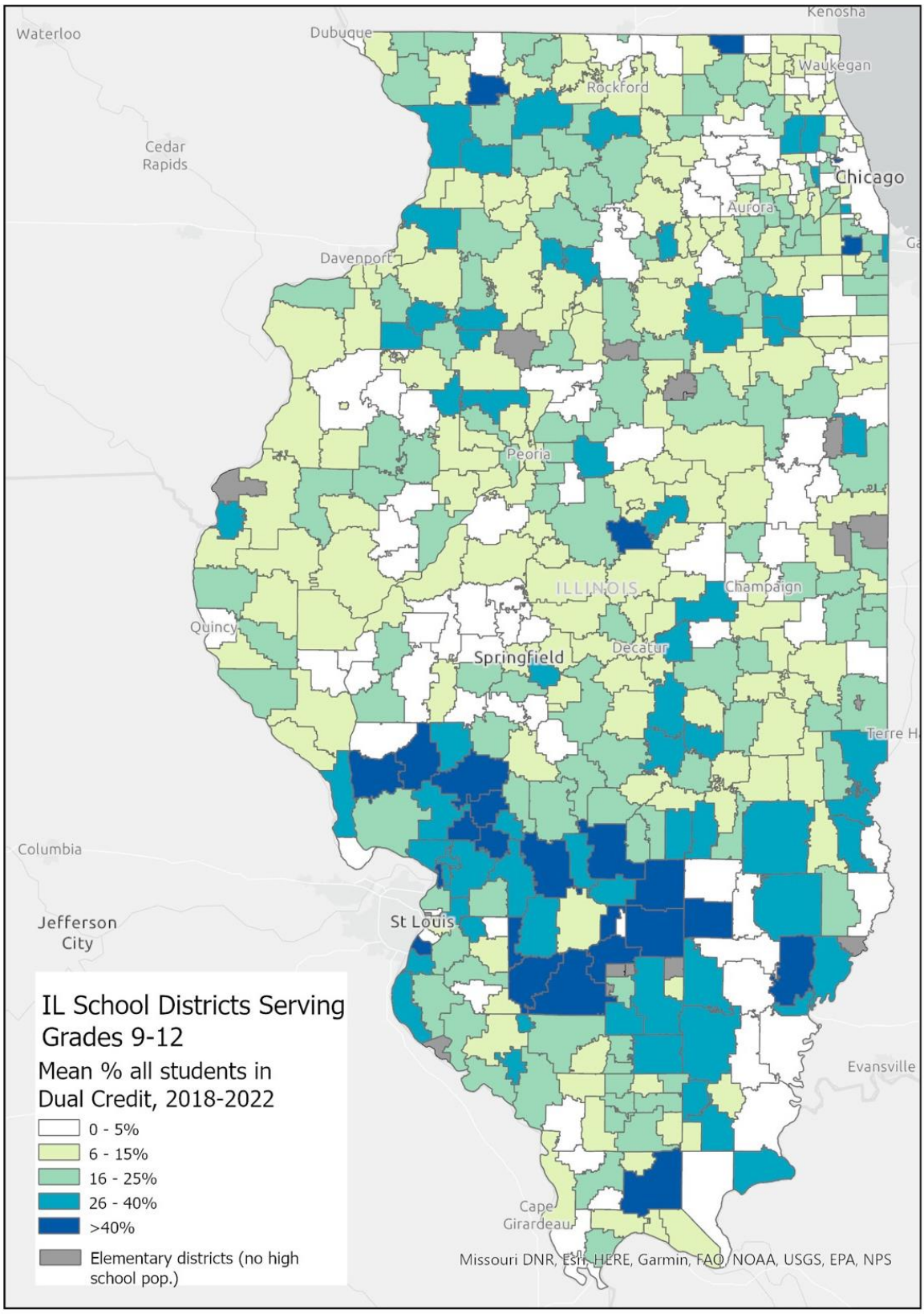


Table 2 displays district average DC participation by locale, describing the trends shown on the map. Districts located in towns had the highest DC participation from SY18-SY22, averaging 17.5% of students each year. Districts in rural areas followed closely, averaging 15.9% of students. Districts in urban locales, which have more residents of color and low-income residents than other locales,[47] had the lowest average participation at 10.2%.

Table 2. Average district rates of participation in rigorous coursework, by locale, SY18-SY22

Locale	% DC Participation	% CTE Participation	% AP Participation
Urban	10.2%	48.2%	22.2%
Suburban	13.2%	51.5%	23.1%
Town	17.5%	72.7%	8.2%
Rural	15.9%	74.0%	4.4%

Table 2 also displays district average proportions of students who participated in Career and Technical Education (CTE) and Advanced Placement (AP) coursework by locale.[E] Given the overlap in courses that count as DC and CTE, it is unsurprising to see that CTE participation was highest in the same locales that had the highest rates of DC participation. AP course participation, on the other hand, was highest in the locales where DC participation was relatively low, and low where DC participation was higher. Following from the differences in district DC participation across locales and regions, districts with varying levels of DC participation differed in their student body compositions.

As shown in Table 3, as district DC participation during the study time period increases, so too does the district proportion of White students, while the proportion of Black students decreases. Latino students were also concentrated in the two bands of districts with the lowest levels of DC participation (0%-5% and 6%-15%), and the average district proportion of Latino students decreases as DC participation increases. Interestingly, the district proportion of Asian students also has an inverse relationship with the district proportion in DC, despite the statewide trend of higher participation among Asian students overall.

Note from the "% District observations" row of Table 3 that most districts are categorized into the two bands with the lowest participation. Districts in these bands also had higher average student enrollment than other bands. In turn, most students in each subgroup statewide – including White students - attended districts in those bands. Table A2 in the Appendix displays the statewide proportion of students in each subgroup who attended districts in each band.

[E] International Baccalaureate (IB) programs are implemented in a very select number of schools statewide. Average IB participation was 0% in each locale type.

Table 3. Average district demographic characteristics, by DC participation band (SY18-SY22)

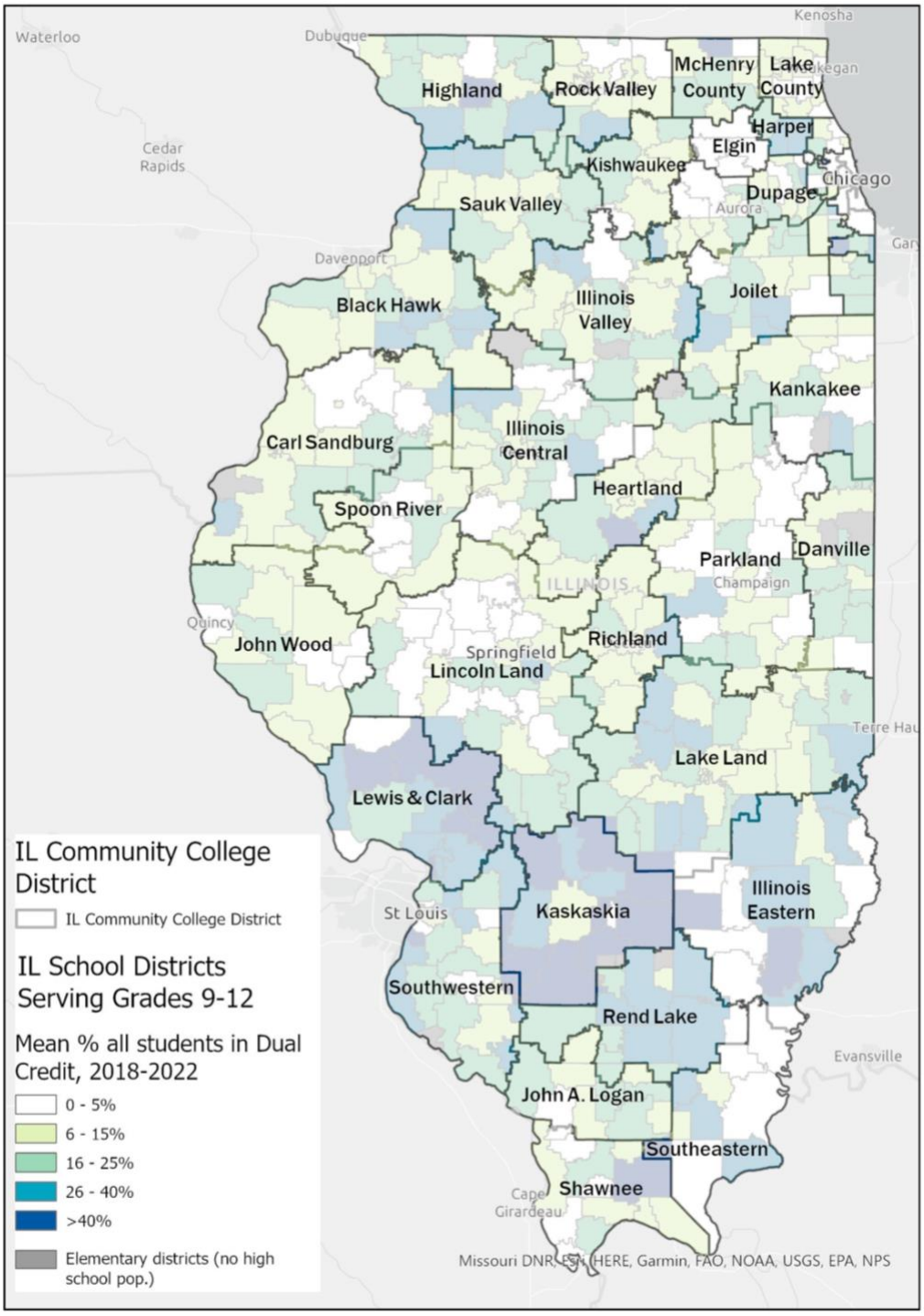
	DC Participation Band				
District Average Proportion of All Students in DC, SY18-SY22	**0-5%**	**6-15%**	**16-25%**	**26-40%**	**>40%**
% District observations	26.4%	30.9%	22.1%	14.4%	6.3%
Average district enrollment	1,713	1,328	1,041	907	645
Average District Racial/Ethnic Subgroup Proportions					
American Indian/Alaska Native	0.2%	0.2%	0.1%	0.2%	0.2%
Asian	2.3%	2.1%	1.5%	1.3%	0.8%
Black/African American	9.7%	7.7%	4.3%	2.9%	3.8%
Hispanic/Latino	11.5%	11.7%	9.3%	6.0%	5.2%
Native Hawaiian/Other Pacific Islander	0.1%	0.1%	0.1%	0.1%	0.1%
Two or More Races	3.0%	3.5%	3.0%	2.9%	2.6%
White	73.3%	74.8%	81.7%	86.7%	87.4%
All racial/ethnic subgroups	100%	100%	100%	100%	100%
Average District Proportions of IEP, EL, Low-income students					
IEP	14.1%	13.8%	13.7%	13.3%	14.3%
EL	2.6%	2.4%	1.9%	1.1%	1.1%
Low-income	41.7%	39.7%	38.4%	37.0%	40.1%

Table 3 also shows that students with IEPs, ELs, and low-income students tended to have slightly higher representation in districts with lower DC participation rates. Students with IEPs and low-income students also had high representation in the band of districts with the highest DC participation. However, because this band comprised just 6.3% of district observations, a low proportion of these subgroups overall attended high-DC districts (see Table A2).

Because most high school DC courses are offered via articulation agreements with local community colleges, it is important to consider how community college districts are related to geographic trends in DC participation. School districts with high DC participation rates most likely have partnerships with community colleges that provide for ample DC opportunities, while school districts with no or very low participation either do not have partnerships, have partnerships with limited course options, or have partnerships and course options but limited student uptake. Figure 4 displays the map of district DC participation rate with a community college district overlay. It shows how school districts with varying DC participation rates are bounded by community college districts.

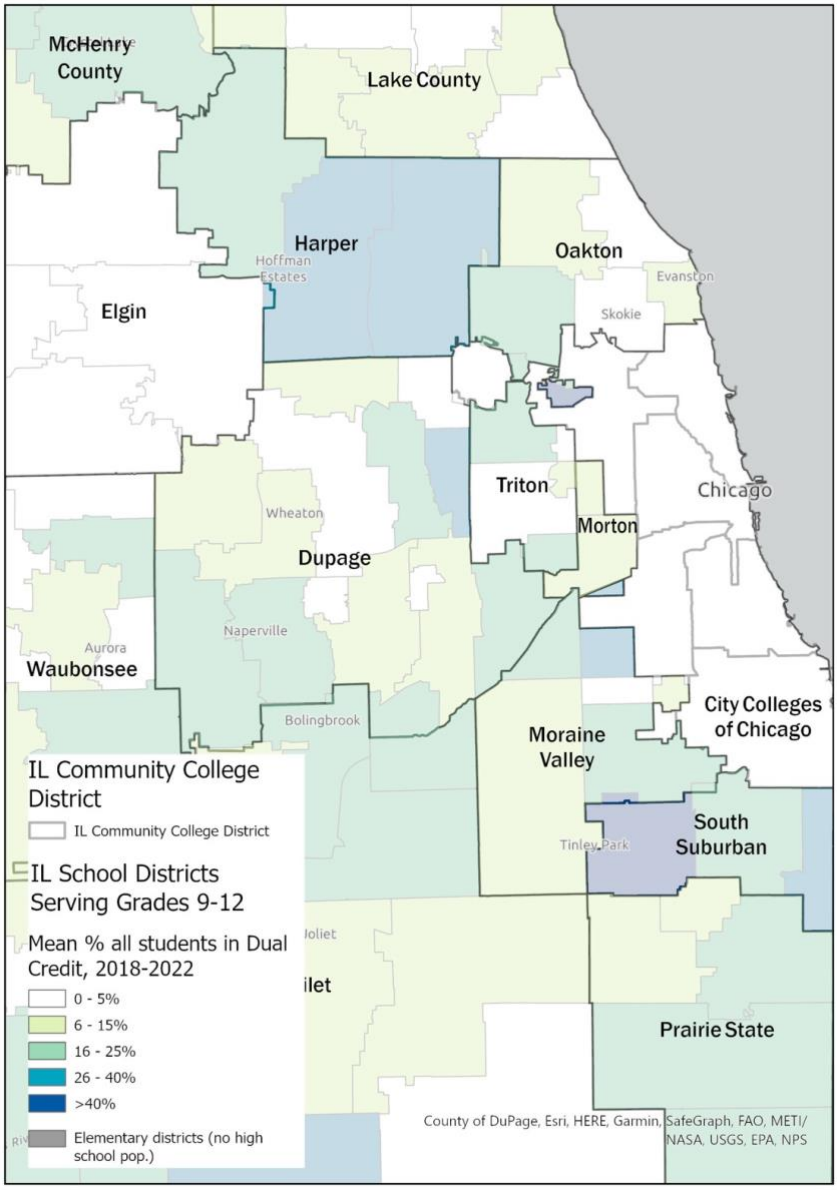
Figure 4. Mean proportion of students participating in DC, SY18-SY22, by school district, with community college district overlay

Figure 4A. Illinois



Note: Community college district shapefiles were provided by ICCB.

Figure 4B. Chicago and Suburbs



When examining Figure 4, a few community college districts stand out as having a concentration of school districts with high DC participation. Lewis and Clark, Kaskaskia, and Rend Lake Community College Districts bound most of the southern Illinois districts that had very high DC participation rates. These districts are located primarily in rural areas and towns, locales that also have higher average rates of participation in CTE. We may therefore ask whether high DC participation in these community college districts reflects high participation in CTE more broadly. According to the ICCB annual DC report,[4] this is indeed the case for Kaskaskia Community College District, where 37% of DC courses were in CTE. However, in Lewis and Clark and Rend Lake Community College Districts, CTE courses made up just 8% and 7% of all DC courses, respectively.

Most other community college districts have within their boundaries a mix of school districts that had low and medium, or medium and high DC participation rates. One exception is Illinois Eastern Community College District, which bounds both school districts that had no or very low DC participation and school districts that had very high DC participation.

This overlay provides a first step toward identifying community college districts that have strong DC partnerships with the school districts they serve. However, it is important to keep in mind that 48 of the 480 observed school districts are assigned to two or more community college districts. In these cases, district participation rates may reflect partnerships with community colleges outside of the community college district where they are geographically located. Additionally, a small number of school districts have articulation agreements with higher education institutions other than their assigned community college(s), including public four-year universities (Approximately three percent of DC students in IL take courses offered by four-year universities. Of those, the vast majority enroll in courses offered via partnerships with Eastern Illinois University.[5]). In turn, averaging DC participation of the school districts within each district's community college district's boundaries will not provide an accurate estimate of each community college district's overall participation rate.

Change in Average Participation Rates Between Districts

Not only did districts with varied student demographic compositions vary in DC participation; they also varied in DC growth. Table 4 shows average demographic characteristics across districts by quintile of change in DC participation from SY18 to SY22.

In quintile 1 are districts that had a decline in DC participation of more than three percentage points. This quintile was disproportionately White. However, because these districts tended to have small student populations (568 students, on average), they accounted for a small proportion of each subgroup population, including the White student population. Subgroup population proportions are shown in Appendix Table A3.

Aside from quintile 1, White students were concentrated in districts that grew in DC participation from SY18 to SY22, as were students with two or more races. On the other hand, Black and Latino students, ELs, and low-income students were most concentrated in quintile 2 districts, which had slightly negative change over the study period. Students with IEPs also had slightly higher representation in districts with a negative change in DC participation rate.

Overall, patterns of change in participation across districts with varying demographic compositions meant that the majority of Black students attended districts with negative change in DC participation, and the majority of Latino, EL, low-income students, and students with IEPs attended districts with negative change or minimal growth, as shown in Appendix Table A3. The majority of White, Asian, and two or more race students, on the other hand, attended districts that grew in DC participation by at least three percentage points.

Table 4. Average district demographic characteristics, by DC participation change band (SY18-SY22)

	DC Change Band				
Percentage point change in DC participation, SY18-SY22	**< -3%**	**-3 – -1%**	**0 – 2%**	**3 – 9%**	**>9%**
% District observations	20.10%	20.00%	20.00%	20.20%	19.70%
Average district enrollment (N)	568	3,869	1,073	1,362	1,237
District Average Racial/Ethnic Subgroup Proportions					
American Indian/Alaska Native	0.2%	0.3%	0.1%	0.2%	0.2%
Asian	0.9%	3.4%	2.6%	3.5%	2.1%
Black/African American	6.2%	27.4%	11.3%	6.1%	6.7%
Hispanic/Latino	7.1%	36.0%	13.2%	13.4%	12.0%
Native Hawaiian/Other Pacific Islander	0.1%	0.2%	0.1%	0.1%	0.1%
Two or More Races	2.8%	2.2%	3.1%	3.1%	3.4%
White	82.8%	30.5%	69.5%	73.6%	75.5%
All district racial/ethnic subgroups	100%	100%	100%	100%	100%
Average District Proportions of IEP, EL, Low-income students					
IEP	14.4%	14.5%	14.0%	13.0%	13.7%
EL	1.5%	8.3%	2.8%	3.0 %	2.7%
Low-income	43.0%	66.7%	42.9%	36.1%	36.4%

Finding 3: *Within* districts, participation was highest among Asian and White students. Participation growth was highest among Asian, American Indian/Alaska Native, Latino, and EL students.

Average DC Participation Rates and Changes in DC Participation Rates Within Districts

Figures 5 and 6 show average within-district DC participation rates across demographic subgroups. On average, Asian and White students within districts had higher participation rates than other racial/ethnic subgroups, and students with IEPs, ELs, and low-income students had lower-than-average participation rates. In addition to having the highest participation rates, Asian students showed by far the most growth in district average participation rate, increasing from 15.4% in SY18 to 22.7% in SY22, an increase of 7.3 percentage points. Other subgroups with higher-than-average participation increases within districts were American Indian/Alaska Native students (3.8 percentage points), Latino students (3.1 percentage points), EL students (2.7 percentage points), and White students (2.5 percentage points). All other demographic subgroups showed increased within-district participation, but their improvements were smaller than the average within-district participation increase, resulting in increased participation gaps from SY18 to SY22. Average within-district participation rates by year for each subgroup are displayed in Appendix Table A4.

Figure 5. District average proportion of students in DC, by racial/ethnic subgroup (SY18-SY22)

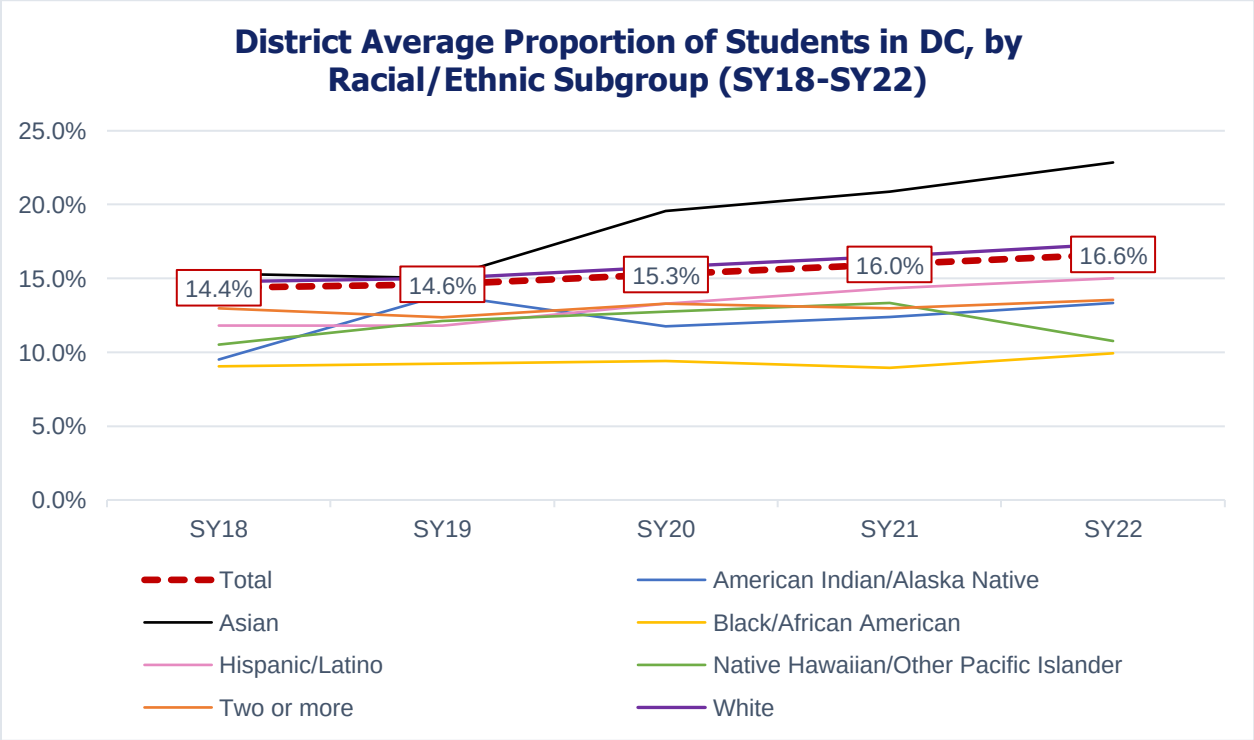
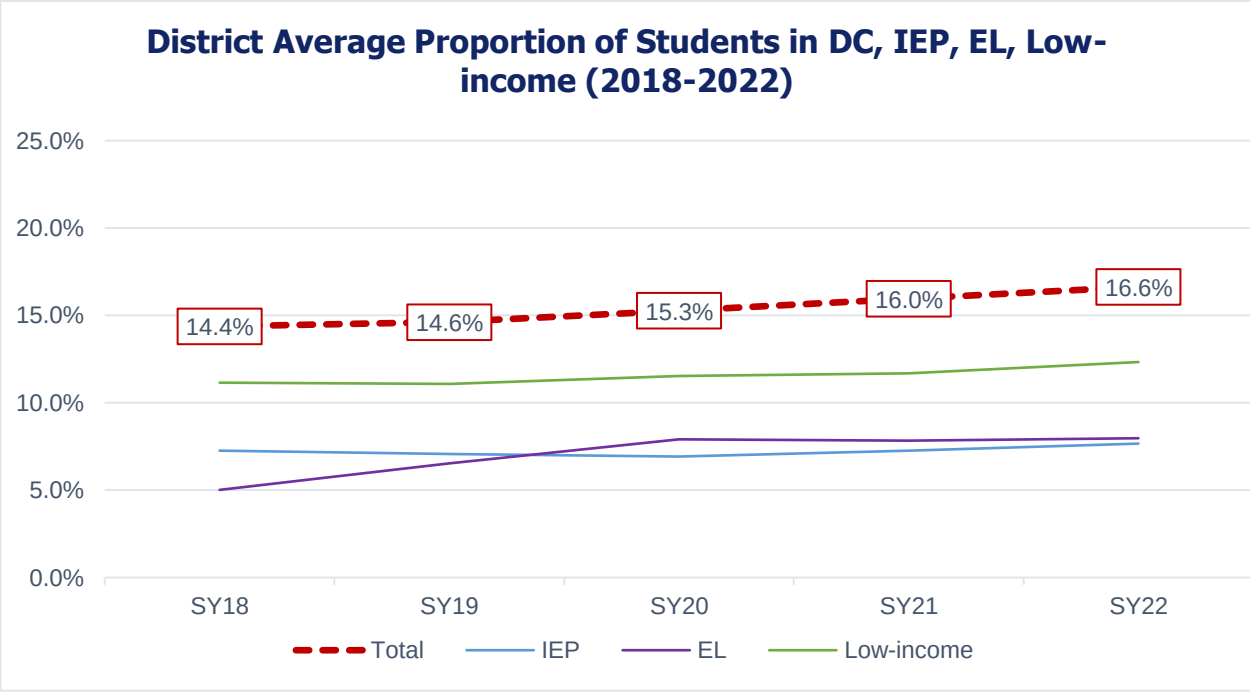


Figure 6. District average proportion of students in DC, by IEP, EL, low-income status (SY18-SY22)



When comparing to the weighted average within-district participation increase for Asian and White students, we see that the average increase among other racial/ethnic subgroups was 0.8 percentage points smaller, as shown in Table 5. This translates to a 28.2% increase in the racial/ethnic gap. Native Hawaiian/Other Pacific Islander students showed the largest percentage point increase in the gap relative to White and Asian students, averaging 2.3 percentage points, while students with two or more races had the largest percent increase in the gap of 111.9%. Students with IEPs and low-income students also showed increased participation gaps relative to the general student population within districts.

Bucking the overall trend of increased within-district participation gaps were the subgroups identified as having higher than average participation increases: American Indian/Alaska Native, Latino, and EL students. The average district gap between White/Asian and American Indian/Alaska Native became smaller by 1.3 percentage points (24.7%) from SY18 to SY22, while the gap with Latino students was reduced by 0.6 percentage points (21.3%). The average district gap between the general student population and ELs decreased slightly by 0.7 percentage points (7.4%).

Table 5. Changes in within-district DC participation gaps, SY18-SY22

District Average Dual Credit Participation Gap, Compared to White/Asian Students (percentage points)	SY18	SY19	SY20	SY21	SY22	Change in Gap, SY18-SY22 (percentage points)	Change in Gap, SY18-SY22 (percent)
All underrepresented racial/ethnic subgroups	2.9	3.4	3.1	3.5	3.7	0.8	28.2%
American Indian/Alaska Native	5.3	1.1	4.0	4.1	4.0	-1.3	-23.9%
Black/African American	5.7	5.8	6.4	7.5	7.4	1.7	29.3%
Hispanic/Latino	3.0	3.2	2.5	2.2	2.3	-0.6	-21.3%
Native Hawaiian/Other Pacific Islander	4.3	2.9	3.0	3.1	6.6	2.3	55.1%
Two or More Races	1.8	2.7	2.5	3.5	3.8	2.0	111.9%
District Average Dual Credit Participation Gap, Compared to General Student Population (percentage points)							
IEP	7.1	7.6	8.3	8.7	9.0	1.9	26.0%
EL	9.4	8.1	7.4	8.1	8.7	-0.7	-7.4%
Low-income	3.2	3.5	3.7	4.3	4.3	1.1	33.7%

Mapping Within-District Changes in Ethnic/Racial Participation Gaps

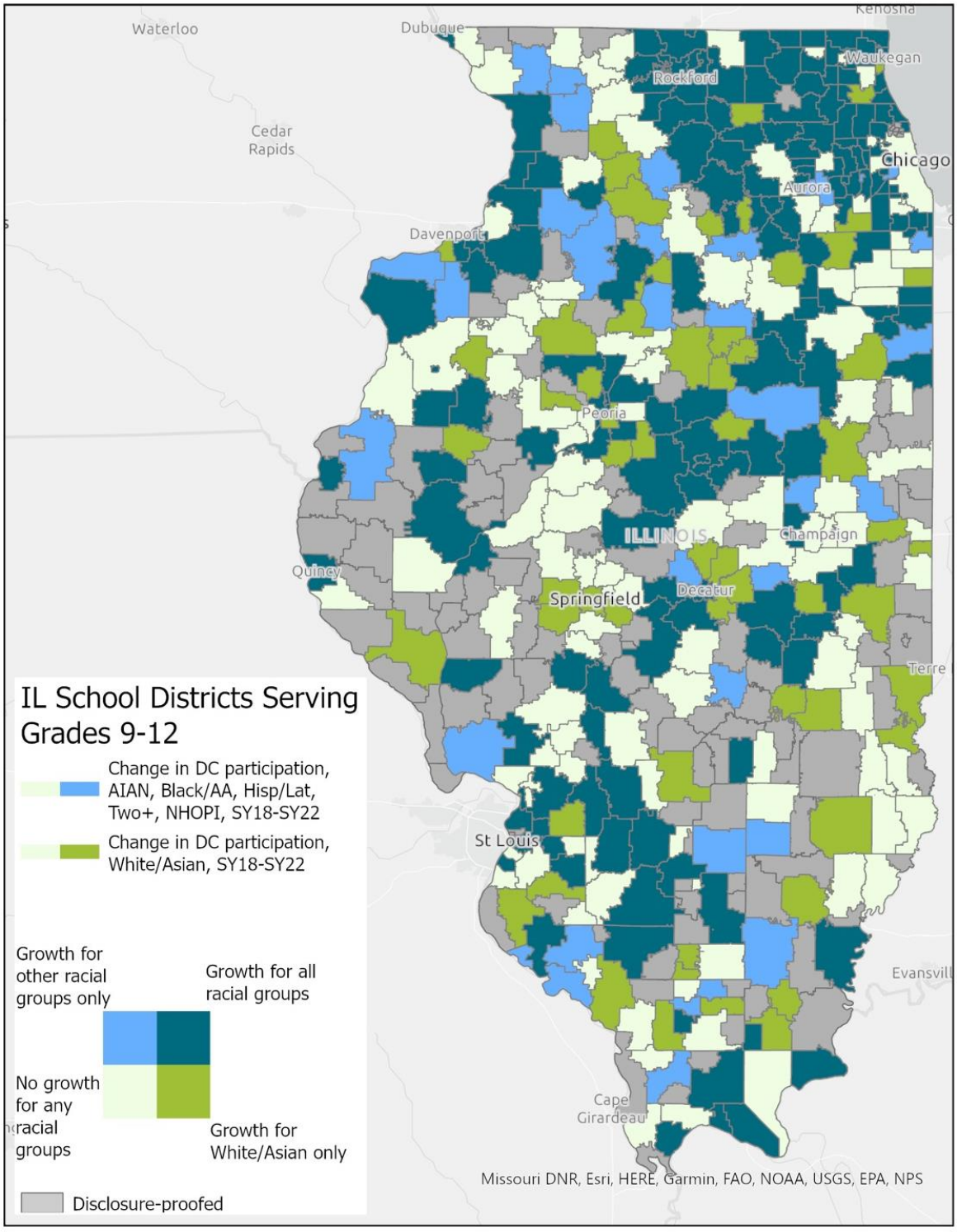
Figure 7 provides a statewide perspective on change in DC participation and racial/ethnic participation gaps within districts. The map groups students into one of two categories: White/Asian and all other racial/ethnic subgroups, which includes American Indian/Alaska Native, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander, and two or more races. In **pale green** are districts that had no positive change in DC participation from SY18 to SY22 for any racial/ethnic subgroups. These districts had either stable or decreased participation during this timeframe. In **medium green** are districts that had growth in DC participation only for White and/or Asian students. These can be thought of as districts that expanded DC participation but saw widened racial/ethnic participation gaps between White and/or Asian students and students in all other racial/ethnic subgroups. In **blue** are districts that had participation growth only for students in all other racial/ethnic subgroups. These districts expanded DC participation while closing racial/ethnic participation gaps. **Teal** districts had growth for White and/or Asian students as well as students in at least one other racial/ethnic subgroup. They varied in terms of which racial/ethnic subgroups increased participation more, such that some saw narrowed gaps and others saw widened gaps. Districts in gray had fewer than 10 DC students in one of the categories displayed on the map (White/Asian or all other racial/ethnic subgroups). These districts

were not color-coded in order to protect student confidentiality. The map shows that the nature of change in DC participation varied widely statewide. In virtually every region of Illinois can be found districts that expanded, districts that narrowed, and districts that maintained ethnic/racial participation gaps among their students. Figure A2 in the Appendix displays the map in closer detail for Chicago and its surrounding suburbs.

Of the districts displayed on this map, several stand out for their exceptionally high rate of DC growth. The top 5 districts for closing racial/ethnic gaps by growing DC among underrepresented racial/ethnic groups (shaded in **blue**) were: La Moille CUSD 303 (which grew by 30 percentage points (pp) among underrepresented racial/ethnic groups), Fisher CUSD 1 (20 pp), Armstrong Township HSD 225 (18 pp), Flora CUSD 303 (18 pp), and Chester CUSD 139 (16 pp).

The top 5 districts for growing DC among all racial/ethnic groups, shaded in **teal**, were: Ridgewood CHSD 234 (which grew by 83 percentage points (pp) among all students), Thorntown Township HSD 205 (46 pp), Woodstock CUSD 200 (42 pp), Heyworth CUSD 4 (27 pp), and Panhandle CUSD 2 (27 pp).

Figure 7. Change in racial/ethnic subgroups participating in DC, SY18-SY22, by school



Note: AIAN: American Indian/Alaska Native; Black/AA: Black/African American; Hisp/Lat: Hispanic/Latino; Two+: Two or more races; NHOPI: Native Hawaiian/Other Pacific Islander

Study Limitations

This study is the first to examine DC participation at the district level among student demographic subgroups in Illinois, an analysis made possible through a data partnership with ISBE. This data is collected annually for the primary purpose of reporting on the annual Illinois Report Card, which describes school and district characteristics and performance on various educational goals. When used for research purposes, the Report Card data has two primary limitations.

First, DC data on the Report Card includes only courses categorized as DC according to IL state agencies' definition, which means that the courses must count for both high school and college credit. Courses that count only for college credit (termed *dual enrollment* in IL) are not included. This means that some districts that offer opportunities for students to participate in college coursework could be categorized in the current study as offering little or no DC. Districts may vary in how they track DC participation internally, and internal figures could differ from the figures they report to ISBE.

Second, the DC data includes information only on the number of students who participated in any DC. It does not provide information on the type of DC coursework students participated in, the number of DC courses students took, or the timing of participation across students' high school trajectories. All of these characteristics (type, amount, and timing of coursework) may vary across districts and student subgroups. For example, imagine District A advises students to spread DC coursework participation across multiple years, while District B advises students to concentrate DC coursework in their senior year. In this scenario, District A would show higher average participation across years in the dataset, even though students in District B may enroll in the same number of DC courses.

This study was also limited by a lack of data on which community colleges and other higher educational institutions school districts partnered with to offer DC. The amount and type of DC that a district offers, as well as the cost of DC participation to students, depends directly on these partnerships. This study examines DC patterns in the school districts located within each community college district's boundaries, but future research should examine how participation rates at the level of community college districts vary statewide.

The Illinois Community College Board (ICCB) provides detailed data that could facilitate this type of analysis. ICCB's annual report on DC provides information about DC participation by community college and course type, among other data.[4] ICCB also annually shares a set of data tables that includes information on dual enrollment in addition to DC among community colleges.[48] Although this information does not link community colleges to school districts, it could be examined to complement this study's findings on equity in participation.

Interpretation

Findings from this study have shown that DC participation increased for all racial/ethnic subgroups and for students with IEPs, ELs, and low-income students in Illinois from SY18 to SY22. However, participation gaps have not only persisted during this timeframe; they have grown for all of the

demographic subgroups studied, mirroring a trend observed nationally.[31] The source of these gaps can be broken down into two components: differences between districts with varied student demographic compositions in the amount of DC offered, and differences within districts in student demographic subgroups participation rate.

As observed by Taylor and Lichtenberger[41] a decade ago, DC participation in Illinois has continued to be highest in rural locales and towns, especially in southern parts of the state. This finding aligns with DC trends observed nationally,[35–37] and it suggests that districts in these locales offered more DC courses and/or made DC coursework accessible to more students than other districts. White students tended to be concentrated in these districts, while students from all other racial/ethnic subgroups, including Asian students, were concentrated in districts that had relatively low DC participation. It follows that high statewide participation observed among Asian students was primarily the result of high DC participation among Asians within districts, rather than high Asian representation in districts with more DC courses. ELs and low-income students were also concentrated in districts with low DC participation.

The racial/ethnic subgroups with the highest DC participation in SY18–White and Asian students, followed by students of two or more races–were also concentrated in districts that had the most growth in DC participation by SY22. Other racial/ethnic subgroups, along with students with IEPs, ELs, and low-income students, were concentrated in districts with minimal growth or even declines in DC participation, resulting in widened participation gaps.

Community college districts appeared to play a role in the amount of DC coursework high school districts offered. Three community college districts in particular–Lewis and Clark, Kaskaskia, and Rend Lake–stood out for the high DC participation rates in the school districts within their boundaries.

As expected, districts that had higher rates of participation in DC also tended to have higher participation in CTE, though the extent of the overlap between CTE and DC coursework varied between districts. AP coursework participation took the opposite pattern, tending to be higher in districts where DC participation was lower. Similar findings have been observed nationally,[40] and they suggest that districts with low DC participation do not necessarily lack opportunity for students to participate in early college coursework; instead, districts may decide to invest in one type of coursework or the other. For example, Chicago Public Schools, the state's largest district, averaged a DC participation rate of less than 5% from SY18-SY22. Yet CPS had much higher participation in AP coursework than DC, averaging a 26.1% participation rate in the same period. Additionally, CPS averaged a 5% participation rate in IB. Still, it is important to understand gaps in access to DC in its own right, since DC may benefit some students more than other types of rigorous coursework depending on the colleges students want to attend, their intended majors, and their academic performance.

The participation gaps resulting from demographic composition differences between districts with different course offerings are compounded by participation gaps within districts. Asian and White students had the highest average participation rates relative to within-district students from other

racial/ethnic subgroups, and students with IEPs, ELs, and low-income students tended to have participation rates below their district average. In addition to Asian students, American Indian/Alaska Native, Latino, and EL students showed higher than average growth within districts, helping to narrow pre-existing participation gaps within districts (even as statewide participation gaps increased). However, it is important not to overstate the extent to which these gaps have been reduced. If participation were to continue increasing at the same rate for each student subgroup, it would take 17 years for American Indian/Alaska Native students and 19 years for Latino students to close the within-district gap with White/Asian students, and it would take 116 years for EL students to close the gap with average district students. For all other subgroups, if subgroup participation in districts were to continue increasing at the same rates, we would see ever-growing within-district gaps.

Conclusions and Implications

Educators, student advocates, and legislators have made substantial efforts to expand DC in Illinois. Since 2018, they have passed and enacted legislation specifically to improve participation among historically underrepresented student racial/ethnic subgroups, ELs, students with IEPs, and low-income students. This study has shown that DC participation among these subgroups has indeed grown since SY18, but the state is still far from equitable representation. Student subgroups who can benefit the most from DC–those with low college enrollment and completion rates–continue to have the lowest rates of participation.

It is clear that more work must be done to improve DC access. Fortunately, a growing body of resources provides guidance on how efforts to scale DC can be strategically designed to improve opportunity for underrepresented subgroups (See the callout box, *"Resources for Equitable Dual Credit Program Design."*) Some of the provisions set forth in recent legislation reflects this guidance.

As this legislation is implemented and work to expand DC continues, stakeholders invested in achieving equitable representation will need to focus on (1) increasing DC offerings in districts that currently have the lowest participation rates, especially urban and suburban districts and districts serving higher proportions of the underrepresented student subgroups discussed in this report; and (2) expanding participation in the DC coursework that districts already offer to more students from subgroups that are currently underrepresented. Only by attending to these issues of representation can the potential for DC coursework to reduce inequities in postsecondary educational attainment be fulfilled.

RESOURCES FOR EQUITABLE DUAL CREDIT PROGRAM DESIGN

Illinois Focused

Strengthening Supports for Dual Credit Instruction in Chicago: Takeaways and Promising Practices[49] – Education Systems Center, Northern Illinois University

Illinois Dual Credit Report: Current Policy Landscape and Policy Recommendations[50] – Illinois Alliance of Concurrent Enrollment Partnerships

Expanding Equity in Dual Credit[51] – Stand for Children, Illinois

Nationally Focused

Unlocking Potential: A State Policy Roadmap for Equity and Quality in College in High School Programs[52] – College in the High School Alliance and the Level Up coalition

Dual Enrollment Equity Pathways (DEEP) **-** Community College Research Center, Teachers College, Columbia

- Rethinking Dual Enrollment as an Equitable On-Ramp to a Career-Path College Degree Program After High School[53]
- DEEP Insights: Redesigning Dual Enrollment as a Purposeful Pathway to College and Career Opportunity[54]

The Dual Enrollment Playbook: A Guide to Equitable Acceleration for Students[55] – Community College Research Center, Teachers College, Columbia

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Appendix

Table A1. Statewide proportion of students participating in DC, by demographic subgroup, SY18-SY22

	Proportion of Illinois Students in DC, by Year					Change, SY18-SY22 (percentage points)
	SY18	SY19	SY20	SY21	SY22	
Total	**10.2%**	**10.8%**	**11.9%**	**13.7%**	**14.0%**	**3.7**
American Indian/Alaska Native	7.4%	7.9%	9.6%	11.4%	9.1%	1.7
Asian	9.3%	10.9%	12.5%	15.2%	15.5%	6.2
Black/African American	7.3%	7.1%	7.5%	10.2%	9.4%	2.2
Hispanic/Latino	7.5%	7.7%	8.7%	10.9%	9.9%	2.4
Native Hawaiian/Other Pacific Islander	9.3%	9.9%	10.2%	12.7%	9.7%	0.3
Two or More Races	9.9%	10.1%	11.8%	13.1%	13.6%	3.7
White	12.7%	13.6%	14.9%	16.3%	17.8%	5.1
IEP	5.6%	5.7%	6.1%	6.8%	7.1%	1.5
EL	3.9%	4.6%	5.2%	6.7%	6.5%	2.6
Low-income	7.9%	7.8%	8.4%	10.4%	10.1%	2.3

Table A2. Statewide proportion of student demographic subgroup, by DC participation band (SY18-SY22)

	DC Participation Band					
District Average Proportion in DC, SY18-SY22	**0-5%**	**6-15%**	**16-25%**	**26-40%**	**>40%**	All districts
% District observations	26.2%	30.8%	22.1%	14.6%	6.3%	100%
Racial/Ethnic Subgroup Statewide Proportions						
American Indian/Alaska Native	43.6%	30.0%	16.2%	7.8%	2.4%	100%
Asian	35.8%	30.6%	20.6%	12.2%	0.9%	100%
Black/African American	46.0%	33.9%	11.9%	4.1%	4.1%	100%
Hispanic/Latino	46.7%	30.3%	14.3%	7.1%	1.7%	100%
Native Hawaiian/Other Pacific Islander	43.6%	29.8%	15.4%	9.4%	1.8%	100%
Two or More Races	28.3%	38.3%	20.0%	10.1%	3.3%	100%
White	26.4%	33.2%	22.5%	13.9%	4.0%	100%
Statewide Proportions of IEP, EL, Low-income students						
IEP	36.2%	32.8%	18.4%	9.2%	3.4%	100%
EL	48.1%	29.3%	13.1%	7.7%	1.9%	100%
Low-income	42.8%	31.3%	15.3%	7.5%	3.1%	100%

Figure A1. Mean proportion of students participating in DC, SY18-SY22, by school district, Chicago and suburbs

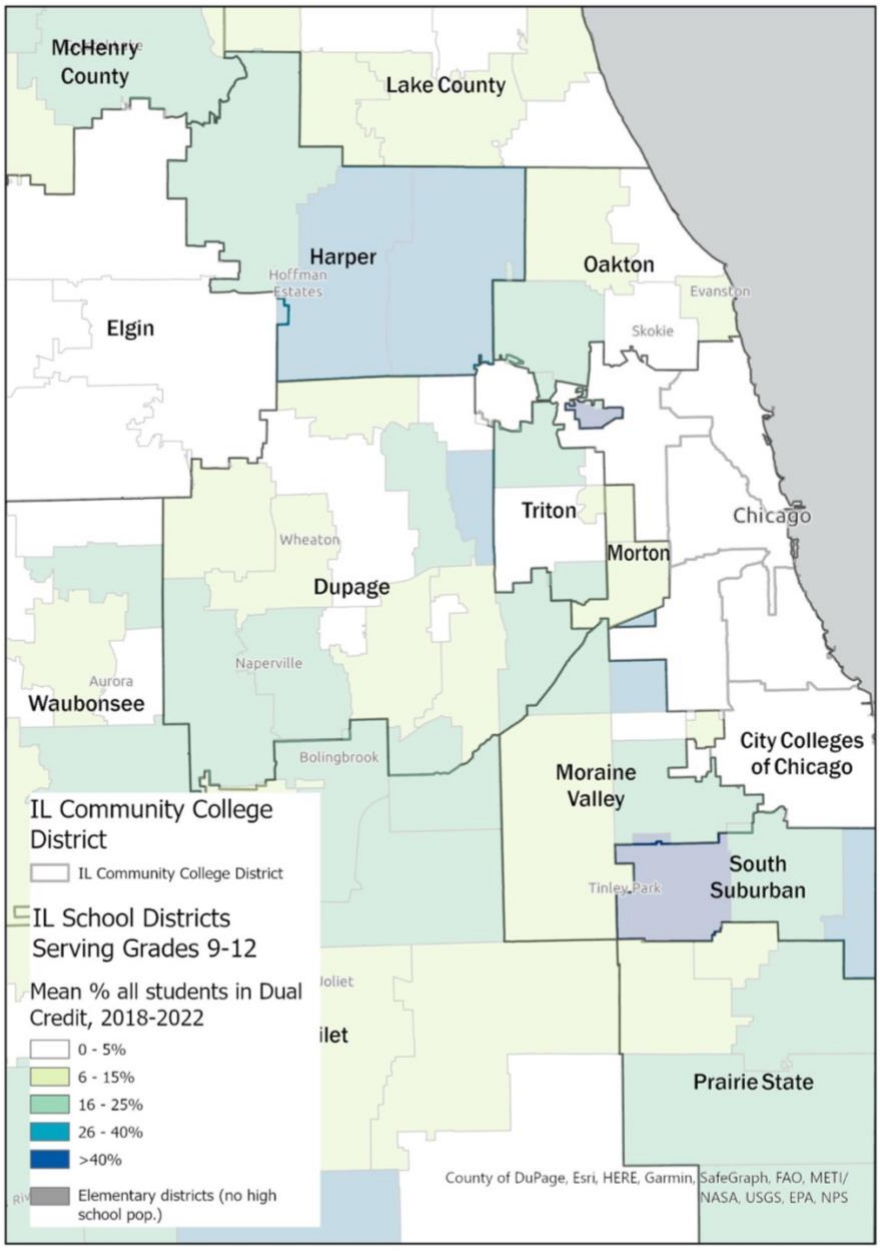


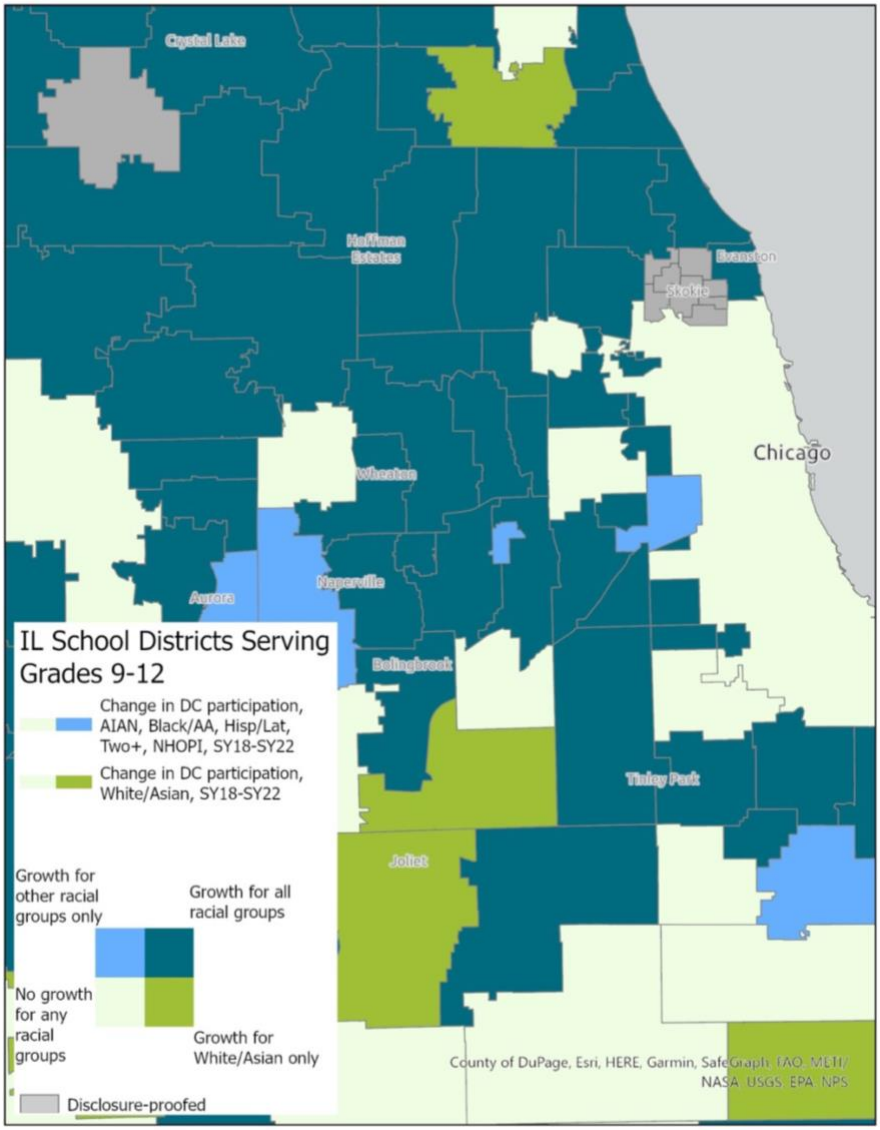
Table A3. Statewide proportion of student demographic subgroup, by DC change band (SY18-SY22)

	DC Change Band					
Percentage point change in DC participation, SY18-SY22	**< -3%**	**-3 - -1%**	**0-2%**	**3-9%**	**>9%**	All districts
% District observations	20.10%	20.00%	20.00%	20.20%	19.70%	100%
Racial/Ethnic Subgroup Statewide Proportions						
American Indian/Alaska Native	9.3%	26.8%	18.2%	24.0%	21.6%	100%
Asian	5.2%	17.1%	21.3%	37.3%	19.1%	100%
Black/African American	11.5%	44.3%	14.3%	14.0%	16.0%	100%
Hispanic/Latino	6.9%	34.6%	22.4%	19.9%	16.1%	100%
Native Hawaiian/Other Pacific Islander	10.6%	34.4%	15.4%	20.4%	19.2%	100%
Two or More Races	12.7%	15.1%	20.4%	27.3%	24.5%	100%
White	13.7%	9.8%	19.9%	29.5%	27.1%	100%
Statewide Proportions of IEP, EL, Low-income students						
IEP	11.8%	24.6%	19.0%	22.6%	21.9%	100%
EL	7.0%	33.9%	21.4%	21.9%	15.8%	100%
Low-income	10.9%	35.8%	19.1%	18.3%	15.9%	100%

Table A4. Average within-district proportion of students participating in DC, by demographic subgroup, SY18-SY22

	Average Within-District Proportion of Students in DC, by Year					Change, SY18-SY22 (percentage points)
	SY18	SY19	SY20	SY21	SY22	
Total	**14.4%**	**14.6%**	**15.3%**	**16.0%**	**16.6%**	**2.3**
American Indian/Alaska Native	9.5%	13.9%	11.8%	12.4%	13.3%	3.8
Asian	15.3%	15.0%	19.6%	20.9%	22.9%	7.6
Black/African American	9.0%	9.3%	9.4%	8.9%	9.9%	0.9
Hispanic/Latino	11.8%	11.8%	13.3%	14.3%	15.0%	3.2
Native Hawaiian/Other Pacific Islander	10.5%	12.1%	12.8%	13.3%	10.8%	0.2
Two or More	13.0%	12.4%	13.3%	13.0%	13.5%	0.6
White	14.8%	15.0%	15.8%	16.5%	17.3%	2.6
IEP	7.3%	7.1%	6.9%	7.3%	7.7%	0.4
EL	5.0%	6.5%	7.9%	7.8%	8.0%	3.0
Low-income	11.2%	11.1%	11.5%	11.7%	12.3%	1.2

Figure A2. Change in racial/ethnic subgroups participating in DC, SY18-SY22, by school district, Chicago and suburbs



Note: AIAN: American Indian/Alaska Native; Black/AA: Black/African American; Hisp/Lat: Hispanic/Latino; Two+: Two or more races; NHOPI: Native Hawaiian/Other Pacific Islander