

Uneven Access:
Dual enrollment programs and students of color in Minnesota

A Dissertation
SUBMITTED TO THE FACULTY OF THE
UNIVERSITY OF MINNESOTA
BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

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May 9, 2016

Acknowledgements

Thank you to my participating schools and the students, counselors, administrators, and teachers who shared their experience with me. I am indebted to them for sharing their perspective and helping me to understand the climate and processes at the school.

I am also indebted to my contacts within the high schools who helped recruit teachers and students, plus my district contacts who provided space, resources, and time to help this project along.

I owe great thanks to the Minnesota Office of Higher Education for sponsoring a portion of this work, providing space and resources. I must extend a HUGE thank you to Meredith Fergus. Meredith provided regular guidance, shared her knowledge, and always showed patience with me as I explored the SLEDS data set. She answered endless questions as I worked to understand the nuances of higher education data collection. Thank you to the OHE Research staff for treating me as one of the team and sharing your expertise. Also, thank you to MDE's Kara Arzamendia for her knowledge on the collection of K-12 data.

I am deeply grateful to my professors, advisors, and my committee for their work on this project. I learned a great deal from each of you and your contributions shaped the direction of this research. Na'im Madyun's Access and Success class first introduced me to dual enrollment, and I immediately knew I had found my topic. Additionally, Na'im's style and approach to equity work inspired me to ask questions and approach topics that scared me, but that I knew were important. Karen Miksch, I am forever indebted to your positivity, sharp wit, knowledge of the topic, and ability to provide the right words of encouragement to move me forward. Thank you, Rebecca Ropers-Huilman, for your ongoing support and guidance on my writing and for continuing to expect the best from me, knowing I could deliver. I have learned many lessons I will carry with me as a practitioner and scholar. Finally, to Jarrett Gupton – a deep and sincere thank you. Without you, this degree and research would not be possible. Your guidance, texts, space, and cyber shouting provided encouragement, built trust, and helped me focus on reaching my goals and achieving this degree.

Thank you to all of my graduate school friends: Seth, Jamal, Amy, Valera, Nick, Pakou, Garrett, Leah, Jayne, Erin, Anne, and Krista - thank you for sharing your work, words of wisdom, and your lives with me on this journey. The texts, emails, Facebook messages and posts kept me sane. Not to mention all the laughs and commiserating when the times got tough. I look forward to more laughs and commiseration at conferences in the future!

Thank you to all my amazing supervisors over the past six years – Emily, Mary Ann, Greg, Russ, and Michael. Thank you for your flexibility, your encouragement, and desire to talk about my courses and my work. Your trust and investment in me made this

possible. Also a special shout out to my mentor, Buffy Smith, whose authenticity, generosity, and friendship helped me through some of the tough times on this journey.

Thank you to my editing crew – Amy Schult, Erin Slattengren, and Katie Walter. I am so happy you all absorbed everything I was supposed to learn in high school and college about writing. Your APA savviness, wordsmithing, and grammatical corrections moved this project along. Without your skills, I wouldn't be here today!

Thank you to my family and friends for all their support. Thank you for all the encouraging words, listening to my endless complaining, accepting my distractedness or disappearance from your lives and for understanding when I had to say 'no' to all the fun things happening in life. I can't wait to get back to you!

Thank you, Mom and Dad, for helping to raise my children and stepping in to watch the kids during classes or on weekends. Thank you for calling to ask how things were going and for listening to the process, even when it made no sense to you. Also, thank you for all the support you've given me in the past 20 years as I've sought new ventures and challenges along the way. Your support and encouragement has kept me going.

The biggest thanks goes to my #1 supporter, cheerleader, and husband, Tim Sheehey. Tim selflessly took on the role of main caregiver, housekeeper, and cook for the better part of six years. I cannot thank him enough for all he did with our children, all the support, kind words, and hugs he has given, plus all the pages he's read and edited, and everything else he endured during this process. Thank you from the bottom of my heart! You are amazing and strong and I couldn't be happier to earn this PhD with you.

DEDICATION

To Dominic and Caroline

“Mom’s Big Project is complete.”

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Chapter One: Introduction

Bells ring loudly in the quad. Students with backpacks fill the small area, full of excitement, apprehension, and happiness. The sound of chanting begins to fill the air, and students, dressed with t-shirts announcing their participation in the class of 2017, look through the arches. The annual convocation ceremony commences as the first-year students march forward. The opportunities, possibilities, desires, and unknowns of the next four years fill the new students' heads as they walk forward. At four-year colleges across the nation, students participate in unifying and welcoming events like this to help solidify their integration and likelihood of persistence to degree (Tinto, 2012).

Unfortunately, institutionalized racism creates societal and structural barriers that limit access to the desirable baccalaureate degree for students of color, leaving these students off campus and out of this picture.

Students of color achieve secondary educational credentials at lower rates than White students in the United States. The most recent National Center for Education Statistics (NCES) report, with data for the 2011 high school graduating class, shows 16 to 22 percentage points separating the graduation rates of Asian/Pacific Islanders (87 percent) and White students (84 percent) from the other racial/ethnic groups, with American Indian/Alaskan Native at the bottom (65 percent) (Stetser & Stillwell, 2014). Gaps such as these suggest inequity in educational environments among White and Asian/Pacific Islanders experiences compared to the experience of other communities of color. Moreover, without a high school diploma, admission into four-year institutions is nearly impossible.

Postsecondary institutions also see differences in enrollment and achievement along racial/ethnic lines. There are 29 million students enrolled in postsecondary education nationwide; students of color represent only 36 percent of this group. (National Center for Education Statistics, 2014). Even with college enrollment rates approaching levels proportionate to population rates (National Center for Education Statistics, 2014; U.S. Census Bureau, 2014); college enrollment and attainment remains stratified by race/ethnicity when taking into account institutional type (Adelman, 2007; Lieber, 2009; Lumina Foundation, 2012; Ross et al., 2012). Nationally, students of color make up 45 percent of the student body at public, two-year institutions, 59 percent at private, two-year institutions and only 35 percent of the student body across four-year institutions (National Center for Education Statistics, 2014).

The highest enrollment numbers for students of color remain concentrated in two-year institutions (National Center for Education Statistics, 2014). Two-year institutions, while more accessible, notoriously report lower retention and graduation rates than four-year institutions. Attendance at two-year institutions can leave students with few college credits, loan debt, and no degree to enhance their economic viability. This has led scholars and policymakers to argue that to ensure degree attainment, students should enroll directly in four-year institutions (Long & Kurlaender, 2009). According to Bowen & Bok (2000), enrollment in four-year institutions increases the likelihood of graduation for students of color; this is especially true when the institution is more selective especially the more selective the institution. As a result, increasing the number of

students of color attending four-year, selective, institutions has become a goal for college access scholars and advocates.

Overall, bachelor's degree attainment has increasingly been a goal and focus for American high school graduates. In fact, bachelor's degree attainment increased across all racial groups over the past two decades, with the greatest increase in the past ten years. While the increases should be celebrated, Whites accelerated much more quickly than other groups, and the end result has been an even wider gap between racial/ethnic minorities and Whites. Instead of an 8 to 15 percentage point difference between Whites and racial/ethnic minorities, the gap is now as much as 20 to 25 percentage points. This widened gap exacerbates the problem and requires more attention from educational scholars.

Minnesota's Educational Landscape

A cursory review shows the State of Minnesota's educational outcomes mirror the national trends, but a closer look reveals even greater disparities among racial/ethnic communities. White students graduate from high school at double the rate of American Indian students (see Table 1.1). According to Stetser and Stillwell (2014), Black/African American and Hispanic students graduated from Minnesota's public high schools at rates 30 percentage points lower than their White peers. Minnesota, the focus of this paper, graduates students of color from high school at much lower rates than the national average. Minnesota's racial minority groups graduate nearly 20 percentage points below the national averages. Furthermore, Minneapolis and St. Paul, the most racial/ethnically diverse school districts in the state, display even worse high school graduation rates for

students of color than the state average (Generation Next, 2013). Low numbers of students of color reaching high school graduation directly decreases the likelihood and opportunity of college enrollment and persistence.

Table 1.1 High school graduation rates by race/ethnicity for Minnesota and the nation

	Percent of Minnesota's high school graduates	Percent of Nation's high school graduates
White	84	84
Asian/Pacific Islander	72	87
Black/African American	49	67
Hispanic/Latino	51	71
Native/American Indian	42	65

Source: MN Office of Higher Education, 2014.

The result of poor educational outcomes within Minnesota's high schools extends to the postsecondary level. Even if Minnesota's students of color graduate from high school, a lower percentage of them enroll in postsecondary education within two years of graduation. Four out of five Asian/Pacific Islander and White public high school graduates enrolled in postsecondary institutions within two years of high school graduation, seven out of 10 Black/African American public high school graduates enrolled in postsecondary within two years of graduation, but less than two out of five American Indian and Hispanic/Latino graduates enrolled in postsecondary within two years of graduation (Minnesota Office of Higher Education, 2014). Without clear pathways leading to higher education, Minnesota's students of color remain underrepresented in postsecondary institutions.

Similar to the national data, Minnesota shows disparities in enrollment patterns, based on institutional choice for enrollment. Minnesota's students of color enroll in two-year institutions at higher rates than four-year institutions (Minnesota Office of Higher

Education, 2014), with an even greater difference between public and private institutions. Additionally, Minnesota's White, public high school graduates are more likely to pursue higher education outside of the state, and at more selective institutions than students of color (Minnesota Office of Higher Education, 2014).

These statistics point to a serious problem within Minnesota's K-12 system affecting the support and preparation of students of color for high school graduation and postsecondary attainment. Low high school graduation rates and low enrollment rates into institutions with demonstrated quality and performance results in low college graduation rates for communities of color. Therefore, Minnesota sees a larger underrepresentation of people of color as bachelor's degree holders, compared to the nation (see Table 1.2).

Table 1.2 Degree attainment for population aged 25 or older by race/ethnicity

	Percent of Americans with bachelor's degree or higher	Percent of Minnesotans with bachelor's degree or higher
White	40	32
Asian/Pacific Islander	58	44
Black/African American	20	19
Hispanic/Latino	16	14
Native/American Indian	15	12

Source: MN Office of Higher Education, 2014.

Problem Statement

Across the nation, and within Minnesota, inequities exist between students of color and their White counterparts in secondary and postsecondary educational attainment. Drawing attention to the gaps and identifying patterns of disparities across racial/ethnic lines sheds light on the structural racism inherent in the American – and Minnesotan – educational system. Identifying, naming, and addressing structural racism

within education opens the conversation to discuss necessary changes in public policy, school and institutional culture, and access opportunities.

Public policy affects access opportunities and school culture. School and institutional culture shape the college-going identity of students. Students create a college-going identity through the college-going culture of the high school. College-going culture is defined as an environment where all students see the need and expectation of postsecondary plans and those plans are reinforced throughout the school staff, from custodial workers to the principal (McDonough, 2005). The strength of the college-going culture of a high school can affect the educational outcomes for students. A strong college-going culture consists of: academic momentum; an understanding of how college plans develop; a clear mission statement; comprehensive college services; and coordinated and systemic college support (Corwin & Tierney, 2007). A weak college-going culture lacks the above components or insufficiently utilizes those components and leads to students' underpreparation, undermatching, and lack of guidance on the college process (Corwin & Tierney, 2007). According to Corwin and Tierney (2007), dual enrollment courses, where students earn college credit by taking college courses in high school, can create academic momentum and help increase coordinated and systemic college support, two components of a strong college-going culture. Therefore, a high school aspiring to a strong college-going culture should implement dual enrollment opportunities.

Proponents of dual enrollment argue that implementation of these opportunities and courses could be useful in improving postsecondary access and readiness for

traditionally underrepresented students by enhancing the individual's college-going identify, school experience, college knowledge, and altering the school culture (Barnett & Stamm, 2010). However, little is known about how dual enrollment programs operate as part of the college-going culture and whether high schools with high-minority enrollment effectively utilize these programs as a pathway to baccalaureate education for students of color.

Purpose of Study

The purpose of this study is twofold. The first is to identify how structural racism affects opportunities for dual enrollment programming for students of color. The second is to identify how high-minority high schools use dual enrollment programming and whether or not the current practices serve as a tool for access and readiness for a baccalaureate degree. The quantitative phase of the study analyzes the dual enrollment offerings of high-minority high schools to identify inequities in access for students of color and determine if opportunities to pursue baccalaureate pathways exist. This mixed methods study will provide important insights about what opportunities exist at high-minority high schools and how dual enrollment programs operate in high-minority high schools for Minnesota's students of color.

Significance of the Study

College enrollment, persistence, and attainment rates are important indicators of equity and success for a population. Currently, students of color in Minnesota and across the nation do not achieve educational success at the same levels as their White counterparts, suggesting significant inequities. Previous research shows dual enrollment

programs, a potential college access point, record low participation rates for students of color and highlight disparities in access across socioeconomic and geographic lines. These disparities illuminate structural barriers that limit marginalized students' participation and access to postsecondary education (Austin-King, Lee, Little, & Nathan, 2012; Conger, Long, & Iatarola, 2009; Corra, Carter, & Carter, 2011). Therefore, this research adds state-level analysis to the access conversation and suggests dual enrollment programming can serve as a tool to improve educational outcomes. Additionally, this research provides the background for conversations on how the school and classroom environment, course options, and participation rates within dual enrollment programs create pathways to postsecondary enrollment for students of color.

This research strives to inform secondary and postsecondary policy recommendations on the use and expansion of dual enrollment. Scholars report that opportunities for participation in dual enrollment are not universally available, with some high schools or districts offering multiple opportunities, and other offering few or no options (Hoffman, 2005). Through the quantitative phase, this research identifies the dual enrollment opportunities, or lack thereof, within the state for students of color. Additionally, the qualitative phase conducts an examination of how high school culture affects participation in dual enrollment. Through this mixed methods analysis, this research adds to a dearth of rigorous research on dual enrollment, and enhances the quality of research available on the topic.

Research Questions

This research attempts to answer the following questions:

1. To what extent does dual enrollment programming increase access for students of color and disrupt structural racism? To what extent does dual enrollment programming perpetuate systemic racial inequities?
2. Does state level data identify a pattern of racial inequities in dual enrollment participation and opportunities?
3. How do those who administer or participate in dual enrollment programs describe their experiences? How do their descriptions differ based on their positionality (e.g. administrators, teachers, students, etc.)?
4. How do different organizational practices and administrators' expectations influence dual enrollment opportunities for students of color?

The first question established the foundation for this study. This question sought to identify how dual enrollment programming operates within the State of Minnesota and determine whether dual enrollment programs act as a mechanism to overcome systemic and structural inequities. A combination of both quantitative and qualitative data collection and analysis were employed. The second question, descriptive in nature and addressed through the initial quantitative phase of the project, sought to provide an understanding of state-wide patterns of dual enrollment opportunities in Minnesota's high-minority high schools compared to predominately White high schools. An understanding of the dual enrollment participation patterns and trends within high schools enhanced the image of Minnesota's educational landscape for students of color.

The third question, addressed through the qualitative stage of the study, provided an opportunity for students, teachers, school staff, and administrators to share their understanding, involvement, and expectations for dual enrollment programming as a tool for student success. Each participant, speaking from their own personal experience, clarified how dual enrollment programming functions and fits in the college-going

culture of the school. Analysis of responses and explanations based on positionality identified power differentials that impact how dual enrollment programming functions as a pathway for postsecondary education.

The fourth question, addressed through the qualitative phase of the study, identified barriers and supports available for participants to engage and succeed in dual enrollment programming. This process articulated the current organizational practices and attitudes of the adults who influence students' interest and experience in dual enrollment programming. These four questions drove this research study and its design and data collection.

Methodology Overview

An explanatory sequential mixed methods design answered the research questions posed on Minnesota's dual enrollment offerings for students of color. The first quantitative phase included the use of descriptive statistics and cross tabulations to identify state trends of dual enrollment participation. This included secondary data analysis from the Statewide Longitudinal Education Data System (SLEDS) to examine which high-minority high schools and postsecondary institutions engaged in dual enrollment programming. The second phase consisted of a qualitative, multiple-site case study of high-minority public high schools to enhance the knowledge acquired through the quantitative state-wide analysis. The qualitative phase identified structures and processes that either perpetuated or overcame racial inequities. The cases for the qualitative phased were selected from the quantitative analysis. The case study analysis included document analysis, observation, and in-depth interviews with stakeholders,

which led to an understanding of organizational practices, attitudes, and expectations in the high school setting impacting dual enrollment participation.

Definition of Key Terms

Dual enrollment. The term dual enrollment has multiple meanings and definitions within the literature and in the field of education. Dual enrollment can be known as dual credit and/or concurrent enrollment. The choice of terminology varies by state, researcher, and program. For this paper, dual enrollment is defined as, “collaborative efforts between high schools and colleges in which high school students are permitted to enroll in college courses and, in most cases, earn college credit that is placed on a college transcript” (Allen, 2010, p. 1). This definition includes courses that take place at the student’s high school or on a college campus, and may be taught by a specially trained high school teacher or college faculty member (Karp & Jeong, 2008; Ulate, 2011). Programs within this definition require high school students’ access to postsecondary courses and for students to earn credit at both the high school and postsecondary institution simultaneously.

Students of color. Students of color include the four broad categories for racial self-identification used by the U.S. Census Bureau: Black/African American, Asian, Native Hawaiian/Pacific Islander, and Alaska Native or American Indian. Additionally, the Census collects information on those who identify ethnically as Latino/Hispanic. I combined Asian and Native Hawaiian/Pacific Islander into one racial/ethnic group to match data provided by SLEDS. I decided to present data on all of the aggregate categories for race/ethnicity rather than presenting data on only the underrepresented

groups in higher education to shed light on the disparities in education within and between communities of color, compared to White communities. Also, I recognize similarities and dissimilarities exist within and across each broad racial/ethnic group and that a specific ethnic group may fare better or worse than the broad racial/ethnic category.

High-minority high school. The State of Minnesota, in its proposal for the U.S. Department of Education's Race to the Top grant, determined "high-minority" schools through a ranking system of schools by percent of minority students, then separating the schools into four quartiles. The quartile of schools with the highest proportion of minority students was defined as "high-minority," and the quartile of schools with the lowest proportion as "low-minority" (State of Minnesota, 2010). High-minority schools in the top quartile of minority populations had a minimum of 37.2% students of color enrolled for the 2009-10 school year (State of Minnesota, 2010). I decided to use a similar method, but identified high-minority schools as high schools with a minority population of 37.5% and above.

Organization

This dissertation consists of seven chapters. Chapter one lays out the current situation, problem statement, significance of the research, and the proposed course of action for this study. Chapter two reviews the literature informing the issue and identifies the theoretical foundation guiding this research. Chapter three explains the methodological framework and research design, including case selection, instruments, environment, and methods. Chapter four presents the quantitative results from the secondary data analyses of SLEDS data set. Chapters five and six present the qualitative

results from the second phase of the study. Chapter seven identifies the implications of the findings on educational policy and practice, and proposes future research opportunities.

Chapter Two: Literature Review and Theoretical Frameworks

This study examines the role of dual enrollment in disrupting or perpetuating systemic inequalities as articulated in the research questions. To answer these research questions and provide a context for this research, I examine the current educational inequities for students of color in Minnesota and throughout the nation. Also, I scrutinize the processes and structures used by high schools in creating, promoting, and executing dual enrollment programming. Finally, I identify the ways Critical Race Theory can be used as a lens for interpreting the data. With this background information, a more accurate picture of dual enrollment as a tool for increased college access and readiness for students of color emerges.

A Review of the Literature: College Access and Readiness of Students of Color

Students of color enroll in four-year institutions at lower rates than their White peers, yet scholars report no gap in college aspirations between White students from more affluent schools and racial/ethnic minority students from lower-resourced schools (Haskins & Rouse, 2013). Students of color want to acquire a bachelor's degree at similar levels as their White peers, but for many students the goal remains unattainable. This raises the question, What makes the experience for students of color on their journey to high school and college graduation different than that of their White peers?

Students of color encounter systemic and structural barriers based on race that limit their educational opportunities and preparedness. Students of color disproportionately live in communities with fewer resources and higher rates of poverty and crime. Further, since school funding is determined by property values, students of color often attend

under-resourced schools. Under-resourced schools lack experienced and high quality teaching staff who have adequate cultural competency to positively connect with students and create meaningful parent communications, two components imperative to students' success (McDonough, 1997; Perna & Titus, 2005). Additionally, administrators and teachers at under-resourced schools typically maintain lower expectations for students, utilize a less rigorous curriculum, and show inefficient or absent connections to higher education and the business community (McDonough, 1997; Perna & Titus, 2005; Walpole et. al., 2005). In general, under-resourced schools lack a strong college-going culture. In turn, attending an under-resourced school is detrimental for students of color seeking a path to higher education.

Impacts of Attending Under-Resourced Schools

Attending an under-resourced school can affect a student's pathway to postsecondary education in three distinct yet overlapping ways. First, students are likely to have a less rigorous curriculum, thereby leading to academic underpreparation. Second, the school may lack a strong college-going culture, leading to low graduation rates and undermatching. Third, students may have limited access to guidance counselors dedicated to helping students with the college selection process. This may deprive students of information they need to make informed decisions about preparing for, applying to, and selecting a college.

Not only do students of color arrive on four-year campuses less frequently, research confirms that students of color fall behind their counterparts academically. Students of color arrive on college campuses underprepared for an academic journey and

often fail (Achieve, 2011; ACT, 2012; Adelman, 2006; Broton & Wilder, 2009; Conley, 2007; Creech, 1997; Lumina Foundation, 2012). Under-preparation often stems from an unchallenging curriculum and low expectations from teachers and administrators. Year after year, ACT (2012) reported African American and American Indian students are the least likely to take a core high school curriculum (four years of English plus three years each of math, science, and social studies). Additionally, ACT College Readiness Benchmarks, indicators of first-year college achievement, found on average only 15 percent of African American students met any college readiness benchmark compared to 23.4 percent of American Indian students, 28.4 percent of Hispanic students, and 52 percent of White students (ACT, 2013). These markers are associated with increased academic readiness, and not meeting them leads to poor college performance and weak rates of persistence in college, especially for students of color (Duncheon, 2013; Knight & Marciano, 2013). Underpreparation sets students of color up for failure in postsecondary environments. Schools must employ initiatives to overcome issues of inadequate K-12 education, poor counseling, discrimination, and the myriad individual reasons for a broken pathway to help students of color to compete and succeed in higher education (McDonough, 2005; Perna, 2006; Perna et al., 2008; Rosenbaum, Miller, & Krei, 1996; St. John, Daun-Barnett, & Moronski-Chapman, 2012).

The high school environment affects students' educational outcomes. Attending a high school with a strong college-going culture can help increase the academic preparation, college knowledge, and proper matching of students to institutions. College-going culture is defined as an environment where all students see the need and

expectation of postsecondary plans, and those plans are reinforced throughout the school staff, from custodial workers to the principal (McDonough, 2005). Guidance counselors or dedicated college counselors may direct or guide the college process, but overall references and discussions on college attendance are infused throughout the curriculum and central to activities at the school. Scholars view the breadth and depth of college-going culture as a major factor in shaping students' college expectations. As part of this culture, students create their own college-going identity, which positively shapes perceptions and expectations for their postsecondary enrollment (McDonough, 2005; Perna, 2006).

High-minority high schools often lack an identifiable college-going culture (McDonough, 2005; Tierney, Corwin, & Colyar, 2004), and in turn, students in these high schools often lack a defined college-going identity (Lieber, 2009; McDonough, 2005; Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008; Tierney, Corwin, & Colyar, 2004). With little to no school-wide college planning strategies and preparation materials, students of color become casualties of poorly conceived and disorganized college-going cultures, resulting in little re-enforcement of postsecondary planning and low college enrollment rates (Corwin & Tierney, 2007; Lieber, 2009; McDonough, 2005; Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008; Tierney, Corwin, & Colyar, 2004; Venezia, Krist, & Antonio 2003). Without a strong college-going culture, students of color select and attend less selective institutions (Bailey, Jenkins, & Leinbach, 2005; Green 2006), thus ultimately affecting their postsecondary outcomes.

In addition to non-existent or weak college-going cultures, college counseling remains under-funded in low-resource and high-minority schools. This is especially problematic because students of color typically have access to less information about the college-going process (McDonough, 2005; Noeth & Wimberly, 2002) and rely more heavily on their high school for guidance than their White peers (Lieber, 2009; McDonough, 2005; Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008; Tierney, Corwin, & Colyar, 2004). Research shows students of color lack the knowledge of the college process – especially financial aid components – considered crucial for increasing college access and readiness (McDonough, 2005; Perna et al., 2008; Tierney, Colwin & Colyar, 2004). This is especially true for students with limited exposure to college role models or first-hand experiences with college or university settings. Therefore, high schools become the de facto college advisor and counselor, which is problematic when the setting lacks a solid college-going culture and limited access to tailored college counseling.

Additionally, guidance counselors, especially in high-minority schools, have large caseloads, and the counselors, not trained as college admissions experts, often do not feel competent to guide students through the process (Louis & Gordon, 2006; McDonough, 2005; Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008). According to an article in *MinnPost*, Minnesota ranks poorly for counselor-to student-ratio (Stellar, 2014), with an average ratio of 792 students assigned to one counselor. Furthermore, families of color with low incomes are often unable to compensate for inadequate college counseling, because they lack the college knowledge, social and cultural capital, or experience to

serve as guides through the process (Lieber, 2009; Tierney & Hagedorn, 2002). This leaves students of color to navigate the system on their own.

With a lack of proper guidance, students of color, even those adequately prepared, struggle with the college choice process. Scholars document haphazard decision-making, a lack of understanding of the process, inability to accurately compare colleges, and misconceptions of financial aid as impediments in decision making (Lieber, 2009; McDonough, 2005; Noeth & Wimberly, 2002; Tierney, Corwin, & Colyar, 2004). Students unable to make well-informed choices instead decide based on one category, such as finances, familiarity, or perception of a college's environment (Noeth & Wimberley, 2002; Perna, 2006; Perna et al., 2008; Rosenbaum, Miller, & Krei, 1996). This results in academically prepared students of color attending less expensive and selective colleges and universities than they may qualify to attend (Bailey, Jenkins, & Leinbach, 2005; Green, 2006; Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008). Research confirms attending a more selective four-year institution is linked to greater completion rates and better economic outcomes (Bowen & Bok, 2000; Selingo, 2013). Therefore, when students of color select institutions with more open admissions policies, they decrease the likelihood of degree attainment. Undermatching, defined as selecting an institution from a lower tier than one they may qualify for, is one of the biggest equity concerns in higher education.

This study, guided by the third and fourth research questions, focuses on the experiences of participants, educators, and others engaged with dual enrollment with an emphasis on how the organizational practices and expectations can influence

opportunities for participation. The questions provide data related to under-resourced schools, experience of students of color and other factors identified by scholars as key barriers to access. The findings illuminate the effect of a college-going culture and how implementation (or lack thereof) of dual enrollment affects access and readiness for students of color in the select high schools.

Educational Issues for Students of Color: Shifting from a Deficit Approach

To achieve new results and change the structural racism within the educational system, educators, scholars, and researchers must continue to evolve how they think about and problematize the educational attainment of this subset of students. Historically, educational researchers view student problems from a deficit mindset. This focuses the discussion about students of color and higher education on the “lack of” something within the individual or group as opposed to addressing the structural barriers that hinder the process. A new lens is necessary to challenge deficit thinking and analyze systemic deficits.

Deficit thinking views the student, or the student’s family, as having deficiencies that need to be fixed for alignment with the dominant culture, thereby paving the way for conventional success (Brown & Brown, 2012; Gorski, 2010; Walker, 2011). For example, when a student does not meet requirements for high school graduation, school administrators focus on what that individual student did not do or have in his/her life to be successful. Examples of deficits include lack of parental support, poor grades, truancy, lack of motivation/resiliency/grit, poor guidance, or lack of role models (Valencia, 2010). Students who fall into this category often become labeled “at-risk,” and the deficits

become central to their identity. Deficit thinking permeates the literature that addresses the lack of success of students of color within educational institutions, particularly in the K-12 field. While some scholars believe addressing the deficits provides an opportunity to find solutions, a number of other scholars find deficit thinking limiting or masking a systemic problem (Brown & Brown, 2012; Gorski, 2010; Valencia, 2010).

According to Gorski (2010), a deficit thinking lens can “justify existing social conditions by identifying the problem of inequality as located *within*, rather than as *pressing upon*, disenfranchised communities so that efforts to redress inequalities focus on ‘fixing’ disenfranchised people rather than the conditions which disenfranchise them” (p. 3 emphasis in original). For example, consider a female student of color who fails a physics course and reports feeling uncomfortable or unwelcome in the course because she was the sole female student of color. With a deficit thinking approach, helping the student cope with her difference individually and in isolation takes priority over analysis of the overall classroom environment, school policies, and social structures influencing her experience. Deficit thinking provides educators, researchers, and administrators the opportunity to direct interventions at a particular student or family behavior and performance, rather than understanding and influencing the systemic and structural inequality that persists. Additionally, deficit thinking undervalues and overlooks skills and talents outside of the dominant culture and labels them as deficiencies (Brown & Brown, 2012; Gorski, 2010; Valencia, 2010; Walker, 2011). Social psychologists argue deficit thinking feeds into self-fulfilling prophecies, stereotype threat, and other

psychological issues that continue to hinder the individual advancement of those with a minority status, such as students of color (Steele, 2010).

Research identifying and critiquing deficit thinking, especially within the K-12 system, has increased (Brown, Berkovitz, Muttillio, & Urban, 2010; Valencia, 2010). A group of scholars now challenge the deficit model and goad others to recognize that marginalized students or students from more challenging environments are individuals who have great skills and gifts, but whose skills or talents are undervalued and overlooked by mainstream culture (Steele, 2010; Valencia, 2010; Valenzuela, 1999). Focusing on the skills or strengths of students requires an asset-based approach. Asset-based thinking focuses on “a positive approach to learning – recognizing students’ strengths and helping students feel they can contribute to their own educational growth” (Paek, 2008, p.1). This includes creating opportunities for counternarratives and experiences to be heard, adding greater clarity and validation to the experiences of students of color. Using an asset-based approach, the sole female of color in the physics course should be encouraged to review the areas she succeeded in the course, guide her to use the skills she has for overcoming adversity, and work with an instructor to identify areas in the course to structure more engagement with peers.

The attitudes and practices within the school, which the fourth research question focuses on, may affect opportunities for dual enrollment participation for students of color. Through this question, I identify whether or not a deficit-minded approach guides the dual enrollment recruitment, policies, and procedures within the school. Illustrating the mindset that exists helps explain suggestions for improvements and changes in

policies. Research shows that shifting from a deficits approach to an assets approach creates a positive and capable voice of students of color. This story is different, arguably more accurate, and adds to the depth of the literature. Using an alternative lens to deficit thinking means a recognition of structural racism in an effort to provide better representation of students of color and more useful solutions and opportunities to address educational inequities.

The disparities in educational outcomes for students of color require intervention. Policy makers, educators, non-profits, and government entities have created programs and initiatives in an attempt to change structural deficits. For example, the federal government aims to increase the participation of students of color, especially those from first-generation, low-income, or immigrant families, in higher education through federal programs such as TRiO and Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP). The federal government also spearheaded changes in financial aid policy and increased financial aid awards. While these efforts make inroads and help dispel myths about the college process, large scale success has yet to be realized (Haskins & Rouse, 2013).

Schools continue to develop solutions to redirect, embolden, and shift the college pathway for students of color. Research on under-resourced schools shows the most effective programs or initiatives must create a stronger college-going culture to counter the systemic barriers and bring out the students assets (Corwin & Tierney, 2007). These programs provide increases in academic readiness and college knowledge and drive greater participation with higher education institutions. This allows students to be

exposed and engaged to the postsecondary experience and expectation as occurs in many suburban high schools. Dual enrollment programs, where high school students enroll in college credit-bearing courses with postsecondary institutions, have the potential to repair the broken system by creating opportunities for students who are systemically overlooked and unprepared.

Programs with the intent of exposing students to college-level material that challenges the student, enriches the college-going culture of the high school, and increases the overall college knowledge of the school staff and the student/family will prove most successful. Advocates of dual enrollment programs believe participation by students, especially middle and high-achieving low-income and students of color, can facilitate smoother pathways to higher education in larger numbers, ultimately resulting in greater persistence to degree (Barnett & Stamm, 2010). In order for these programs to reach full potential, high schools must embrace this premise and provide dual enrollment courses that create the opportunity for students to “try on” the college process without the same burdens of “real” college students. One of those eliminated burdens is the financial constraints of college. Participation in dual enrollment programs offers opportunities for postsecondary credits at a free or reduced rate, which is especially helpful for students with limited economic resources (Hoffman, 2003). Students can participate in the program with limited fear that the financial investment could end poorly. Through intentional, appropriate, and challenging course offerings from institutions of higher education, dual enrollment programs can create avenues to postsecondary success for students of color that have often been reserved for only their White peers.

Dual Enrollment Participation, Programs, and Policies

Dual enrollment programs have existed since 1985. The State of Minnesota was the first to create this type of program, which requires high schools to provide opportunities for students to participate in college courses while still considered a high school student. The original purpose of dual enrollment was to provide greater rigor or advancement to unchallenged high school students who had exceeded the course offerings at their high school, especially those in smaller or geographically isolated schools (Boswell, 2001; Hoffman, Vargas, & Santos, 2008; Hoffman, 2012). Through partnerships with local universities, opportunities (face-to-face and through distance learning) for these college bound students expanded and confirmed their aptitude for college (Barnett & Stamm, 2010; Boswell, 2001; Hoffman, 2012).

Within high schools across the nation, various advanced programs exist to help students accelerate their college experience. Some of the most common programs are: Advanced Placement (AP), International Baccalaureate (IB), Early College High Schools, and Tech Prep. Under the dual credit umbrella, programs such as AP and IB may fit the dual enrollment definition. However, for this paper, I do not consider these latter two programs dual enrollment. While AP and IB deliver advanced/college-level curricula to eligible high school students during the school day by a trained high school instructor, students are not simultaneously enrolled with a postsecondary institution and must take a one-time exam to earn college credit rather than earn credit for their participation in the course (Bragg, Kim, & Barnett, 2006; College Board, 2011). Without an opportunity for students to obtain transcribed credit, I excluded AP and IB programs as dual enrollment.

Who participates in dual enrollment programs? According to the most recent national estimates dual enrollment has grown from one million high school students in 2001 to over 1.4 million students in 2011 (Marken, Gray, & Lewis, 2013; Kleiner & Lewis, 2005; Speroni, 2011b). However, national numbers remain difficult to obtain. Thus, researchers choose to capture the growth and importance of dual enrollment by reviewing the growth in states' policy reforms (Borden, Taylor, Park, & Seiler, 2013). In the past three decades, dual enrollment has grown from one or two state programs to opportunities available nation-wide, with legislation in place supporting programs in all 50 states, thus confirming scholars' belief in the growth of dual enrollment programs (Andrews, 2004; Borden, Taylor, Park & Seiler, 2013; Boswell, 2001; Bragg, Kim, & Barnett, 2006; Karp & Jeong, 2008). Yet, with no federal mandate, states are able to determine their own agenda for dual enrollment, creating wide gaps in access and participation.

Nationally, 71 percent of high schools and five percent of the high school population participated in at least one dual enrollment course (Hoffman, 2005; Speroni, 2011a; Waits, Setzer, & Lewis, 2005). The majority of participants (74 percent) took courses at the high school rather than on a college campus (Barnett & Stamm, 2010). Research shows school participation differs based on the state or region a student lives (Waits, Kleiner & Lewis, 2005). Urban school districts, small high schools, high schools with high-minority enrollment, and districts in the northeast region of the United States offered dual credit options less frequently (Allen, 2010; Waits, Setzer, & Lewis, 2005; Ulate, 2011).

Students of color in the U.S. typically attend urban high schools with a high-minority enrollment (McDonough, 2005; Perna, 2006), which Hoffman (2005) asserts may make dual enrollment programs inaccessible to low-income, students of color, or those in urban areas due to the limited participation with postsecondary institutions and school reputation. It is unsurprising that research shows students of color participate at lower rates than their White counterparts (Kleiner & Lewis, 2005; Speroni, 2011b; Ulate, 2011). In fact, Speroni (2011b) found the average dual enrollment student is White, female, middle to upper income, a native English speaker with a high grade point average, and has passing graduation exam scores. Advocates of dual enrollment as an access point can be energized by recent studies from Speroni (2011b), Ulate (2011), and Austin-King, Lee, Little, and Nathan (2012) that show steadily increasing participation of students of color within dual enrollment programs.

Additionally, states recognize the limited number of participants of color, and most states pledge to increase the number of students of color involved in dual enrollment programs. Unfortunately, Borden, Taylor, Park, and Seiler (2013) found that states', "well-intentioned attempts to pursue aggressively an access agenda have been seriously undermined by deep state budget cuts" (p. vii). Without a strongly funded access agenda for dual enrollment programs, individual rather than systemic gain may be made, leaving students of color as a group off campus.

Marken, Gray, and Lewis' National Center for Education Statistics report (2013) found that half (53 percent) of higher education institutions participate in dual enrollment opportunities. According to scholars, geography limits high schools access to prestigious

universities, creating more opportunities for rural and urban schools to partner with community colleges (Barnett & Stamm, 2010; Bragg, Kim, & Barnett, 2006; Palmer, 2000; Robertson, Chapman, & Gaskin, 2001). This is particularly relevant in thinking about the relationship to where large numbers of students of color are concentrated (urban) and where the more selective and prestigious institutions (suburban and rural) are located.

Community colleges continue to engage with dual enrollment programs more than any other sector. Andrews (2004) noted, “This is logical considering that community and technical colleges are strategically and ideally located to reach students throughout the states they serve” (p. 417). In addition, the majority of states direct legislation of dual enrollment to public sector institutions, while some states mandate institutions’ involvement and others merely suggest participation (Borden, Taylor, Park & Seiler, 2013). Thus, it is no surprise that Marken, Gray, and Lewis (2013) found 98 percent of public two-year institutions had high school students taking dual credit college courses during the 2010-2011 academic year, compared to 84 percent of public four-year institutions, 49 percent of private four-year institutions, and 10 percent of private for-profit four-year institutions. Public institutions, both two- and four-year, follow state mandates, while private institutions may choose or choose not to build a partnership with a high school and provide programming. Additionally, almost half of states mandate or highly suggest articulation agreements between K-12 and postsecondary partners to increase communication and sustainability (Borden, Taylor, Park & Seiler, 2013).

Characteristics and structures of dual enrollment programs. Multiple factors affect which students, institutions, and high schools participate in dual enrollment programs. The characteristics of the postsecondary institution and the secondary school, in addition to the state structures or mandates, all influence the effectiveness and function of dual enrollment programs. Currently, state policies include provisions for funding, course offerings, oversight, accountability, required institution participation, student eligibility, and quality assurance (Borden, Taylor, Park & Seiler, 2013). However, a lack of uniformity exists across dual enrollment programs, resulting in significant variation in student participation, entrance criteria, financing, course location, offerings, rigor, and instructors (Barnett & Bragg, 2006; Karp & Jeong, 2008; Palmer, 2000; Robertson, Chapman, & Gaskin, 2001). Therefore, the characteristics and structures of dual enrollment programs vary across the nation and within states.

In an attempt to unify and categorize dual credit programming, Bailey and Karp (2003) created a typology of programs comprised of three variations. The first refers to stand-alone college-level courses referred to as singleton programs. Singleton courses may be one elective/extra course added to a traditional high school schedule and usually do not have a sequence or pattern for course-taking. The purpose of these courses is to provide academic rigor and enrichment to high achieving students. The second type is comprehensive programs, which comprise the majority of students' academic experience during their junior and senior years, with focus on increasing rigor and enrichment for the academically inclined. The third type, enhanced comprehensive programs, provide academic rigor and enrichment coupled with social-psychological development, most

often for low- to middle-achieving students. Enhanced comprehensive programs provide sequenced courses aimed at increasing the college readiness of students. Singleton courses are the most common types of dual credit programs, followed by comprehensive programs, with enhanced comprehensive programs rarely employed.

According to Hoffman, Vargas, and Santos' Jobs for the Future report (2008), the best dual enrollment programs consist of logically sequenced courses with students engaged in college-level material to earn college credit. Karp and Bork's (2012) study of City University of New York's College Now program agrees with this assessment of effective courses. They found the most effective courses need to feel authentic to the students and allow them to work independently and engage in complex, analytic discussions. Most of the programs that identified as either comprehensive or enhanced comprehensive fit this criteria (like CUNY's College Now). However, singleton programs, considered "cafeteria style" programming and most commonly offered by high schools, do not fit the best practice model (Hoffman, Vargas, and Santos, 2008).

Two examples that highlight the different approaches and missions to dual enrollment across the nation include efforts in Florida and New York. Florida has a fully integrated, funded, and accessible state-wide dual enrollment program with articulated agreements with all 31 community colleges and guaranteed credit towards high school graduation (Speroni, 2011a). Course selection is determined by the state, but students can choose between career focused (technical) and college credit bearing, such as college algebra. To participate, students must be considered "college ready" by the high school and postsecondary institution. Florida's legislation defines college ready as a grade point

average (GPA) of 3.0 for academic courses and 2.0 GPA for career courses, plus competency on a college readiness exam. Currently, more than 35,000 Florida students participate, with fewer than 30 percent of these participants identifying as students of color. Some regions enroll fewer than 10 percent students of color and others enroll as many as 57 percent (Holcombe & Smith, 2010). Florida does not provide data on the difference in enrollment in college credit courses over career/technical courses for students of color; therefore, it is difficult to assess if Florida's dual enrollment program is increasing access to four-year institutions for students of color. Though the State of Florida eliminated an obvious barrier for low-income students by covering all costs, constraining dual enrollment eligibility by GPA and success on a standardized test tends to decrease the participation for students of color (Barnett & Stamm, 2010; Jencks & Phillips, 1998).

In contrast to Florida's model, College Now is a city-wide effort focused on increasing college readiness and enrollment rates of New York City (NYC) middle-achieving students rather than the usual focus on college ready or high achieving students (City University of New York (CUNY), n.d.). Over 350 participating NYC high schools enroll approximately 20,000 students, with significant numbers of participants of color (Allen, 2010). College Now offers opportunities for both developmental and college-credit courses throughout all of the CUNY two- and four-year institutions. Additionally, student eligibility, though based on test scores and GPA, is more flexible since students do not have to meet all requirements. They have to meet only one benchmark, and that benchmark may be focused on good attendance records (CUNY, n.d.). Thus, College

Now is one of the largest programs for students of color and continues to be one of the most researched and evaluated dual enrollment programs with success in achieving its goals for students of color (Allen, 2010).

Despite the robust programs in Florida and New York, many other states have only legislation and a small number of participants, with limited intent or ability to grow dual enrollment opportunities (Borden, Taylor, Park, & Seiler, 2013). The complexity and variations between state policies, in addition to the limited national numbers and studies, make understanding the context, implementation, and impact of dual enrollment across the nation difficult. It is especially difficult to isolate and understand the experience of students of color.

Minnesota's dual enrollment program. The State of Minnesota will serve as the case study for this research on dual enrollment. A key aspect of the research will be led by the second research question, which identifies state-wide patterns for enrollment and participation in dual enrollment by students of color. While Minnesota was the first state to implement dual enrollment and continues to be a leader in educational initiatives across the nation, there is little information about how dual enrollment has been implemented across the state and what the experiences have been for those engaged with or administering the programs. The third and fourth research questions enhance the knowledge regarding the practice and implementation of Minnesota's dual enrollment programming, especially for students of color.

In 1985, Minnesota became the first state to enact legislation regarding a student's ability to earn credit at an eligible postsecondary institution while still in high school.

Minnesota now has two legislatively created dual enrollment programs: Postsecondary Enrollment Options (PSEO) and concurrent enrollment (CE), making a distinction in these programs based on the location of the course and the instructor.

The PSEO program enrolls a student in coursework on a college campus delivered by that institution's faculty member. Eighty-nine colleges and universities in Minnesota participated in PSEO during the 2010-2011 school year (Minnesota Department of Education (MDE), 2011). Students must meet eligibility requirements to enroll in PSEO, and these requirements vary by the postsecondary institution, which makes the final admissions decision. Examples of eligibility requirements may include: Minnesota residency, under the age of 21, high school student, public or nonpublic high school affiliation, not taking a full secondary schedule (MDE, 2013). According to Minnesota State Colleges and Universities system board policy 3.5 and procedure 3.5.1 (2012) the minimum academic eligibility is:

- 1.) Meet the course prerequisite
- 2.) High school seniors must be in the upper one-half of their class or score at or above the 50th percentile on the ACT or SAT.
- 3.) Juniors must be in the upper one-third of their class or score at or above the 70th percentile on a test, such as the ACT or SAT.

Concurrent enrollment, is also commonly referred to as College in the Schools (CIS), College Now, InCollege, College in the High Schools, or simply Concurrent Enrollment. CE involves the student enrolling in a college course taught at the high school by a high school teacher who has been trained and mentored by a college instructor. Thirty-three postsecondary institutions participated in concurrent enrollment in the 2012-2013 school year (Minnesota Concurrent Enrollment Partnerships (MNCEP),

n.d.). The biggest provider of CE is the Minnesota State Colleges and University system, with the University of Minnesota system, a close second. Concurrent enrollment eligibility differs from PSEO because the course resides at the high school. Student eligibility and enrollment for courses is determined in conjunction with the college, but the onus of student selection falls to the high school.

Minnesota's legislation for dual enrollment includes funding. For PSEO, students directly benefit as students do not have to pay tuition to participate in PSEO, which is state-funded under MN §124D.09, nor do they have to pay for the cost of book or lab fees; these costs can be paid by the state, school district, or postsecondary institution. The per credit cost to the school district is the same as a traditional college student and a portion of the dollars awarded to the high school for the student follows the student to the postsecondary institution. The exchange of funds for PSEO are done based on number of credits per student.

Concurrent enrollment, on the other hand, is a fraction of the cost of PSEO and most programs do not charge based on the number of students per credit. Rather the price is assessed by number of courses and number of students in the course. For example, a postsecondary institution may charge a school district approximately \$2,000 for up to 24 students to enroll in a math course. As with PSEO, Minnesota's legislature provides aid to school districts providing concurrent enrollment. "School districts that offer Concurrent enrollment courses are also eligible to receive aid under MN Statute §124D.091 to help defray the cost of offering this program at the high school" (Austin-King, Lee, Little, & Nathan, 2012, p. 5).

One of the biggest challenges with sustaining and increasing PSEO is the funding model (P. Yang, personal communication, September, 2015). Both postsecondary and high schools lose money when students participate in PSEO. High schools lose a portion of their average daily membership (ADM) for each high school student enrolled in higher education simultaneously. Also, the reimbursement rate to postsecondary institutions for PSEO through the state is not equal to the tuition rate plus books for most postsecondary institutions. To counter this, some school districts have created a program known as “PSEO by contract” (P. Yang, personal communication, September, 2015). This contract bypasses the funding process through MDE and through a complicated equation puts more money back into the postsecondary and secondary schools on both ends. This results in an undercount of the students participating in PSEO by MDE, because the funding flag is not activated. The two- party contract is the only item that makes the program different, all aspects of the student experience remain the same.

Another version of PSEO by contract includes faculty-led courses at a high school. A few postsecondary institutions have contracts with high schools where college faculty teach courses in the high schools, either online or in person (P. Yang, personal communication, September 2015). This arrangement occurs based on a contract and is therefore missed by the MDE funding flags. PSEO by contract leaves a hole in the data collection. At this point, no data exists on which high schools, the criteria for student selection, and the arrangement between the secondary and postsecondary schools for those that choose to operate with a contract.

Lastly, another program falls into the realm of dual enrollment, but does not fit the definition of dual enrollment or the definition of advanced courses. Articulated credit provides college credit to students enrolled in technical courses during high school through an agreement between the faculty member and the high school instructor. Students can earn college credit through successful completion of the course, but the credit is not transcribed and the articulation occurs only at specific institutions, making it non-transferable. Students must provide a certificate to the admissions office to earn transfer credits (M. Klein, personal communication, October 2015).

These three alternative programs have little to no research on them. Within the data analysis section, these programs will be identified as “unknown,” because they cannot be pulled out or individually identified in the current data set. Furthermore, no data exists on the demographics of students engaged in any of the three programs listed above, or the number of high schools engaged in the specific programs. Knowledge that these alternative programs exist helps to understand the landscape of dual enrollment opportunities within Minnesota, but it also underscores the need for better data on which students end up in these “unknown” programs to provide more information on Minnesota’s dual enrollment offerings.

Minnesota has a higher percentage of students participating in dual enrollment than the national average, with about 17 percent of the public high school population participating (Austin-King, Lee, Little, & Nathan, 2012). The majority of these students participate through concurrent enrollment. Enrollment in PSEO is considerably lower than concurrent enrollment (5,600 and 21,000, respectively). Students in ninth through

twelfth grades are eligible to participate in concurrent enrollment, while only tenth through twelfth grade students can participate in PSEO (MDE, n.d.).

Students of color make up 23 percent of the public high school eleventh and twelfth grades population in Minnesota; however, only nine percent of students of color participated in PSEO and CE during the 2010-2011 school year. During the year, 861 students of color participated in PSEO; which is 15 percent of the PSEO participants and a six-percent increase from the previous year (Austin-King, Lee, Little, & Nathan, 2012). However, students of color participate in concurrent enrollment 12 percentage points less than their White peers. Asian/Pacific Islander was the largest non-White group represented in CIS (Austin-King et al., 2012). Overall, Minnesotan students of color enroll in dual enrollment courses at a lower rate than their White peers (see Table 2.1).

Table 2.1: Percentage of students of color enrolled in dual enrollment programs

Fiscal Year 2010	Percent of all 11 th and 12 th grade students enrolled	Percent of 11 th and 12 th grade students of color enrolled	Percent of 11 th and 12 th grade White students enrolled
Enrolled in either PSEO and/or CE	19	9	22
Enrolled in PSEO	4	3	4
Enrolled in CE	15	6	18

Outcomes of participation in dual enrollment programs. The newness of dual enrollment programs shows in the research because the vast majority of literature on dual enrollment consists of descriptive or evaluative studies of specific programs. While this may help explain to practitioners how to implement, structure, and create successful programs, little research focuses on the outcomes of these initiatives. This lack of focus results in a limited body of research attempting to analyze the effects of dual enrollment

on students' pathways, enrollment, and persistence rates in higher education.

Additionally, very few studies provide a deep description of the student experience, with an even smaller body of literature studying the experience of students of color within dual enrollment.

Dual enrollment programs advertise benefits for students and families that include a decrease in college costs and time to degree attainment, a wider variety and more challenging courses, improved academic performance, and an ability to test out the college experience in a low-stakes environment (Barnett & Stamm, 2010; Boswell, 2001; Delicath, 1999; Hoffman, 2005; Speroni, 2011a; Swanson, 2008; Ulate, 2011).

Unfortunately, the impact and effects of dual enrollment on students remains unclear.

Many assumptions underlie the expansion of dual enrollment programs, and few of those assumptions have been tested and confirmed (Barnett & Stamm, 2010; Hughes, Rodriguez, Edwards, & Belfield, 2012; Karp & Bork, 2012; Speroni, 2011a; Ulate, 2011), especially in relationship to students of color. While these benefits sound appealing, only a handful of studies have focused on proving these assertions, and most of the studies are small and program-specific. The limited rigorous research design of most dual enrollment studies raises concerns about conclusions affirming the benefits of dual enrollment (Kinnick, 2012; Hoffman, 2012). Overall, dual enrollment remains an underexamined area with a dearth of rigorous research on the benefits and impacts on college pathways and persistence (An, 2013a; Hoffman, 2012; Swanson, 2008).

Adelman (2004) conducted one of the first studies focused on the long term impacts of dual enrollment. While other scholars scrutinized Adelman's methods and

findings, his analysis provided the groundwork for conversations about the impact of students entering college with earned credits. He found students with nine or more credits earned were more likely to graduate in less time (4.25 years) than the national average of 4.56 years (Adelman, 2004). Adelman (2004) also found dual enrollment increased the likelihood of graduation for participants compared to non-participants. Additionally, in his 2006 *Toolbox Revisited*, Adelman identified successful college students accrue 20 credits by the end of their first year; therefore students enrolling with nine early credits are well on their way to college success. Combining his two studies, Adelman argued that dual enrollment could be a way for students to challenge themselves and acquire credits to persist in college. Swanson (2008) built upon Adelman's research, finding dual enrollment students created "academic momentum" towards a degree. Specifically, she found that dual enrollment participants were more likely to enter college more quickly after graduation and persist into the second year of college than non-participating students.

Adding to Adelman and Swanson's research, a study by Karp, Calcagno, Hughes, Jeong, and Bailey's (2007), considered the most comprehensive assessment of dual enrollment, found a positive association between dual enrollment and enrolling in a four-year institution, enrolling full-time, and persisting through the second year. They also found male and low-income students especially benefited from the program. Specifically, low-income male students were more likely than their non-participating peers to graduate from high school, enroll in college, enroll full-time, persist beyond the first year, and achieve higher grade point averages than non-participating low-income males.

Furthermore, dual enrollment students were 4.3 percent more likely than their peers to earn a high school diploma, have higher cumulative college GPAs, and earn more college credits (Karp et al., 2007).

An's (2013a) study, one of the first quantitative analysis of dual enrollment and its impact on first-generation students, showed positive outcomes for participants in dual enrollment programs. An (2013a) reported "the proportion of first generation students who attained any postsecondary degree is 8 percentage points higher if they participated in dual enrollment than not" (p.64). In An's (2013b) second study, he concluded that any dual enrollment participant performs academically better than a non-participant, but most importantly "first-generation students who participated in dual enrollment tend to perform better in college than nonparticipants" (p. 421). He also found a positive association between dual enrollment and college readiness and academic performance. Other scholars (focused on specific programs) have also identified the connection between dual enrollment and higher GPA and less remediation for first-year students (Allen & Dadgar 2012; Karp et al., 2007). In addition, a study of current private, four-year students who previously participated in PSEO had higher college GPAs and were 25 percent more likely to graduate than non-participating students (McQuillan, 2007).

Additional research supports the claims of dual enrollment's impact on increasing academic preparation and college readiness. Michalowski (2007) used multiple regression to control for students' background, demographics, and institutional factors for students enrolling in CUNY colleges who participated in College Now. Results indicated higher GPAs, increased persistence to third semester, and increased likelihood of

obtaining a bachelor's degree. Similarly, Kim and Bragg's (2008) correlation analysis found students with more semester credits and advanced classes fared better and were more likely to be considered college-ready in math.

Florida, New York, and Ohio have been the subject of comprehensive evaluations of the dual enrollment programs within their respective states. Minnesota, the focus of this research, has been the subject of only a few, dated studies. The Legislative Auditor Report (1996) conducted by the State of Minnesota found PSEO participants performed better in their first-year college courses than their non-participating students. Also, a large majority (approximately 75 percent) of survey respondents indicated knowing what to expect from college and becoming better academically prepared as a major benefit of enrollment in PSEO (Minnesota Legislative Auditors Office, 1996). In contrast to the Legislative Auditor Report, Minnesota State Colleges and Universities (2001) looked at PSEO student participant outcomes within MnSCU and found that while a number of students performed well and 62 percent earned college credit, "a significant number of high school students fail or withdraw from courses taken at college or university campuses" (p.ix).

Generally, the body of research focusing on dual enrollment programs in community and technical colleges is significantly smaller than four-year institutions; yet, two-year institutions engage more frequently in dual enrollment programs than four-year institutions. One study, conducted for the Minnesota State Colleges and University system by Kotamraju (2005), focused on experiences of PSEO students at career and technical colleges. Kotamraju's findings, similar to McQuillan (2007) and the Minnesota

Legislative Auditor Report (1996), reported higher GPAs and degree completion, especially if students participated in academic and career/technical education courses rather than remedial or development education courses.

College in the Schools (CIS), a dual enrollment program in the State of Minnesota, conducted an evaluation of 2004 high school graduates who had participated in the concurrent enrollment program (University of Minnesota, 2009). The self-reported outcomes included 100 percent of respondents enrolled in college after high school with 84 percent completing a bachelor's degree within four years and 56 percent graduating early or within four years (University of Minnesota, 2009).

Students of color. A small number of studies focus specifically on the benefits or experience of students of color with dual enrollment. Karp, Calcagno, Hughes, Jeong, and Bailey (2007) and An (2013a & 2013b) include students of color because the population included non-White students; but only one study focused directly on the outcomes for students of color. Ulate's (2011) published dissertation looked at the experience of California's students of color who participate in dual enrollment. His major findings highlighted continuing disparities in academic outcomes between African American and Hispanic dual enrollment students and their Asian and White counterparts, both in academic preparedness and college readiness. Specifically, African American and Hispanic students were less likely to participate in dual enrollment over multiple semesters, more likely to enroll in basic skills or developmental courses, tend to earn lower grades in dual enrollment courses, and were less likely to select courses in a college degree pathway (Ulate, 2011). However, Ulate (2011) found "differences

between underrepresented students and whites are attenuated when accounting for institutional effects” (p. 146). That is, when students attend dual enrollment programs through four-year institutions, they are more likely to continue and pursue postsecondary education compared to students participating through two-year institutions.

Overall, research shows positive outcomes for students participating in dual enrollment. However, most dual enrollment programs target students considered college ready or otherwise on a college preparation track, which means concluding that dual enrollment benefits *all* students remains problematic (Hoffman, 2012). With only a small number of studies affirming dual enrollment outcomes for students and even fewer studies showing mixed outcomes for students of color, continued and expanded research on dual enrollment must occur before a firm conclusion can be made about the positive outcomes of participation in dual enrollment for any students and especially specific subgroups of students. The topic of dual enrollment needs more in-depth analysis of the outcomes and impacts of the programs.

Theoretical Framework

Dual enrollment programs and the impacts on or benefits to students, communities, and institutions are often analyzed through human capital theory. Human capital is defined as “skills, knowledge, or experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country” (Oxford, n.d.). “Human capital theory suggests that individuals and society derive economic benefits from investments in people” (Sweetland, 1996, p. 341). Derived from economics, human capital theorists focus their analysis of higher education through

outcomes of personal economic growth or earnings, return on investment, and national economic benefits (Sweetland, 1996). Human capital theory dominates the literature on dual enrollment, as these type of educational programs are often subsidized or fully funded by state and local governments. Human capital theory allows researchers to examine the return on investment for both the government entities and the individual participants. However, human capital theory does not account for systemic differences within or between racial or marginalized groups. The biggest disadvantage to human capital theory is its limited scope and one-size-fits-all model, especially when thinking about racial/ethnic inequalities or differences. Additionally, most dual enrollment research concentrated on the economic investment and returns, rather than analyze how the programs operate and affect students, especially their psychological and sociological implications, which may be necessary for a true assessment of their effectiveness.

Sociological concepts and theories that explain social phenomenon and educational inequities via cultural capital, social capital, and habitus (Dika & Singh, 2002; Dumais, 2002; Lin, 1999) have yet to emerge within the literature on dual enrollment, making it difficult to assess how well dual enrollment programs help to transfer both social and cultural knowledge about the college process to outsiders. Research with sociological frameworks could be important to the study of dual enrollment through identifying the networks or connections that develop for students' participating in the programs versus non-participants. Social capital theory deepens the understanding associated with social connections and how those connections transfer knowledge or opportunities to those who become connected. Unfortunately, the newness

of dual enrollment research hampers the use of social and cultural capital theory.

Numerous data access issues and limited data collection on the part of programs hinder the use of sociological theories, like social and cultural capital.

Human capital and sociological theories have a place within the dual enrollment literature; however, neither of those frameworks adequately frame my work on dual enrollment. Instead, I chose to frame my research on students of color and dual enrollment programs through Critical Race Theory (CRT). I sought answers on how dual enrollment acts as a disruption to current structural and systemic racism rather than simply understanding the benefits or functions of dual enrollment programming. My first research question guides my inquiry into dual enrollment through a CRT lens.

Critical Race Theory

Critical Race Theory originated in the mid-1970s as a response to much more subtle racism than persisted after the great efforts of the civil rights movement (Delgado & Stefancic, 2001). Legal scholars and early adopters/founders of CRT, Derrick Bell and Alan Freeman, were agitated by the slow pace of change within the legal system and hoped to provide another venue for conversations about racism and power. Since its inception, CRT has informed numerous disciplines and found an easy pathway into examining societal inequities throughout the educational system. Ladson-Billings (1998) argues that CRT's critiques on society can be seen in choices of school curriculum, instruction, assessment measures, funding structures, and attempts at desegregation. With stratified participation by race/ethnicity and some high-minority high schools offering no dual enrollment opportunities, dual enrollment provides another aspect of the educational

system that shows societal inequities by race. Critical Race Theory can provide the critical assessment of dual enrollment necessary for conversations of inclusion and expansion.

Critical Race Theory stems from many disciplines, most notably from critical legal studies and radical feminism. From legal studies, CRT has adopted the concept of “legal indeterminacy”, which holds that each legal case can have more than one outcome depending on the authority and interpretation of facts (Delgado & Stefancic, 2001). From feminism, CRT adopted “insights into the relationship between power and the construction of social roles, as well as the unseen, largely invisible collection of patterns and habits that make up patriarchy and other types of domination” (Delgado & Stefancic, 2001, p. 5). Critical of the positivist and dominant attitude within institutions, both of these approaches view oppression and power from the macro level, which CRT does as well.

Scholars using CRT recognize that it is not a rigid framework, and depending on the circumstances they apply modified versions of the tenets. Yet, all critical race theorists seek to identify systemic issues based on race, power, and privilege with the ultimate goal of changing the system to be fairer and more equitable (Delgado & Stefancic, 2001). With such a large goal, CRT has spawned a number of theories focused more directly on the oppression experienced by one specific group or subpopulation. Recent outgrowths include Critical Race Feminism, Latino/a Critical Theory (LatCrit), Queer-Crit Theory, and Asian American Legal Scholarship.

Tenets of CRT. Critical race theorists often differ on some of the tenets within the theory, however, several tenets commonly appear throughout the work of critical race theorists. The first tenet is that racism is normal and ordinary. Racism, defined as prejudice plus power, highlights the power, or lack thereof, for people of color. As long as power is held by the dominant group, other groups cannot have or use it. “Because it is so enmeshed in the fabric of our social order, it appears both normal and natural to people in this culture” (Ladson-Billings, 1998, p. 11). The subtleness and inherent nature of racism makes addressing and eradicating it much more difficult for critical race activists. Identifying issues of racism or racial preference become much harder to sell to the dominant culture because the overt nature or malicious intent remains hidden or obfuscated.

The second tenet most often held by critical race theorists is the concept of interest convergence. This idea asserts racial superiority or dominance serves a purpose, particularly for the dominant White culture, and that equality will not occur unless the benefits to those marginalized meet the interests of the dominant. All Whites, regardless of income, benefit from inherent racism. For Whites within the highest income levels, the benefits are tangible (lack of competition for materials), while for Whites in the lowest income levels, the benefits serve a psychological purpose, that is, a belief in superiority over others. Changing the current system could eliminate said advantages, which could be seen as threatening to those in power (Whites). Therefore, the incentives to make change or disband racial privilege remain small and brought Bell (1980) to advocate the

notion that one must not experience a loss of privilege for others to benefit, but both parties' interests must converge.

A third tenet emphasizes the social construction of race. If race is socially constructed then it is not fixed or inherent, nor is it based on any scientific proof of major genetic or biological deviations; therefore, these constructions of race are able to shift if society shifts. Categorizing individuals by physical traits, such as skin color, hair texture, and eye color, changes and shifts over time, and society decides rather flippantly how and when to retire specific racial labels. At one point in American history, Mexican Americans were considered White. However, over the past decades Chicanos have moved to their own category. Critical race theorists are especially interested in the creation and maintenance of these labels.

The fourth concept is differential racialization. Critical race theorists describe differential racialization as the “ways the dominant culture racializes different minority groups at different times, in response to shifting needs” (Delgado & Stefancic, 2001, p. 8). Depending on the needs of the dominant culture, rotating or shifting the place of racial groups can serve specific goals. For example, Japanese Americans went from citizens in a community to living in war relocation camps during World War II. Containing and vilifying Japanese Americans made White Americans feel safer during the war, yet created systemic racism against Asians and specifically Japanese Americans. This tenet also addresses the change in representation via the media and stereotypes of various communities of color. Depending on the situation (e.g. the 9/11 terrorist attack and

Muslim Americans), one group can move from being represented favorably to a feared community with negative representation.

Three additional aspects addressed by critical race theorists fit with an analysis of the participation of students of color in dual enrollment. The first is the critique of meritocracy (Bell, 2004). College admissions, dual enrollment programs, and financial aid all base decisions on meritocracy. Meritocracy assumes all individuals have an equal opportunity; thus, those who have worked the hardest and have the best scores will rise to the top. CRT argues against this notion and points to flaws within systems of meritocracy. Dual enrollment, with its stratified participation rates, certainly has flaws in its system of meritocracy. CRT will help to bring these flaws to the forefront.

Next, CRT argues for intersectionality, especially the intersections of race, class, and gender (Crenshaw, 1991). In a study focused on students of color, intersectionality will definitely have a place. As indicated before, students of color disproportionately fall into low-income categories. Therefore, taking time to understand the impact of these intersections and acknowledging their presence creates space for validation and richer discussion about the various aspects and identities each person has and how those affect interactions and opportunities.

Lastly, CRT helps incorporate the unique voice of color through the use of storytelling or narratives to enhance the image or picture of people of color and counter deficit thinking. Brown and Brown (2012) define counter-discourse as “knowledge, theories, and histories that emerge as a direct challenge to commonly held deficit-oriented *beliefs* about racial groups and social phenomenon” (p. 11). Telling stories,

showing examples, and highlighting erroneous beliefs create a broader understanding and range of the experiences to add to the conversation and description of students of color. Through counter-discourse, society can view students of color in different and more positive ways, and we can take time to examine the social and structural constructs that create barriers for the success of these students. Creating space for students who have participated in dual enrollment to share their story will be a powerful alternative narrative to that of the predominantly White students participating in the programs and found in the literature.

Critical Race Theory holds all institutions and situations within society accountable for the racism and power differentials that exist. The goal of CRT is to highlight inequities in policies, structures, and systems for people of color, and to create an open arena to discuss how those policies and procedures may intentionally and unintentionally serve as barriers, with the ultimate goal leading to a fairer and more just society where youth of color flourish. Through these conversations, people of color can validate their experiences and see how the system has oppressed them by making access to resources and success more difficult.

Currently, Critical Race Theory has served as the framework for only one dual enrollment study. Turner's (2010) dissertation on Latino students enrolled in dual enrollment programs used CRT as one of three frameworks. Turner selected CRT in response to the underrepresentation of Latino students in dual enrollment programs. She felt CRT provided the best framework for examining the unique experience of Latinos and help inform her research design, which relied exclusively on story-telling or narrative

answers. Her emergent themes were in line with CRT. They highlighted disparities in the quality of secondary experience, underpreparation of students, and lack of student support services, especially for Latina/o students. The use of this framework to explore the experience of students of color within dual enrollment programs added depth that is missing in other dual enrollment research, a reason I use it in my research.

A small group of dual enrollment scholars advocate for increasing the participation of students of color in dual enrollment programs. They believe that maintaining the status quo – participation by White, middle- to high-income self-selected students – benefits the dominant groups and exacerbates the achievement gap (An, 2013b; Barnett & Stamm, 2010; Karp et al., 2007). Therefore, increasing the number of studies focused on dual enrollment with a CRT lens provides more information to increase the need and desire for intentional recruitment of students of color into dual enrollment programs. Additionally, these dual enrollment advocates believe increasing participation by students of color will decrease knowledge gaps, increase personal resources, and prepare students of color to enroll, persist, and succeed in college (An, 2013b; Barnett & Stamm, 2010; Karp et. al., 2007). Ultimately, increasing participation by students of color will help overcome major societal and racist barriers in the educational world.

The literature in this chapter identified gaps in the conversation surrounding dual enrollment and the opportunities for students of color to participate. This review supports expanded analysis of dual enrollment participation as a college access and readiness tool for students of color. Scholars in this literature identify educational attainment and

postsecondary access gaps for students of color due to the effects and impacts of structural racism, which warrants the use of Critical Race Theory as the foundation for exploring the topic. Scholars also argue that changes within the college-going culture of schools and creating more intentional partnerships with postsecondary institutions will increase the college-going identity and pathway for students of color.

Chapter Three: Methods

I employed a mixed methods research design to gain a deeper understanding of how structural racism affects participation in dual enrollment programming for students of color in Minnesota's public high schools. This chapter details the methods, research methodology, and materials involved in the study, along with rationale for the selection of case study sites. The following research questions guide the direction of the study:

1. To what extent does dual enrollment programming increase access for students of color and disrupt structural racism? To what extent does dual enrollment programming perpetuate systemic racial inequities? (Mixed methods)
2. Does state level data identify a pattern of racial inequities in dual enrollment participation and opportunities? (Quantitative)
3. How do those who administer or participate in dual enrollment programs describe their experiences? How do their descriptions differ based on their positionality (e.g. administrators, teachers, students, parents, community members, etc.)? (Qualitative)
4. How do different practices and attitudes influence dual enrollment opportunities for students of color? (Qualitative)

Research Perspective

A critical, anti-racist perspective stemming from a transformative paradigm informed my research. Research conducted using this framework situates racial injustice at the center of the design, questions, and analysis for the purpose of creating social change (Decuir & Dixson, 2004; Smith-Maddox & Solorzano, 2002; Mertens, 2003).

According to Decuir and Dixson (2004), "CRT implies that *race* should be the center of focus and charges researchers to *critique* school practices and policies that are both overtly and covertly racist" (p. 30, emphasis in original). With a critical and transformative perspective, I ground my analysis of systems, structures, and process in

the assumption that racism exists and improvements in society remain imperative (Mertens, 2003). According to Mertens (2003), a researcher with a transformative paradigm “consciously analyzes asymmetric power relationships [and] seeks ways to link the results of the inquiry to wider questions of social inequity and social justice” (p. 140). In this case, I seek to transform public policy and educational practices by placing racial inequity at the core of the research design.

The quantitative analysis of the dual enrollment data suggested racist patterns and practices, but combining the qualitative analysis to create a mixed methods study provided a more robust description of the impact of the inequities. Through systematic review of policies and practices I specifically emphasize the access and educational opportunities afforded to (or overlooked by) students of color attending high-minority high schools and reviews how the school culture, understanding of key personnel, and expectations for students affect access to dual enrollment courses. Students of color added their experience and voice, creating a rich and authentic analysis, contrasting the staff perspective in the building.

Reflexivity

I am the sole collector and analyzer of these data. Through this process of data collection and analysis I gained deeper understanding of what it means to be a White researcher using a CRT lens. I saw White privilege in action and also felt the impact of my authority. I saw, heard, and felt how racism, especially within the education system, has been normalized. Conversations centered on deficits and focused heavily on the belief that students of color were from less educated families and therefore needed

additional supports and services, while White children did not have the same needs.

These assumptions and stereotypes resonated with me as they were often the same ones I had to work through on my own anti-racism journey. I cringed during many conversations as I was reminded of my own errors in thinking on the need for students' success. The most challenging piece of this research was separating my conditioning as a White, female educator from the voices of the adults in the building. This project required me to continually and constantly identify and address my own bias and assumptions. Through this journey as a White researcher using CRT, I became more confident, comfortable, and aware of the underlying racism within the dominant culture and continually addressed my own role in perpetuating stereotypes and racism. As a result of shifting my mindset and addressing my bias and assumptions, I identify racist practices in order to create opportunities for social change in education.

As a White researcher interviewing students of color, I saw the impact of both my race and my authority reflected in the body language and responses of the interviewees. A number of the interviewees were visibly uncomfortable discussing race and inequity with me. While I did my best to establish rapport and create a comfortable environment, I cannot be certain that I gathered the information I desired. Additionally, I am unable to fully know or understand the lived experience of individuals of color, which is why I use the students' words, rather than mine alone, to provide a narrative of the experiences of students of color in dual enrollment courses. Case study methodology asks the researcher to provide insight from the participant's perspective; the fact that I identify as White adds a layer of separation to my interpretation of the data from my student participants.

On the other hand, interviewing White administrators and counselors had an assumed element of closeness and understanding permitted to us, as occupants of a shared dominant space. I documented my experiences, both positive and negative, through a journal and discussed the more uncomfortable and challenging experiences with other researchers. Those experiences have shaped the analysis in chapters five and six.

One of the main issues I struggled with following data collection has been how to use and disseminate the information gathered. Thus far I have taken time to meet with principals at both of the case study schools on more than one occasion. I provided the chapter featuring their school and added further feedback and tools. Some of the feedback related directly to the racist undertones in the conversations with counselors, teachers, and administrators. Furthermore, I sent a copy of each high school's themes to my contacts at the school for dissemination to participants. This allowed participants to review and check the accuracy of my interpretations, member checking helped me to reshape and direct some of my work.

Lastly, I must address my connections and professional experiences as they relate to this work. I have professional experiences with the Minnesota Office of Higher Education as a Research Analyst and college access program supervisor, plus I have worked in concurrent enrollment program development at two postsecondary institutions. These experiences created opportunities for me to engage in formal and informal discussions with school officials and administrators that afforded me access to district files and strategies that may not have been or ever will become available to another

researcher. Through these connections, I gathered information more quickly and understood the complexities of dual enrollment on a deeper level. Finally, I oversaw the development of the college access program associated with one of the high schools in this study. I had intimate knowledge of the college-going culture and the staff because of my previous affiliation. This familiarity provided deeper access and better data, but it also had the potential to skew some results. I was aware of these potential weaknesses and relied on my advisors to help me to minimize biases and assumptions in my research. Knowledge of my position, influence, and privilege helped me articulate my findings and biases more clearly and authentically. With that in mind, I feel confident the research design provided accurate analysis of the dual enrollment opportunities for students of color in Minnesota.

Research Design

This mixed methods study examined the landscape of dual enrollment offerings for high-minority high schools and students of color in Minnesota. Research on dual enrollment programming throughout the nation is minimal and lacks rigor. Additionally, few dual enrollment studies include both qualitative and quantitative research, which means there is room for these methods to enhance the depth and complexity of analysis. Yin (2009) stated, “Mixed methods research can permit investigators to address more complicated research questions and collect a richer and stronger array of evidence than can be accomplished by any single method alone” (p. 63). With a dearth of rigorous research, this mixed methods study provides a richer understanding of dual enrollment opportunities for Minnesota’s students of color.

This study used a sequential mixed methods design, where the quantitative phase provided the backdrop for the qualitative portion and helped “determine the distribution of the phenomenon” (Morse, 2003, p. 193). The qualitative study added an explanation or backdrop to the themes discovered during the quantitative stage. The quantitative phase began in April 2015 and concluded in October 2015. Through the quantitative analysis of high-minority high schools and the dual enrollment participation rates, I selected lists of potential high-minority high schools to use in the qualitative phase. The qualitative phase included multi-site case study at two high schools, Arthur and Russell. Data collection began in September 2015 and ended in January 2016.

Quantitative Phase

The initial phase of the research included quantitative analysis of secondary data derived from the Statewide Longitudinal Education Data System (SLEDS). This phase identified patterns of dual enrollment participation across the state for students of color. I reviewed data on type of high school, composition of high school, and also noted which colleges and universities partnered with high-minority high schools compared to predominantly White high schools. To obtain this data I submitted an official research proposal to the SLEDS data and governance team in January 2015. Approval of the proposal was granted by the SLEDS data and governance team and then sent onto the three governing commissioners for their review and approval. Official approval for the use of data was granted in April 2015 and in early May, I signed a data sharing agreement with Minnesota Office of Higher Education, who sponsored the project.

The quantitative phase answered the second research question: Does state-level data identify a pattern of racial inequities in dual enrollment participation and opportunities? To complete this phase of this study I used secondary data analysis. Hakim (1982) defined secondary data analysis as “any further analysis of an existing dataset which presents interpretations, conclusions, or knowledge, additional to, or different from, those produced in the first report on the inquiry as a whole or its main result” (as cited in Smith, 2008, p. 324). A large SLEDS data set existed as a result of an earlier proposal for the Midwest Research Education Lab (REL). Midwest REL study focused on the participation rates and postsecondary outcomes for dual credit participants. I used this same set of variables to complete my analysis, but instead focused on the type and composition of high schools engaged with dual enrollment and offerings for students of color.

Data collection. The SLEDS data warehouse includes information from Minnesota Department of Education (MDE), Minnesota Office of Higher Education (OHE), and Minnesota Department of Employment and Economic Development (DEED). SLEDS provides information about a person from K-12 through postsecondary and into the workforce. These various state entities collected the data as part of their normal business. Prior to the data being sent to the SLEDS warehouse, the data was reviewed, cleaned, and processed by each of the state agency partners (MDE, DEED, and OHE). After validation of the data by each state agency, the de-identified SLEDS data was delivered via secure network to a research drive at the Minnesota Office of Higher

Education (OHE). This data was stored in a secure folder and access limited to only the research team at OHE and me.

The data represented every Minnesota public high school graduate from the Class of 2011. This provided the opportunity to show patterns that occurred in public high schools from 2007-2011. The data set included student demographic information, characteristics about high schools and postsecondary degree granting institutions. This study is one of the first completed using SLEDS data and complements the Midwest REL dual credit study. See Appendix A for the variables included in this study.

Data analysis. I began data analysis in April 2015 and concluded in October 2015. To conduct my analysis I used the software package Statistical Package for the Social Sciences (SPSS). I identified descriptive statistics, which “describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data” (Laerd Statistics, n.d., para. 1). Through frequencies, cross tabulations, and analysis of mean, mode, range, and median, I answered the question regarding statewide patterns for racial/ethnic minorities’ participation. Under this main research question, the following questions were explored and answered in the secondary data analysis:

- Which high schools and what type (senior, secondary, state-approved alternative programs, or “other”) of high schools have students of color participating?
- How many students of color participate at each high school, and what proportion is this to the student body?
- Where in the state are the high schools located with the highest numbers of students participating in dual enrollment? Where are the high schools with the largest proportion of students of color participating in dual enrollment?

My first priority consisted of creating a state-wide summary of the data on students of color's participation in dual enrollment. Then, I moved to an analysis of state-wide patterns in dual enrollment participation for low-income and Limited English Proficient (LEP) students. Next, I compared the three groups to one another to show the similarities between these other marginalized communities and Minnesota's racial/ethnic minorities.

After the state-wide analysis, I moved to review the overall high school participation by sector and school classification (type). Then, I moved to a summary of high-minority high schools' participation in dual enrollment with the best measure of central tendency (i.e. mean, median, mode, and range). Next, I compared the mean, median, mode, and range of predominantly White high schools to high-minority high schools. I identified the frequency of participation and discussed the findings found within the State of Minnesota by high school type, student body composition, and location.

Next, I answered the following questions about patterns of dual enrollment participation along racial/ethnic lines. What postsecondary institution(s) are partnering with which high schools? What are the characteristics of those institutions (college level, control, and selectivity)? Through these questions I summarized the participation of postsecondary institutions with high-minority high schools. This finding suggested systemic patterns of postsecondary partner participation for various types and populations of high schools within the State of Minnesota.

The SLEDS data set did not include some enrollment data. Therefore, to accurately answer my research questions, I added additional information (enrollment numbers, school classification, or county of the school from MDE). I used MDE's online Data Center to find enrollment data from fiscal year 2011 (FY11). From there, I merged the FY11 data for grade 12 with the SLEDS list of schools to make a complete file that included minority student enrollment, school classification, and county location of the school. From there, I removed all schools classified by MDE as special education, hospitalization or treatment facilities, and adult basic education, which fell outside of the scope of this research. This changed the number of institutions available for analysis from the 668 high schools in the SLEDS data set to 639 high schools in my data set.

To create a more accurate file to answer my research question, I added an additional calculated variable (high-minority high school). I used the MDE enrollment data to calculate the minority enrollment in each high school. Using the count for total minority enrollment of Grade 12 students at each school, I identified schools as high-minority if the minority population equals or exceeds 37.5 percent. High schools with greater than 37.5 percent received a label as "high" and those with less than 37.5 as "low" (see Appendix D). This data set included 130 high schools labeled as "high" or high-minority high schools and 509 high schools labeled as "low" or predominantly White high schools.

Lastly, during the data analysis I found records for students with postsecondary courses prior to the high school graduation date, but with no flag for concurrent enrollment or PSEO. I determined that the concurrent enrollment and PSEO flags

represented students receiving state funding for participation. Therefore, students enrolled in a college credit program, but paid for by third-party contract or without the state aid, did not initially show up in the data. Therefore, I created a flag to identify students with a postsecondary record beginning prior to their high school graduation date or students enrolled in postsecondary with transfer credits, but no PSEO, AP, IB, or concurrent enrollment identifier. This resulted in the creation of an “unknown” program category.

Another item to note, SLEDS data included information on postsecondary institutions connected to a specific student, but not directly to a high school. Therefore, to answer the question about which high schools connect with which postsecondary institutions, I analyzed the postsecondary partners for individual students at a high school. To identify a postsecondary partner for a student I decided to isolate the student’s first postsecondary record during either junior or senior year for Class of 2011 graduates. This provided postsecondary dual enrollment data for 494 high schools. One limitation to note is that the high school associated with the student record is the high school from which the student graduated and may not be the high school where the student took the course. Additionally, this is limited to the *first* postsecondary institution and does not include subsequent institutions or a comprehensive look at all postsecondary partners for a specific high school. Lastly, I use the term *partnered*, recognizing that not all dual enrollment participation, particularly PSEO, required a formal partnership between the high school and postsecondary institution. However, I decided on *partnered* because both

institutions partner in providing a piece of a student's education, even if it is a loose or uncoupled partnership.

This final data set proved sufficient to answer the second research question about Minnesota's statewide patterns of participation in dual enrollment. In addition to identifying statewide patterns, this phase of the study created a list of potential high schools for consideration as cases in the qualitative phase of the study. Further, this phase provided the groundwork to answer the first and central question of the research on the role of dual enrollment in disrupting or perpetuating structural racism in Minnesota.

Qualitative Phase

The research conducted during the qualitative phase focused on the third and fourth research questions.

How do those who administer or participate in dual enrollment programs describe their experiences? How do their descriptions differ based on their positionality (e.g. administrators, teachers, students, parents, community members, etc.)?

How do different organizational practices and administrators' expectations influence dual enrollment opportunities for students of color?

To describe how the phenomenon of dual enrollment courses and programs operate in high-minority high schools within Minnesota, I conducted a multi-site case study. While case studies are not generalizable, a multiple-site case study creates a stronger case and better evidence for description and possible trends (Yin, 2009). Case study methodology fit as I sought answers for questions that began with "how" and "why" (Merriam, 1988; Swanborn, 2010; Yin, 2009). For example, how the experiences, practices, and attitudes in the schools affect dual enrollment opportunities? Case study

methodology encouraged observation and face-to-face interviews to inform the research and provide answers to the questions.

Additionally, the CRT framework that guides this research fits well with case study. CRT centers research on social justice and addressing racial inequity, case study can be a tool used in applied research and evaluation, which is at the heart of CRT. Myers (2008) argues that, “critical case study research involves critical reflection on current practices, questions taken-for-granted, assumptions, and critiques the status quo based on the theories of one or more critical theorists” (p. 9). Critical race theorists working in the field of education call for a critical review of the practices and culture of high schools that support and limit access for students of color (Ladson-Billings, 1998; Smith-Maddox & Solorzano, 2002). Moreover, Parker and Lynn (2002) stated, “the thick descriptions and interviews, characteristic of case study research, not only serve illuminative purposes but also can be used to document institutional as well as overt racism” (p. 11). Identifying racist practices and assumptions that hinder the access and readiness of students of color focused this project. Through the data collection techniques used in case study, such as interviews, focus groups, observation, and document analysis, I highlighted the “importance of perspective and context in assessing truth claims” (Parker & Lynn, 2002, p.11). For these reasons, I selected case study as my method for the research.

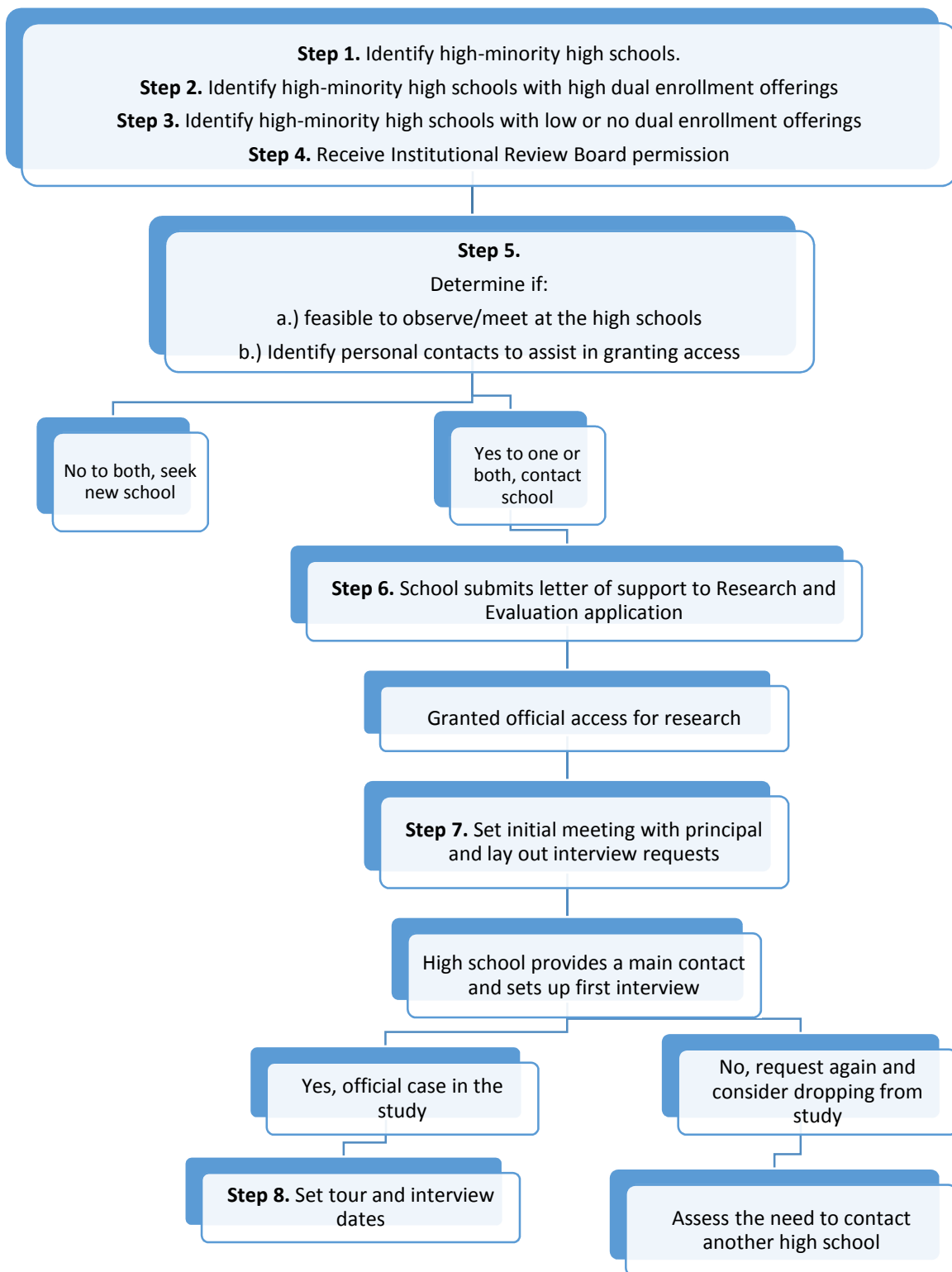
Setting and environment. In the quantitative phase, I identified school districts with the lowest percent of students of color engaged in dual enrollment and compared that to the population of students of color in the high school to determine the representation. I also considered the locations of the high-minority high schools. From

there I used purposive sampling to identify key districts to interview. Tashakkori and Teddlie (2003) state purposive sampling means “intentionally selecting specific cases that will provide the most information for the questions under study” (p. 279). It was imperative that I select high schools enrolling at least a few students of color in both PSEO and concurrent enrollment, because research questions three and four articulated an interest in learning about the experience, practices, and attitudes involved in the participation of students of color in dual enrollment programs. My list included schools with high and low percentages of students of color enrolled in dual enrollment. Thus, schools with zero percent of participation were immediately excluded from consideration.

I narrowed my options to five school districts and identified high schools within each school district that could be exemplar as well as those considered non-exemplar. Because cultures, policies, and populations differ significantly across districts, I decided to obtain access to high schools within one school district rather than across school districts. This led me to select one urban school district with multiple high schools. View Figure 3.1 to follow my path for selecting cases for this study.

To collect data within this school district, I submitted a packet for review to the school district’s research department. Prior to submitting the application, a letter of support from the prospective high schools was required. Therefore, I contacted via email and phone call all of the high schools within the district, but most principals did not respond to my phone calls or email messages. Through personal contacts, I received letters of support from two high schools, who met the criteria. Upon acceptance of my study by the research department, I began to conduct research at those two schools.

Figure 3.1 Criteria for selecting high schools



Fortunately, these two high schools met my needs as defined by my purposive sampling: one qualified as an exemplar and the other as non-exemplar. To have theoretical replication, Yin (2009) suggests a minimum of two cases as a necessary component for validation. Theoretical replication added validity, according to Yin (2009), by predicting “contrasting results but for anticipatable reasons” (p. 54). While different settings, the high schools had similarities based on characteristics of the city and school district. Because of the different participation rates and college-going cultures, the high schools had different practices, attitudes, and student experiences. This provided validity to the basis for the qualitative study.

School district. The two high schools are part of a school district located in a metropolitan area in the state. The district’s twelfth grade population in 2011 exceeded 3,000 students, and students of color made up almost 80 percent of the twelfth grade. Graduation rates for the district hovered around 75 percent, with underrepresented groups showing lower rates. The district is comprised of multiple high schools and alternative learning centers.

The school district implemented a racial equity agenda at all schools. This agenda has included a phased-in racial equity training for all staff, culturally competent curriculum changes, and shifts in disciplinary actions throughout the district. Therefore, this district provided a rich environment for this research and allowed me to provide meaningful feedback to the high schools to address policy changes and structural barriers around race.

The high schools, Arthur and Russell, have distinct differences in their setup, demographics, and leadership. In the following sections, I describe the student body, location, and different landscapes at the two high schools. This provides a more complete picture of the settings for the qualitative research.

Arthur High School. Arthur High School (AHS), a pseudonym, is a senior high with a historical reputation as one of the higher performing high schools in the district. AHS is located in a quiet, middle-class neighborhood in the city. Arthur High School's principal has been at the helm for a few years and seeks a culture change in the high school as the demographics have shifted. The principal opted in to this research as an avenue to learn more about the high school and see the results from an objective outsider. Prior to beginning the research, the principal and I discussed some issues surrounding race at AHS and identified ways this research could benefit new initiatives at the high school.

About 1,300 students attended AHS and seventy-five percent of students identified as students of color, with Black/African American students making up the largest racial/ethnic minority group. Seventy-two percent of students qualified for free or reduced price lunch, and twenty-six percent of students identified as English Language Learners. Forty-one percent of students were proficient on the reading MCA test and twenty-seven percent were proficient on the math MCA. Arthur High School had 5.4 FTE counselors, a ratio of 1 counselor to 240 students, better than the state average.

Arthur High School students can participate in two college access programs: a TRiO program and College Possible. The average ACT score at Arthur High School is

19. The options for dual enrollment courses at AHS have remained stable for the past five years. AHS partners with a public, four-year university's dual enrollment program to provide CE courses in English, French, and Physics.

Russell High School. Russell High School (RHS), a pseudonym, is a secondary school located in a lower-income neighborhood in the city. RHS has been operating as a high school for less than a decade and has received little public recognition. The principal has been with Russell High School since its inception and provides a clear vision for the direction of the school. The principal participated in this research to learn about the impact of the college-going initiatives RHS has started.

More than 2,200 students attended RHS and students of color made up 94 percent of the RHS's student body, with Asian students representing the largest racial/ethnic minority group. Almost 93 percent of the population qualified for free or reduced price lunch, and 60 percent identified as English Language Learners. Seven full-time counselors served the student body, a ratio of one counselor to 314 students, which is better than the state average.

The following college access programs serve RHS: College Possible, GEAR UP, and a TRiO program. The average ACT score for the Class of 2015 was 16. Dual enrollment programming at RHS has expanded from zero course a few years ago to more than eight courses available in six disciplines. Students can select courses from a public, four-year institution in Math, English, Chinese, Physics, History, and Anatomy.

High schools are made up of people, determining the appropriate people to interview is critical. Corwin and Tierney (2007) identified seven categories of people

who participated in and created the college-going culture of a school. These categories are: administrators, teachers, counselors, students, school staff, family members, and community members. For my study I selected individuals from five of these categories. The information I collected from those groups formed a detailed picture of the school culture related to dual enrollment and college-going expectations. I intentionally selected individuals to accurately articulate the high school's organizational practices and environment. The categories and number of participants from each school can be found in Table 3.1.

Table 3.1 Categories and numbers of participants in case studies

Russell High School			Arthur High School		
Role	#	Data collection	Role	#	Data collection
Teachers	10	Focus group	Teachers	3	Focus group
Administrators	1	Interview	Administrators	1	Interview
College access staff	5	Focus group	College access staff	1	Focus group
Students	9	Interviews	Students	6	Interviews
Counselors	2	Interviews	Counselors	4	Interviews

Data collection. After receiving IRB approval and approval from the school district to conduct the research, I began data collection. Data collection included document analysis, observations, one-on-one interviews, and focus groups. In the following section, I outline the instruments, recruitment process, and tools for data collection.

Document analysis. According to Yin (2009), collecting documents provides background information prior to field work, ensures correct titles and organizational names, and allows the researcher to make inferences and corroborate or disprove information from sources. I collected documents prior to, during, and after my visits and

as needed during the data analysis. Document collection began with approval in August 2015 and concluded in January 2016. I collected information from each high school's website on dual enrollment opportunities. I gathered flyers and handouts the school used to communicate with students about dual enrollment. Additionally, I viewed registration guides that included information on dual enrollment options and the process, plus retrieved items displayed throughout the school or provided to me during interviews.

From each high school I gathered historical data on all the dual enrollment courses. This included the course names, titles, and designations (i.e. ECON 100 or PSTL 100) for all of the dual enrollment courses that have been offered from the high school from 2010 to present. This historical data showed a pattern of involvement with dual enrollment and connected the quantitative data set for Class of 2011 graduates to the qualitative phase. As students identified courses they enrolled in, I visited each postsecondary partners' website to find the correct course title and number of credits and in what format. I maintained a notebook and electronic file of the documents I collected.

Focused interviews. For the interview phase, I used focused interviews (see Appendix B) to elicit information from various groups at the high schools. Focused interviews require participants have direct involvement in a specific situation, such as participation in a dual enrollment course, and that the interviewer has conducted prior analysis that has generated at least one hypothesis regarding the topic (Merton & Kendall, 1946). Using the quantitative analysis to influence my interviews, I had two hypotheses: Students of color enrolled in high-minority high schools lacked access to concurrent enrollment courses, and *if* high-minority high schools had concurrent enrollment, most

would enroll more White students than students of color. Thus, the use of the focused interview helped to confirm my hypotheses from the quantitative process.

At each high school I was assigned a contact person to help with recruitment, communication, and data collection. Through my contact, I invited individuals to participate using a purposive sample and the suggested categories of people. Below I list each category and the strategies used to identify participants for the one-on-one semi-structured interview.

Administrators: At the initial meeting with the principal, I asked the principal to identify an administrator responsible for dual enrollment or college-going initiative and to inform the administrator that I would contact him or her. This yielded one formal administrator interview at each high school, along with multiple informal conversations with each principal.

Counselors: In my initial meeting with the administration, I asked for an introduction and recommendation to speak to the counselor(s) most closely involved with dual enrollment and college-going activities. At Russell High School, this led me to two counselors with whom I had a working relationship. I contacted both via email and easily set up the interviews. I did not interview any grade level counselors.

At Arthur High School, I was directed to connect via email the two counseling chairs. After a few days, I received a phone call from a third counselor responsible for the College and Career Center. In my interview with this counselor, I was informed the other counselors would not have time for the project. After this initial interview I was directed to another counselor responsible for the honors program. We set up the interview. Both

provided quality information, but they did not have the longevity of the school on their side. I felt I did not have enough information about the school culture, so I reached out to my contact at the school to inform her I was getting no response from the counseling chairs. After a day, I was asked to email them again. Each reluctantly agreed and at the start of the interviews I reminded them they did not have to answer any questions. Ultimately, both provided useful information and engaged in the discussion. In the end, I interviewed four counselors at Arthur High School.

Students: Students were recruited by the main contact at the school. The contact took the class lists of students who had participated in at least one PSEO or concurrent enrollment course and identified as students of color. Students were given both a parent consent form and an assent form.

At Russell High School, I interviewed nine students over two different days. Two students canceled on the day of the interview, and one student forgot the parent signature form. Of the students interviewed, four identified as male, five identified as female, two were juniors and seven were seniors. Most of the interviewees had experience with both PSEO and concurrent enrollment.

Arthur High School presented recruiting challenges. The main contact empowered two counselors to recruit students, and initially recruited only a few students. With a little more pressure, they were able to recruit and schedule ten student interviews in one day. On the day of the interviews, two of my scheduled interviewees did not show and another two forgot the necessary forms and did not express interest in rescheduling. At Arthur

High School, I interviewed six students, four were juniors and two were seniors. All of the students identified as female and participated in only one dual enrollment program.

All participants signed an informed consent form, and those under 18 also signed an assent form. Additionally, each participant was reminded that participation was voluntary and could end at any point during the interview. Those who participated in a one-on-one interview received a gift card to Target. Each interview was audio recorded and transcribed. Interviews lasted between 11 minutes and 45 minutes. I did not conduct follow-up interviews with any of the participants. I took notes and wrote a reflective journal after each interview. Interviewing began in September 2015 and concluded in October 2015.

Focus group. I decided to conduct focus groups for the teachers and college access staff. Using a focus group allowed me to include as many voices as possible, use my time effectively, and to hear multiple perspectives, which enhanced the complexity and diversity of their responses (Krueger & Casey, 2008). The focus groups elaborated on and corroborated answers given during the individual interviews. At each high school, I conducted a focus group with teachers. Another focus group occurred with college access staff members. These groups added greater breadth and depth to my understanding of the dual enrollment experience and its place in the school.

Focus groups subjects received a gift card to Target for their participation. The focus groups varied in length, with most lasting less than one hour. The beginning time was reserved for informed consent, late arrivals, discussion of the study, and expectations for the group. The focus groups occurred in October 2015. See Appendix C for the focus

group protocol; it was modified slightly during the focus groups to accommodate time constraints. The focus groups were taped and transcribed, and I wrote field notes.

Teachers: Twelve teachers teach concurrent enrollment courses at Russell High School. At RHS, the teachers meet monthly to focus on issues related to concurrent enrollment. My contact at Russell High School added me to the agenda for one of the monthly meetings and informed teachers of the research in an email encouraging them to arrive on time to participate in the study. All of the teachers expressed interest in participating and providing input, but due to scheduling conflicts, only 10 participated. With other business to conduct, the group was unable to devote its entire meeting time to my focus group. I had 45 minutes with this group of teachers, who had been with this school or in this building from three to nineteen years.

Arthur High School has four teachers engaged in concurrent enrollment and no specific meetings for concurrent enrollment teachers. The teacher focus group at Arthur High School was loosely organized by the Assistant Principal. The interest from teachers was tepid, and most unwilling to meet outside of the school day. Therefore, the focus group occurred during a prep hour for three of the four teachers. The Assistant Principal offered to provide coverage for the fourth teacher, but that never occurred. The focus group consisted of three concurrent enrollment instructors, which is smaller than recommended for best practice. The focus group lasted approximately 40 minutes, as participants arrived late. Initially, the participants appeared unengaged and spent time grading papers and checking email. However, within 20 minutes the tone changed and

the participants became engaged, providing excellent data. The teachers at Arthur High School had taught at the school between two to nineteen years.

Community members: For this category, I conducted focus groups with college access partners, which represented non-profits and federal and state grant programs. These college access staff, employed by outside entities, work with students at the high school. I extended invitations to College Possible, TRiO programs, and a GEAR UP program. A district liaison who has a relationship with each group contacted the direct service providers via email and introduced them to the study.

The college access focus group took place in October 2015 and included three different college access programs and six participants, one man and five women. Of those six participants, only one had experience with Arthur High School and the remaining five worked with Russell High School. Four of the participants worked within the school on a weekly basis and two others supervised staff within the school buildings. The experience of the program staff within the schools ranged from two to six years.

Direct observations. Direct observation serves as the best way to see how environmental factors, behaviors, and other conditions affect the “case” (Yin, 2009). Direct observation was a continuous part of my data collection and began with my first visit to the schools in September 2015. My observations added depth to the information gleaned in my interviews and focus groups. It also shaped my understanding of the college-going culture of the school. After each visit to the school I jotted down notes, added pictures, and reflected on the experience.

While I did not use a formal observation tool, my observations were informed by Corwin and Tierney's (2007) necessary aspects of creating a strong college-going culture. The following components guided my observations: academic momentum, understanding of how college plans develop, a clear mission statement, comprehensive college services, and coordinated and systemic college support.

I visited Arthur High School on eight occasions. Five of those visits included formal interviews, two were meetings with the principal and research contact, and the last included a tour of the school. My student interviews occurred in the office, near the counseling area, and outside the college and career resource center. Therefore, during my interview days at Arthur High School, I was able to witness counseling sessions, use of the college and career resource center, behavior in the hallways, and traffic to the counseling offices. The tour of the high school provided me an opportunity to visually identify cues of the college-going culture.

I visited Russell High School on seven occasions. Five of those visits were for interviews, one included a tour of the school, and two of the visits were meetings with the principal. During my time at Russell High School, I spent time in both the college and career readiness center and also the main office. I was able to observe first-hand the advising, coaching, and classes occurring in the college and career resource center, as well as the traffic to the assistant principals' offices. The tour of the high school provided me an opportunity to visually identify cues of the college-going culture.

Official data collection for the qualitative portion concluded because I reached saturation of categories, saw emergences of regularities, and approached over-extension,

which occurs when the collection of data is irrelevant to the study (Lincoln & Guba, 1985). I concluded the data collection phase in November 2015 and began the final and intensive data analysis portion of the study.

Data analysis. Informal data analysis occurred simultaneously with my data collection. According to Merriam (1998), “The process of data collection and analysis is recursive and dynamic” (p. 123). With informal data analysis occurring during data collection, I refocused interview and focus group questions that were not yielding the right information and shifted the direction of other questions to garner better responses. Ongoing analysis informed data collection and changed criteria and scope of specific focus groups, interviews, observations and document collection. Case study research is an iterative process that requires continual reflection and analysis of the information gathered.

After the data collection finished, the formal data analysis occurred with transcribed interviews, memos, document analysis, and field notes, which I used to analyze the data for both Russell and Arthur High School. Initial coding documented key phrases, topics, and experiences as related to the research questions. Next, conceptual categories were developed to further explain the cases and better interpret the data (Merriam, 1988; Swanborn, 2010). I continued to refine my coding categories by connecting them to the research questions and the other data. After the initial analysis, I sent a draft to each of the contacts and the principal at each school. Upon their review, I updated information and assessed the need for further data collection or analysis. Data analysis concluded in February 2016.

One challenge with case study research is the large volume and variety of sources, which creates difficulties in focusing the analysis (Yin, 2009). While my research encompasses an entire high school, my goal is not to provide a full description of the high school. Rather I sought to identify patterns or trends in practices, attitudes, and experiences in the development and participation of dual enrollment opportunities. This narrowing of scope is just one tool I used to help decrease the volume of data. Yin (2009) suggested theoretical propositions as a way to limit and to guide the analysis. Yin (2009) explained that using the “theoretical proposition helps to focus attention on certain data and to ignore other data” (p. 130). For this study, with CRT as my theoretical lens, I reviewed data with a focus on power differentials, racial/ethnic injustices, and inequity in access and participation for communities of color. Additionally, Yin (2009) argued that quantitative data can help support the key propositions of the study and provide greater clarity to the final analysis. Lastly, I spent time cross-checking the information from the qualitative interviews, document analysis, and observation with the quantitative output, which created an additional opportunity for review and refined my focal point for the data analysis.

Scholars suggested additional techniques for focusing the data analysis such as reviewing the proposal, chronologically reading the case report, finding units of analysis to become categories, and checking the frequency of what is said (Merriam, 1988; Swanborn, 2010; Yin, 2009). Pattern-matching and cross-case synthesis was part of this analysis and both increased validity and made sense of the patterns emerging within the data. To ensure the validity of the analysis, I checked rival interpretations of the findings,

addressed the most significant aspect of the case study, and made use of my prior expert data to guide my interpretation and findings (Yin, 2009).

Mixed methods. Combining the two phases of this study helped to answer my main research question about whether dual enrollment serves as a disruption or perpetuation of structural inequalities. The quantitative phase provided the baseline and foundation to identify state-wide patterns of systemic inequity. The qualitative phase identified structures, processes, attitudes, and experiences that drive/create/reinforce inequities and hint at the bias that plays out within the high school culture. Together these two phases offered a more comprehensive review of dual enrollment within Minnesota for students of color and added greater depth to our understanding of how the programming works.

Limitations

A number of limitations exist for this study. The quantitative analysis conducted from secondary data resulted in some data points being unavailable. Therefore, some questions continue to go unanswered because the data is inaccessible. For example, there is no data source to identify state-wide patterns of dual enrollment course-taking and whether specific courses positively or negatively affect a student's college access or success. Additionally, the quantitative data reflected the Class of 2011. Since then, there has been a dramatic increase in dual enrollment programming across Minnesota. Therefore, the numbers provided for schools may not represent the current engagement with dual enrollment for some schools. Lastly, this data set included information on public high school graduates only. Without information on all dual enrollment

participants, even those who did not graduate, the data may not accurately identify the magnitude of the disparities.

Limitations in the qualitative phase exist because case study requires a great deal of researcher interpretation and subjectivity, is often ungeneralizable, and contains large volumes of data. These limitations often lead researchers to discard valuable data or overlook other key themes because of a lack of time or perspective or over-extension. For this research, the qualitative phase focused only on high-minority high schools and could not include the perspective or experience for students of color in predominantly White schools. Other limitations to the qualitative study were the ability to travel, a lack of time, and limited funding. If unlimited funds, time, and travel existed, this research could include other areas within the State, and multiple school districts; unfortunately, it did not.

Chapter Four: Quantitative Themes

Minnesota's participation rates for students of color in dual enrollment mirror prior research on American educational programs. Prior research documented low participation rates and inequities in access across racial/ethnic, socioeconomic, and geographic lines, which illuminated structural barriers limiting marginalized students' participation (Austin-King, Lee, Little, & Nathan, 2012; Conger, Long, & Iatarola, 2009; Corra, Carter, & Carter, 2011). Moreover, scholars reported uneven opportunities for dual enrollment, with some high schools or districts offering multiple opportunities and others offering very few options (Hoffman, 2005). The data in this chapter builds on the above research through the following research question: Does state level data identify a pattern of racial inequities in dual enrollment participation and opportunities? The emergent themes from the data show that Minnesota's high-minority high schools provided less options and inequities exist between high-minority high schools to their predominantly White counterparts.

Dual enrollment participation for public high school graduates in the Class of 2011 suggests systematic racial inequities, reinforcing the status quo for Minnesota students. Five themes in the data support this claim. First, graduates of color did not participate at rates proportionate to their percentage of the class make-up, nor did graduates of color access certain dual enrollment programs at similar levels as White graduates. Second, differences in participation were discovered between White graduates and racial/ethnic minorities, low-income graduates, and graduates with limited English proficiency, showing consistent underrepresentation of marginalized groups in dual

enrollment opportunities. Third, graduates of color participated in dual enrollment at lower rates, regardless of classification of high school in which they enrolled. Fourth, high-minority high schools had less involvement with any dual enrollment program, while predominantly White schools showed higher enrollments through multiple dual enrollment opportunities. Lastly, high-minority high schools partnered with less selective postsecondary institutions. Combined, these themes suggest an educational environment that does not lend itself to equitable access to dual enrollment opportunities and limits the postsecondary success of students of color.

One: Participation Differed between Graduates of Color and White Graduates

This section analyzes the participation rates throughout the state for dual enrollment broadly. It also highlights the participation rates in each dual enrollment program, concurrent enrollment and PSEO. The section ends with an analysis of where dual enrollment occurred in the state.

Eighty-two percent of Class of 2011 graduates identified as White in Minnesota. The remaining 18 percent (10,952) identified as students of color (Asian, Black, Hispanic, and Native). One percent of graduates of color identified as Native/American Indian, four percent Hispanic/Latino, six percent Asian/Pacific Islander, and seven percent Black/African American. The percentage of graduates of color remained lower than the actual enrollment numbers of students of color. The use of SLEDS data limited the analysis to graduates only, and Minnesota graduated slightly more than half of enrolled students of color. Therefore, SLEDS provides only one picture of the involvement (or lack thereof) for students of color in dual enrollment programs.

With more than 32 percent (18,966) of the public high school graduates from the Class of 2011 participated in dual enrollment opportunities, Minnesota's rate of participation is greater than Florida's and New York's highly acknowledged and evaluated programs (Allen, 2010; Holcombe & Smith, 2010). Across the state, students gained access to dual enrollment in 85 percent (548) of high schools. Students of color participated in dual enrollment in 61 percent of the schools with dual enrollment participants (336 out of 548). White students participated in dual enrollment at 93 percent of the high schools (507 out of 548). Participation in dual enrollment varied dramatically from high school to high school; participation rates ranged from less than one percent to 100 percent of the graduates per high school. High schools with one hundred percent participation occurred in very small and predominantly White, if not completely White, schools. On average, 30 percent of graduates per high school participated in dual enrollment.

Overall, graduates of color participated in dual enrollment at a disproportionate rate compared to their class make-up. Graduates of color made up 18 percent of the Class of 2011, but only 12 percent of dual enrollment participants (2,339). Furthermore, a 13-point difference in participation rates existed between the percentage of White graduates participating in dual enrollment compared to the percentage of graduates of color participating in dual enrollment (34 compared to 21, respectively).

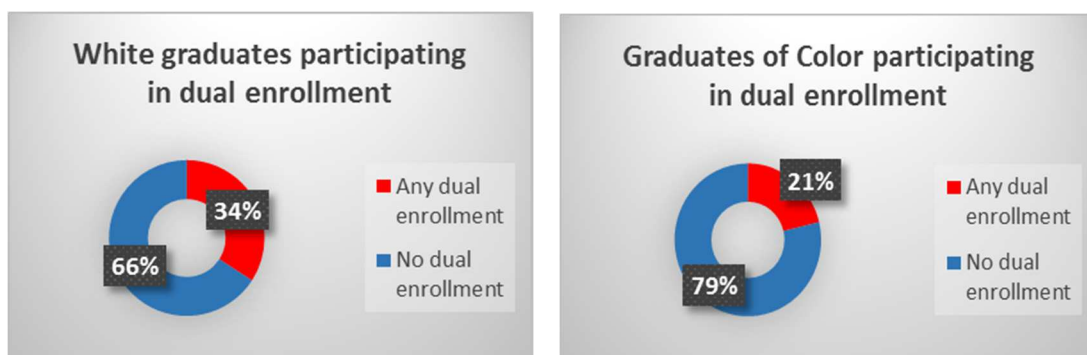


Figure 4.1 and 4.2 Percentage of dual enrollment participation by race/ethnicity

Gaps between White graduates and graduates of color were also found in program participation. As discussed in chapter two, program participation varies by the level of school buy-in, adult gatekeeping, and autonomy of the program. Therefore, gaps in participation by program type provided evidence of structural barriers within the school system. Fifty-five percent of White graduates participated in concurrent enrollment, a school-led and directed program, compared to forty-four percent graduates of color. Graduates of color participated in PSEO, a student-led and directed program, by seven percentage points higher than White graduates (23 compared to 16, respectively). Also, graduates of color enrolled in an “unknown” program type more than White graduates. The “unknown” program type proves problematic for analysis and is an area for further exploration.

Differences in program participation by race/ethnicity calls for greater scrutiny of the programs and the high schools where programs exist. Future research should include an analysis of the criteria for participation, barriers to participation and recruitment efforts. The case study analyses in chapters five and six addresses some of these aspects at high-minority high schools and suggest the high school environment, approach to

recruitment, and removal of barriers can affect the participation rates for students of color.

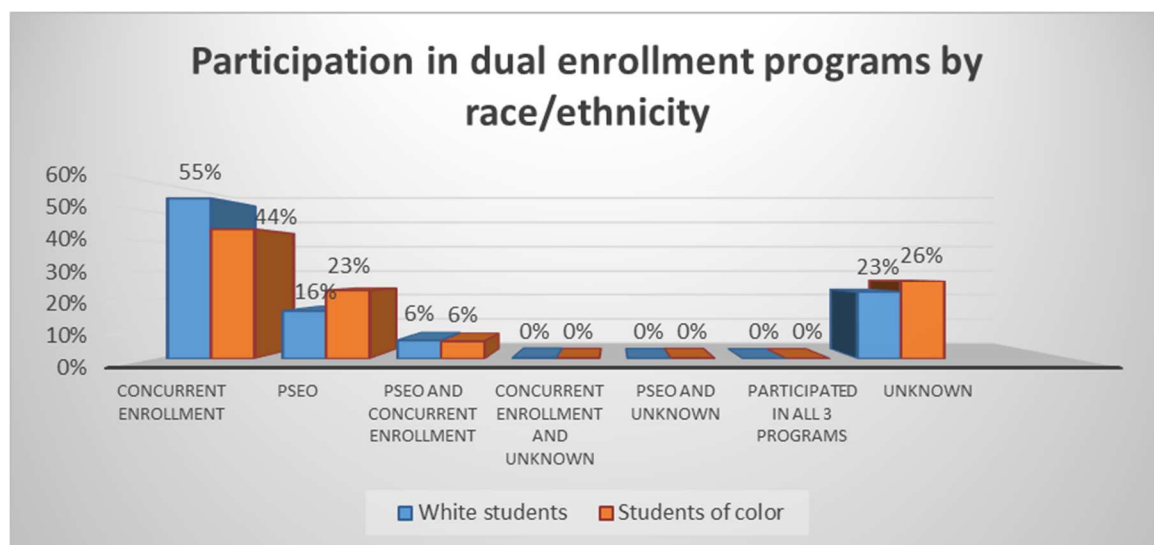


Figure 4.3 Participation in dual enrollment programs by students of color and White students

Location. The data also revealed a mismatch between where dual enrollment opportunities occurred and where Minnesota’s students of color resided, offering partial explanation for the low participation rates. While people of color can be found throughout the state, Minnesota’s students of color heavily populate the urban core and a few pockets in outstate Minnesota (Census, 2014). The counties representing the urban core and the outstate communities with high-minority high schools showed lower rates of participation per high school than suburban or rural Minnesota counties. Educational facilities within Hennepin County, one of Minnesota’s most racially diverse and largest counties, dominated the bottom quartile of dual enrollment participation, with most high schools showing zero percent participation (See Appendix D). Of the 160 schools in the top quartile for dual enrollment participation, high-minority high schools represented only six percent (10).

Minnesota's dual enrollment pattern, contrary to previous research suggesting suburban areas as high-points for dual enrollment (Kleiner & Lewis, 2005; Speroni, 2011b; Ulate, 2011), showed outstate, rural schools to be dominant providers of dual enrollment opportunities. St. Louis County, in the Northeast quadrant of the state, had the most high schools in the top quartile, and Stearns County, in central MN, had the second highest number of schools. The two counties (St. Louis and Stearns) populations exceeded 91 percent White residents (Census, 2014).

Larger percentages of White graduates participated in dual enrollment compared to graduates of color. White graduates participated in concurrent enrollment at higher percentages than graduates of color, but graduates of color surpassed Whites enrollment for PSEO and the "unknown" programs. Finally, the robust dual enrollment programs in the state occurred in regions of the state with few students of color. Therefore, location and program availability may factor in to participation rates for graduates of color.

Two: Inequalities in Participation across Marginalized Groups

Historically, students of color also are members of other marginalized communities, such as those with low-income or immigrant status. Breaking down participation rates by broad racial/ethnic groups, as well as income and immigrant status, adds to the conversation about systemic and structural racism in dual enrollment. This section analyzes the participation rates by the broad racial/ethnic groups and then provides an analysis of other marginalized communities.

Race/ethnicity. Black/African American graduates participated less in dual enrollment programs than other minoritized racial/ethnic groups. Black/African

American enrollment was four to seventeen percentage points behind all other racial groups (see Table 4.1). Additionally, comparing dual enrollment participation rates to percentage of graduates showed the overrepresentation of White graduates and underrepresentation of minoritized racial/ethnic groups. White students remained overrepresented by six percentage points, with all other racial/ethnic groups underrepresented by anywhere from less than one percent to greater than three percent. The largest gap existed for Black/African American graduates (see Table 4.1).

Table 4.1 Minnesota participation in dual enrollment by racial/ethnic groups

Race/ Ethnicity	Number of Class of 2011 graduates	Number participated in dual enrollment programs	Percent who participated in dual enrollment	Percent of all DE participants N =18,966	Percent of all Class of 2011 graduates N = 59,499	
Asian/Pacific Islander	3,579	930	25.98	4.90	6.02	Under
Black/African American	4,261	729	17.12	3.84	7.16	Under
Hispanic/Latino	2,309	485	21.00	2.56	3.88	Under
Native/American Indian	803	195	24.28	1.03	1.35	Under
White	48,547	16,627	34.25	87.67	81.59	Over

Within the minoritized racial/ethnic groups, Black/African American graduates' participation ranked at the bottom. Black/African American graduates made up 31 percent of the participants of color in dual enrollment; however, in the state Black/African American graduates represented 39 percent of the graduates of color (see Table 4.2). Conversely, Asian/Pacific Islanders represented the largest group of minoritized dual enrollment participants at 40 percent. This is an overrepresentation of six percentage points. Native/American Indian graduates were the only group with equal representation, while Hispanic graduates had a slight underrepresentation (22 percent compared to 21 percent).

Table 4.2 Minnesota percent of participants of color in dual enrollment

Race/ Ethnicity	Number of Class of 2011 graduate s	Number participated in dual enrollment programs	Percent of graduates of color N=10,592	Percent of DE participants of color N =2,339	
Asian/Pacific Islander	3,579	930	34	40	Over
Black/African American	4,261	729	39	31	Under
Hispanic/Latino	2,309	485	22	21	Under
Native/American Indian	803	195	1	1	Under

Participation or concentration of each racial/ethnic group engaged in dual enrollment per high school varied (see Table 4.3). More White students participated in dual enrollment than any other racial/ethnic group. Asian/Pacific Islander dually enrolled graduates had the widest range for marginalized students (77), but this group was one-third the range of White dually enrolled graduates (233). Additionally, the average number of dually enrolled White graduates per high school was between 8 and 17 times higher than other racial/ethnic group.

Following the earlier trend, Asian/Pacific Islander dually enrolled graduates had the largest concentration for minoritized racial/ethnic groups, with an average of 4.2 dual enrolled graduates per high school. Black/African American dually enrolled graduates came in third, with an average of 3.6 per high school. However, it is important to note that all racial/ethnic groups had a mode of one, suggesting a number of high schools lack a coordinated effort in dual enrollment engagement for any racial/ethnic group.

Table 4.3. Descriptive statistics of dual enrollment participation by racial/ethnic group

Race/Ethnicity	All Minnesota High Schools			
	Range	Mean	Median	Mode
Asian/Pacific Islander	77	4.2	2	1
Black/African American	28	3.6	2	1
Hispanic/Latino	17	2.5	1	1
Native/American Indian	12	1.9	1	1
White	233	34.0	21	1

Program participation differed by racial/ethnic group, with some enrolled in PSEO more frequently than concurrent enrollment. White graduates participated in concurrent enrollment more than other broad racial/ethnic group (55 percent). Following closely behind, 52 percent of Hispanic/Latino dual enrollment graduates participated in concurrent enrollment. Native/American Indian and Asian/Pacific Islander dually enrolled graduates followed with 47 and 45 percent respectively. Black/African American dually enrolled graduates participated in concurrent enrollment at 19 percentage points less than White students and nine percentage points lower than the closest minoritized racial group (see Table 4.4). The disparity in participation between Black/African American graduates and other minoritized groups should be examined. This gap suggests structural barriers to concurrent enrollment, particularly for Black/African American students.

Asian/Pacific Islander dually enrolled graduates participated in PSEO at the greatest rate, which is four percentage points higher than Black/African American graduates and nine percentage points higher than White and Hispanic/Latino graduates. The level of involvement by Black/African American graduates in PSEO highlighted the potential structural racism and barriers at the high school level for some racial/ethnic groups. One inference could be that high schools inadvertently prevent students from accessing college credits at the high school, thus forcing them to navigate their own path through PSEO.

Native/American Indian dually enrolled graduates, on the other hand, participated at the lowest rates in PSEO less than half that of Black/African American and

Asian/Pacific Islander dually enrolled graduates (see Table 4.4). The low rate of involvement of Native/American Indian graduates in PSEO calls for further exploration. Do Native/American Indian students have geographic barriers? Are postsecondary institutions obstructing access? Do the high schools with Native/American Indian students provide information about PSEO?

Table 4.4. Percent of dually enrolled MN graduates by different types of DE programs and race/ethnicity

Race/Ethnicity	Dual enrollment programs			
	CE	PSEO	Unknown	Combo
Asian/Pacific Islander	45	29	19	7
Black/African American	36	25	33	6
Hispanic/Latino	52	20	25	3
Native/American Indian	47	12	37	4
White	55	20	19	6

A quarter of Hispanic/Latino and almost a fifth of Asian/Pacific Islanders and White dually enrolled graduates participated in an “unknown” program. However, more than one-third of Black/African American and Native/American Indian dually enrolled graduates showed participation in an “unknown” program. What about those two racial/ethnic groups or the high schools they attend make them more likely to be candidates for the “unknown” programs? Unknown programs, as described in chapters two and three, often develop through an institution and a high school bypassing the state department of education. Therefore, MDE does not capture data on the program and the students’ involvement remains unknown to the state and not included in the data warehouse.

Overall, Asian/Pacific Islander dually enrolled graduates’ participation rates most closely mirrored White dually enrolled graduates. Hispanic/Latino participation rates for dually enrolled graduates raised fewer concerns. However, Black/African American and

Native/American Indian students, two groups historically and continually marginalized in education, had the largest gaps in participation. These findings suggest systemic barriers based on racial differences for these communities. A deeper understanding of how these racial differences play out in high schools can be found in chapter six when Arthur High School students articulate a disconnect and lack of access to dual enrollment for Black/African American and Native/American Indian students.

Income. According to the latest state-wide reports, Minnesota's communities of color continue to struggle to reach economic stability (Reinan & Webster, 2015). This data adds to the conversation on systemic disengagement for specific communities and acknowledges the intersectionality of inequality. To further address intersectionality, I reviewed the data for economic status. The variable identifying students' eligibility in free or reduced price lunch served as a proxy for economic status, because families must demonstrate that household income falls with 185 percent of the federal poverty line. Thus, I identified students eligible for free and reduced price lunch as low-income.

Like students of color, students from a lower socioeconomic background showed lower participation rates in dual enrollment. Graduates eligible for free or reduced price lunch made up 30 percent of dual enrollment participants, which is eight percentage points below their representation for Class of 2011 (see Table 4.5). Of free and reduced priced lunch graduates, 26 percent participated in dual enrollment, which is 10 percentage points lower than the participation rate of non-eligible graduates (36).

Table 4.5. Dual enrollment participation rates by economic status for Minnesota graduates

Economic Status	Number of Class of 2011 graduates	Number participated in dual enrollment programs	Percent of graduates N= 59,499	Percent of DE participants N = 18,966	Representation
Free/Reduced Price Lunch	22,585	5,779	38	30	Under
Non-Free/Reduced Price Lunch	36,914	13,187	62	70	Over

Dually enrolled graduates from lower economic backgrounds participated in concurrent enrollment less than those from a higher economic background. This pattern aligns with the minoritized racial/ethnic groups and raises red flags about the access opportunities for underrepresented graduates. Unlike minoritized racial/ethnic groups, graduates eligible for free and reduced price lunch participated at a lower rate in PSEO than non-eligible students, but only by one percentage point. Also, the underrepresented dually enrolled graduates from a lower economic background participated in “unknown” programs at higher rates than higher economic background graduates, a pattern in line with the minoritized racial/ethnic groups.

Overall, students eligible for free and reduced price lunch participated at a disproportionately low rate compared to their representation in the Class of 2011. Program participation rates varied, with lower rates in both concurrent enrollment and PSEO for students from lower incomes, but the differences were not as stark as other underrepresented groups. Therefore, socioeconomic status (SES) may not affect participation as much as race. However, combining race and income, an area for future study, may show even greater access issues for underrepresented racial and socioeconomic groups.

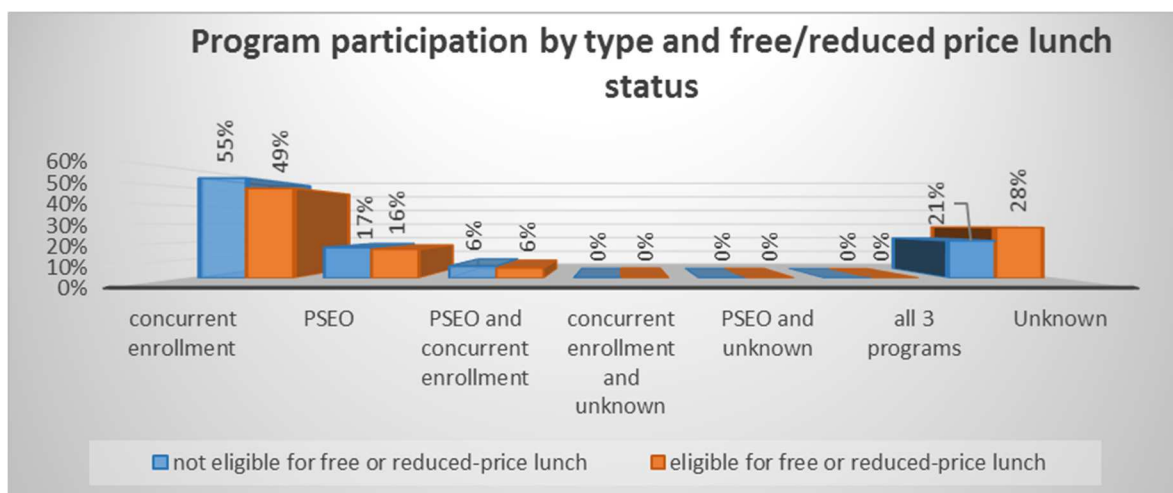


Figure 4.4 Program participation by free and reduced price lunch eligibility

Immigrant status. Minnesota is home to many refugee and immigrant communities, which diversifies the state. The largest influx of immigrant and refugee communities have been Hmong (Asian/Pacific Islander), Somali (Black/African American), and Karen (Asian/Pacific Islander). These populations fall into Minnesota's minoritized racial/ethnic groups and often fill classrooms for limited English proficiency (LEP). The intersection of limited English proficiency and race prompted me to conduct an analysis of participation rates for students identified with LEP.

LEP participants showed disproportionately low participation in dual enrollment compared to number of LEP graduates. LEP students made up eight percent of the Class of 2011 graduates, but only a little more than four percent of the dual enrollment participants (see Table 4.6). Also, the participation rates of non-LEP compared to LEP remained unequal. Fourteen percentage points separated the rates of participation, with approximately 19 percent of LEP students participating in dual enrollment programming compared to 33 percent of non-LEP graduates.

Table 4.6. Percent of dually enrolled Minnesota graduates by LEP status

	Number of Class of 2011 graduates	Number participated in dual enrollment programs	Percent of all graduates N= 59,499	Percent of DE participants N =18,966	
Limited English Proficiency	4,492	849	8	4	Under
Non-Limited English Proficiency	55,007	18,117	92	96	Over

Figure 4.5 shows that LEP students participated differently in dual enrollment than non-LEP students. Following the trend of racial/ethnic minorities and students from lower SES, LEP students participated in concurrent enrollment at 12 percentage points below non-LEP students. LEP students also followed the trend for students of color by enrolling in PSEO at a rate seven percentage points higher than non-LEP students. Also consistent with both racial/ethnic minorities and low SES graduates, more than a quarter (28 percent) of the dually enrolled LEP participants' program remained "unknown."

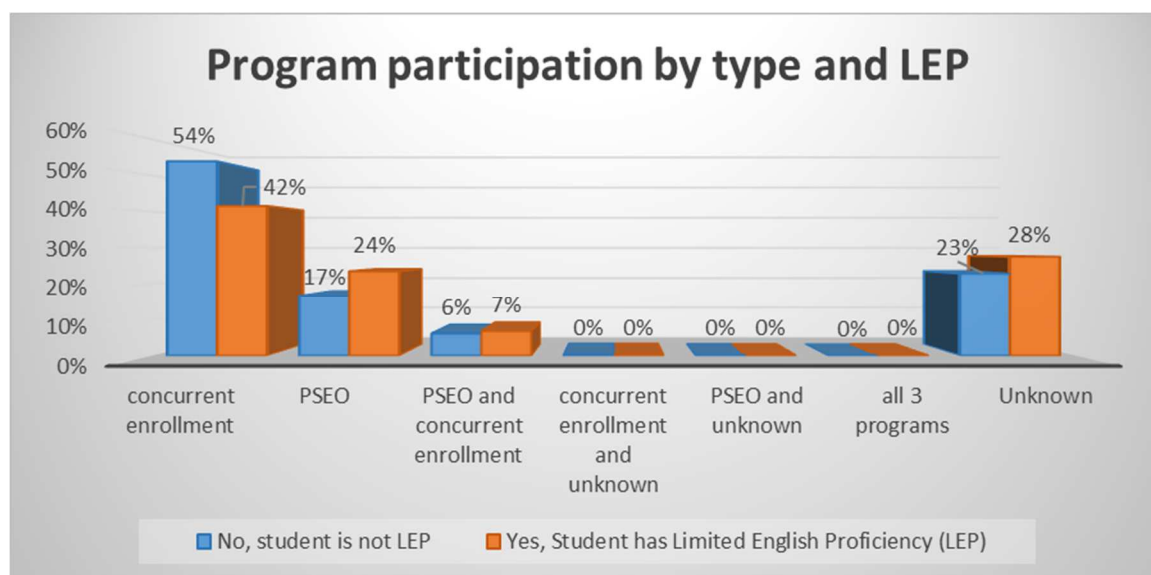


Figure 4.5 Program participation by limited English proficient students

Underrepresented students - racial/ethnic minorities, graduates from lower SES, and graduates with limited English proficiency – remained underrepresented in dual

enrollment compared to the dominant groups. However, program participation showed some variance, particularly in PSEO, where underrepresented groups had larger participation rates. As for concurrent enrollment, all of these underrepresented groups participated less frequently than White, higher income, and native English speaking students. This finding requires future research focused on how students from underrepresented groups access programs in the high school and the role of the “unknown” programs.

In chapter five, Russell High School demonstrates how a school creates a culture and environment committed to successfully serving students of color from immigrant backgrounds in dual enrollment programs. In chapter six, Arthur High School represents dual enrollment programming highly geared toward White, affluent, and non-LEP students. The differences in these high schools suggests the high school environment and mission significantly impact the opportunities and availability of dual enrollment opportunities. The next three themes will focus on aspects of the high school (student composition and type of high school) that create or limit opportunities in dual enrollment programs for students of color.

Three: Underrepresentation for Graduates of Color across Classifications

Students in Minnesota graduated from many types of high schools, some more comprehensive and college-focused than others. Historically, students attending non-comprehensive educational facilities received less college readiness opportunities, such as dual enrollment or dual credit (Corwin & Tierney, 2007; McDonough, 2005; Ulate, 2012). Unfortunately, a large concentration of Minnesota’s students of color attended

non-comprehensive educational institutions, such as alternative learning centers, private learning programs, and correctional facilities. Because of this, they missed opportunities such as dual enrollment. This section explores the differences in the high school classifications and identifies dual enrollment opportunities based on the various classifications.

High-minority high schools overwhelmingly fall into the non-comprehensive high school category. Thirty-four percentage points separated the number of high-minority senior and secondary schools compared to predominantly White senior and secondary schools (see Table 4.7). Furthermore, state approved alternative programs (public and private) represented nearly half (47 percent) of high-minority high schools, compared to less than a quarter (22 percent) of predominantly White high schools. The isolation of students of color to non-traditional facilities shows another facet of the systemic racism found within Minnesota's educational system and is one of the key barriers to dual enrollment.

Regardless of school type, Minnesota high schools failed to create environments that led to equitable participation in dual enrollment by students of color. Graduates of color, in all types of educational facilities, participated in dual enrollment at disproportionately low rates compared to White graduates. Senior and secondary schools had larger proportions of dually enrolled graduates than SAAPs or "other" schools. Ninety-five percent (152) of schools in the top quartile of dual enrollment participation classified as senior or secondary schools. The bottom quartile consisted of 53 percent of

the high schools classified as either SAAPs or “other” programs. A thorough review of each classification engaged with dual enrollment follows.

Table 4.7. Educational facilities in Minnesota based on racial/ethnic composition

Classification Description	# of high-minority	% of high-minority facilities N = 129	# of PW facilities	% of PW facilities N = 510
Senior High (9-12)	42	33	177	35
Secondary (7-12)	12	9	201	39
Elem/Sec Combo (K-12)	4	3	5	1
Public Area Learning Center (SAAP)	43	33	87	17
Public Area Learning Program (SAAP)	6	5	24	5
Private Learning Program (SAAP)	12	9	0	0
Distance Learning Program	1	1	12	2
Secondary Vocational Program	0	0	1	0
Delinquent Student/Correctional Program	8	6	2	0
Miscellaneous Program	1	1	1	0

High school classification. Ninety percent of senior (grades 9-12) high schools, the most common type of high school in the state, had at least one student participate in dual enrollment. While 97 percent (213) of senior highs had at least one student of color enrolled in the Class of 2011, only 81 percent of senior high schools (178) had students of color participating in dual enrollment. Table 4.8 shows disparities in participation by race/ethnicity within senior high schools. Senior high schools did not enroll White graduates and graduates of color at similar levels in dual enrollment. The median number of participants per school was eight times higher for White graduates than graduates of color, and the average number of participants was 10 times higher.

Most senior high schools did not have proportionate dual enrollment participation for graduates of color. Only one senior high had equal representation for graduates of color. The rest split between under- (47 percent) and over- (51 percent) representation of

graduates of color in dual enrollment, with similar ranges (see Appendix D and E). Senior high schools with overrepresentation of students of color were located within suburban and rural areas of the state; not one senior high school within Minneapolis or Saint Paul had overrepresentation of students of color. One hundred percent of high-minority senior high schools showed an underrepresentation of graduates of color, with underrepresentation of 30 percent or greater. It is also interesting to note that all predominantly White senior highs had underrepresentation of White students, but only in high-minority senior highs were White students overrepresented. The racial/ethnic composition of the senior high schools may affect dual enrollment opportunities for all students.

Secondary high schools (grades 7-12), of which 94 percent (201) identified as predominantly White schools, had over 78 percent (166) with at least one student of color in the Class of 2011. However, only 42 percent (90) of secondary high schools had at least one dually enrolled graduate of color. The participation indicators highlighted the discrepancies at secondary schools. The range of dual enrollment participation was triple for White graduates compared to graduates of color. Also, the average dual enrollment participation per high school was seven times higher for White graduates than graduates of color and the modes differed by twenty-five graduates per high school.

Secondary schools with graduates of color (166) manifested higher levels of underrepresentation than senior high schools. Sixty-three percent (104) of secondary schools with at least one dually enrolled graduate of color showed an underrepresentation in participation, ranging from one to eighty-six percent. Ninety-two percent of high-

minority secondary schools showed underrepresentation of dually enrolled graduates of color. Furthermore, 33 percent (3) of high-minority secondary schools had an overrepresentation of White dually enrolled graduates. Secondary high schools showed disproportionate participation for students of color.

Seventy-seven percent (132) of SAAPs had a least one graduate of color enrolled in the Class of 2011, but only thirty-five percent of SAAPs (60) had dually enrolled graduates of color. Of all the school classifications, SAAPs had more similarities in participation between White graduates and graduates of color (see Table 4.8). The lack of involvement of SAAPs in dual enrollment may be reflective of students' academic record, a school's limited college-going culture, or a perceived lack of student interest. However, with the largest concentration of high-minority high schools identified as SAAPs, this classification should become a priority for school districts and postsecondary partners to increase engagement with dual enrollment for students of color.

Overall, SAAPs provided limited dual enrollment opportunities to graduates of color. Of those high schools with dual enrollment, 15 percent (20) of SAAPs had an overrepresentation of dually enrolled students of color, with overrepresentation ranging from six to ninety-four percent. The remaining 85 percent of SAAPs (112) showed an underrepresentation of students of color, with a slightly larger range from two to one hundred percent.

High-minority SAAPs had a different pattern than the SAAPs overall. Two high-minority SAAPs showed overrepresentation of students of color, ranging from six to forty-three percent. The remaining high-minority SAAPs had an underrepresentation of

graduates of color which ranged from two to one hundred percent. High-minority SAAPs with more than 50 percent underrepresentation of students of color were located in Hennepin and Ramsey counties. Also, high-minority SAAPs showed an overrepresentation of White graduates, ranging from 33 to 57 percent. The location and the composition of the SAAPs affected the opportunities for graduates of color.

Table 4.8. Descriptive statistics of dual enrollment participation at different types of MN high schools.

	Students of Color				White students			
	Range	Mean	Median	Mode	Range	Mean	Median	Mode
Senior Highs	115	9.8	5	2	232	62.0	44	4
Secondary Schools	27	3.0	2	1	97	21.0	17	26
SAAPs	21	2.8	1	1	24	3.2	2	1
All others	8	3.3	2	2	22	9.0	8	N/A

The “other” type of educational facilities (all other schools found in Table 4.4), made up five percent of the options and of those forty percent (14) identified as high-minority. Twelve of the fourteen high-minority “other” schools were located in Ramsey and Hennepin counties, and the remaining two were located in Nicollet and Rice counties. Seventy-four percent (26) of “other” facilities had graduates of color enrolled, but only 40 percent (14) had dually enrolled graduates of color. The “other” facilities followed the pattern found with senior and secondary schools, with higher concentrations of dually enrolled White graduates than graduates color. Additionally, the range for White graduates’ dual enrollment participation was two and half times higher than graduates of color, and the average for White graduates was triple the average for graduates of color.

Four “other” schools (11 percent) had an overrepresentation of dually enrolled graduates of color, with overrepresentation ranging from five to fifty percent. None of the “other” schools with graduates of color had equal representation. The remaining “other” schools (10) had underrepresentation ranging from two percent to one hundred percent. Again, all of the high-minority “other” schools had underrepresentation of graduates of color. As with the other classifications of schools, high-minority “other” schools were the only type of school with an overrepresentation of White graduates.

The origins and initial intent of dual enrollment has kept it from less academically successful students, which is reflected in the data pointing to senior and secondary schools as the largest providers of dual enrollment. Regardless of type, few schools showed proportionate enrollment based on race/ethnicity. White graduates, outside of high-minority high schools, had underrepresentation across all classifications. Graduates of color showed both under- and overrepresentation across types. Unfortunately, high-minority high schools represented fewer comprehensive high schools, thus, graduates of color gained access to fewer dual enrollment opportunities. Minnesota’s system of moving students of color out of comprehensive high schools perpetuates systemic inequities.

Four: Fewer Opportunities for Dual Enrollment in High-Minority High Schools

Not only are Minnesota’s students of color concentrated in non-traditional schools, Minnesota’s students of color enrolled in densely populated racially/ethnically diverse schools in urban settings. Previous research has shown that simply by enrolling in schools identified as high minority and/or urban, students inherently have fewer

opportunities to participate in dual enrollment (McDonough, 2005; Perna, 2006). This is true for dual enrollment opportunities because of the negative perception of the academic readiness of the student population (Hoffman, 2005). Minnesota's high-minority high schools followed this trend with lower participation rates in dual enrollment as a whole and across dual enrollment programs. This section analyzes the rates of participation overall and by program for high-minority and predominantly White high schools.

High school composition. Figures 4.6 and 4.7 identify a 14 percentage point gap between the rate of high-minority high schools (HMHS) and predominantly White high schools (PWHS) with at least one student dually enrolled (62 percent to 76). Rates of participation in dual enrollment at high-minority high schools ranged from under one percent to 55 percent of the graduates participating, a 45 percentage point difference from predominantly White schools, where participation ranged from one percent to 100 percent. Additionally, predominantly White schools represented 99 percent of the top quartile of dual enrollment participation, whereas, high-minority high schools dominated the bottom quartile.

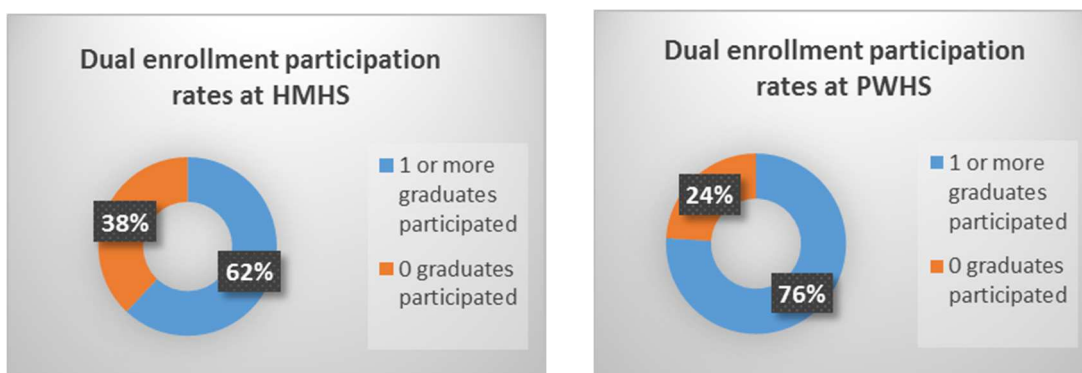


Figure 4.6 and 4.7 Percent of MN schools with dual enrollment participation

Dual enrollment courses at high-minority high schools showed low participation rates, but graduates of color had the advantage over White graduates. The average rate of

participation per high school for graduates of color was about one-third higher (8.6) than White graduates (5.9). The median number of dually enrolled graduates per high school was three times higher for graduates of color than White students. The mode was two times higher for graduates of color than White students (see Table 4.9). While differences existed, these numbers show few high-minority high schools have a critical mass of any students involved in dual enrollment.

Table 4.9. Descriptive statistics for dual enrollment participation at high-minority high schools by race.

	Minnesota high-minority high schools			
	Range	Mean	Median	Mode
Students of color	116	8.6	3	2
White students	99	5.9	1	0

Table 4.10. Descriptive statistics for dual enrollment participation at predominantly White schools by race.

	Minnesota predominantly White high schools			
	Range	Mean	Median	Mode
Students of color	48	5.5	3	1
White students	233	35.7	22	1

While the opportunities for White graduates of high-minority high schools were less than graduates of color, the difference was not dramatic. However, the picture differed dramatically at predominantly White schools where graduates of color engaged in dual enrollment at lower rates per high school than White graduates (see Table 4.10). The range for dually enrolled White graduates per high school was almost five times greater than for graduates of color. Additionally, the average and median enrollment per high school for graduates of color was seven times less than for White graduates. However, it is important to note that the mode for each high school stayed at one for both

racial/ethnic groups, which means a number of high schools had fewer opportunities for all students, regardless of race.

Overall, predominantly White high schools had larger percentages of graduates engaged in dual enrollment. Comparing the top 10 high-minority high schools to the top 10 predominantly White high schools showed differences in dual enrollment participation based on the composition of the school and by race. The top 10 high-minority high schools had much lower rates of participation than the top 10 highest predominantly White high schools. The tenth largest dual enrollment program at predominantly White high schools, Cook Secondary, had an 11 percentage-point advantage over the top high-minority high school, Mahnomen Secondary. Additionally, six of the high-minority high schools had fewer than 20 graduates, while none of the predominantly White high schools had that few graduates. Larger enrollments at predominantly White high schools, which are more likely to be comprehensive high schools, reflected that these schools offered more opportunities for their students to engage in dual enrollment than high-minority high schools. Overall, high-minority high schools did not provide the same opportunities for dual enrollment as predominantly White high schools.

Program participation at high-minority high schools. Program participation differed at high-minority high schools compared to predominantly White high schools. Overall, more predominantly White high schools offered concurrent enrollment and PSEO opportunities to graduates than high-minority high schools. Participation indicators by program (mean, median, mode) showed differences between high-minority and predominantly White high schools.

More predominantly White high schools enrolled graduates in both dual enrollment programs than high-minority high schools. Only 56 percent (45) of high-minority high schools with dually enrolled students had involvement with concurrent enrollment compared to 71 percent (279) of predominantly White high schools. The same held true for PSEO, but the gap was much smaller. Sixty-nine percent (270) of predominantly White schools enrolled graduates in PSEO compared to 61 percent (49) of high-minority high schools with graduates enrolled in PSEO. Also, the participation indicators showed that predominantly White high schools had a larger volume of students enrolled. These figures reinforce my findings that fewer dual enrollment opportunities existed for graduates enrolled in high-minority high schools. High school composition appeared to affect access to and opportunities for engagement with dual enrollment for all graduates (see Table 4.11).

Table 4.11. Descriptive statistics for high schools with dual enrollment programs.

	Predominantly White High Schools					High-Minority High Schools				
	% of HS	Range	Mean	Median	Mode	% of HS	Range	Mean	Median	Mode
CE	71	233	33.9	21.5	1	56	102	14.3	2	1
PSEO	69	81	10.5	4	1	61	41	7	2.5	1

Five: High-minority high schools less connected to four-year institutions.

Postsecondary institutions partner with multiple high schools to meet enrollment goals and serve their region. High schools also partner with multiple postsecondary institutions to provide their students with different dual enrollment opportunities. The most postsecondary partners a high school had was 14. /the majority partnered with only one postsecondary institution, but the average number of postsecondary partners per high

school was 2.9 and the median was two postsecondary partners. This section reviews the difference in partnerships based on high school classification and student composition.

High school composition. Among the high schools engaged in dual enrollment, partnerships with postsecondary institutions varied little between high-minority high schools and predominantly White high schools. Predominantly White high schools did have a wider range of postsecondary partners per high school than high-minority high schools, but the remaining numbers showed similarities in mean, median and mode. Overall, most high schools, regardless of student population, had only one postsecondary partner (see Table 4.12).

Table 4.12. Descriptive statistics for postsecondary partnerships with MN high schools.

	Predominantly White High Schools				High-Minority High Schools			
	Range	Mean	Median	Mode	Range	Mean	Median	Mode
Postsecondary partners	13	2.9	2	1	9	2.6	2	1

However, there were some notable differences in postsecondary partnerships between predominantly White high schools and high-minority high schools. Nearly 30 percent more predominantly White high schools had an identifiable primary postsecondary partner compared to high-minority high schools (83 percent compared to 56 percent). High-minority high schools had 10 percent more schools with no largest provider (see Table 4.13). Not having a largest provider usually indicated small numbers of participation spread across multiple institutions, showing that a number of high-minority high schools had no coordinated effort with a particular postsecondary institution. Graduates more than likely selected their partner on their own rather than

benefitting from an established relationship fostered by the schools. This finding suggests predominantly White high schools had more coordinated postsecondary partnerships.

Table 4.13. Descriptive statistics for postsecondary partnerships by MN high school composition

	Predominantly White high schools N = 421		High-minority high schools N = 74	
	Number	Percentage	Number	Percentage
Public, 4-yr	151	36	19	26
Public, 2-yr	224	53	38	52
Private, n-f-p	4	1	1	1
For-profit	3	1	3	4
No largest provider	33	8	13	18

*information only available on 495 high schools

High-minority high schools did not partner with the same type of institutions as predominantly White high schools. Predominantly White institutions partnered with more selective institutions (four-year versus two-year) than high-minority high schools. Ten percentage points separated the number of high-minority high schools with four-year institutions as largest provider (26 percent) for their first-time dually enrolled graduates from predominantly White high schools (36 percent). Interesting to note that the University of Minnesota-Twin Cities, the most selective institution on the list of providers, was the top provider for only three percent of predominantly White high schools compared to ten percent of high-minority high schools. The location of the Twin Cities campus, in addition to the Entry Point Project, a program focused on engaging the middle 50 percent of students, may contribute to this finding. High-minority high schools partnered with for-profit institutions more than predominantly White high schools.

High school classification. No differences emerged between senior and secondary schools with regard to their postsecondary partnerships. Secondary schools had a slightly higher percentage of partnerships with private not-for-profit institutions, while senior high schools had a slightly larger percentage of “no largest provider”. Overall, senior and secondary schools demonstrated no involvement with for-profits and showed coordinated approaches to dual enrollment programming that included stronger ties to four-year institutions than other classification of schools (see Table 4.14).

SAAPs, which are largely high-minority high schools, had the smallest percentage of four-year institutions (8 percent) as their largest provider, but 62 percent had postsecondary partnerships with public, two-years. Also, key to note that *only* SAAPs partnered with for-profit institutions, no other classification of high schools engaged in partnerships with traditionally predatory partners. Finally, more than a fifth of SAAPs did not have a largest provider, which suggests participation was uncoordinated and/or the school did not engage large numbers of students in dual enrollment programs.

“Other” high school types, a small percentage of the high schools, had nearly 50 percent with no largest provider, the largest of any of the high school types. No largest provider indicates student selected partnerships, this type of individualized programming could be a hallmark of the “Other” program type. Interestingly, “Other” schools had less than 30 percent partnering with public, two-year institutions, which is the lowest of all high school types. A larger percentage of “Other” schools had partnerships with four-year institutions than SAAPs did. These unique high schools showed unique patterns of postsecondary partnerships.

Postsecondary partnerships differed by classification of the high school. Senior and secondary high schools had more of their first-time enrollees partnered with four-year institutions compared to “Other” and SAAPs. In three of the classifications, two-year institutions led the pack. However, the less selective postsecondary institutions partnered more frequently with the less traditional high schools.

Table 4.14. Percentage of postsecondary partnerships by type of Minnesota high school

	Senior Highs N = 206		Secondary Schools N = 187		SAAP N = 84		Other N = 17	
	#	%	#	%	#	%	#	%
Public, 4-yr	85	41	75	40	7	8	3	18
Public, 2-yr	109	53	101	54	52	62	5	29
Private, n-f-p	0	0	3	2	1	2	1	6
For-profit	0	0	0	0	6	7	0	0
No largest provider	12	6	8	4	18	21	8	47

Overall, the state-level data identified patterns of inequity to dual enrollment across racial/ethnic groups from participation rates, to postsecondary partnerships, to simply the volume of (or lack of) opportunities in high-minority high schools. Additionally, the fact that students of color, as a collective group and in broad racial categories, participated in concurrent enrollment at lower rates than White students implies a racial bias or preference occurring in schools. The question of where this bias resides remains, how this bias shows itself and its impact will be part of the analysis in chapters five and six.

The participation rates by program and the postsecondary partnership patterns found in chapter four informed the interviews with students, teachers, school staff, and administrators at two high-minority high schools within the state. These interviews explored how the high school environment, practices, policies and expectations of the

adults in the building factor into the decisions students make about dual enrollment.

Chapters five and six show the connection between college-going culture of a high school and the notion of who belongs in dual enrollment.

Chapter Five: Russell High School

“If we had more students who were meeting benchmarks and academically ready, we’d have 100 percent of our kids in these classes. I truly believe that.” –Adrienne

High-minority high schools provided the fewest dual enrollment opportunities for Minnesota’s Class of 2011 public high school graduates. Chapters five and six add to the data analyzed in chapter four. These chapters identify themes that situate dual enrollment in two high-minority high schools, with its own college-going culture and differing rates of participation by students of color. The practices, policies, and attitudes of the college-going culture of a high school can greatly affect educational outcomes for students. The case studies of these two high-minority high schools demonstrate how the college-going culture can affect dual enrollment participation, especially for students of color.

The following research questions guide the findings of chapters five and six, and add depth to the themes found in chapter four.

- How do those who administer or participate in dual enrollment programs describe their experiences? How do their descriptions differ based on their positionality (e.g. administrators, teachers, students, and college access groups)?
- How do different practices and attitudes influence dual enrollment opportunities for students of color?

This chapter will provide analysis of Russell High School (RHS). Chapter six includes an analysis of Arthur High School.

Russell High School has only operated as a high school for less than 10 years. Russell expanded from a middle school to a secondary school, and now more than 2,200 students attend. Students of color make-up 94 percent of RHS’s student body population.

Almost 93 percent of the population qualify for free or reduced price lunch, and 60 percent are considered Limited English Proficient. Seven full-time counselors served the student body, which is a ratio of one counselor to 314 students, better than the state average.

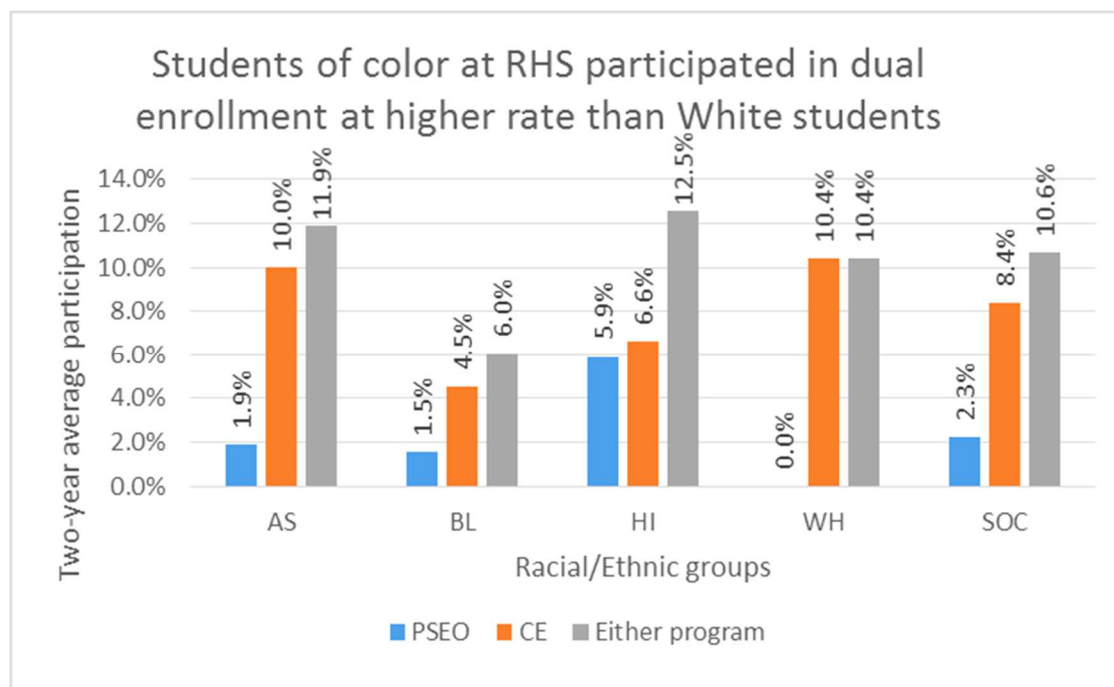


Figure 5.1 Participation rates in dual enrollment by race/ethnicity at Russell High School

According to Minnesota Department of Education (MDE) data, the two-year average participation showed approximately ten percent of RHS students engaged in dual enrollment. Of that ten percent, more than two percent participated in PSEO and a little more than eight percent of students participated in concurrent enrollment. The two-year average rate of participation for students of color at RHS was slightly higher than the two-year average rate of participation for White students (10.6 compared to 10.4, respectively). RHS shows higher levels of students of color participating in dual

enrollment than other high-minority high schools. This led to the selection of RHS in the case study.

Disaggregating RHS's participation data to the four largest racial/ethnic categories show differences in participation rates. Black/African American students had the lowest average at six percent. Asian/Pacific Islander and Hispanic/Latino students showed participation rates above that of White students by almost two percent (see Figure 5.1). White students at Russell High School represented under seven percent of the student population, but ten percent of the dual enrollment participants. Overrepresentation and differences in participation rates exist, but on a smaller scale than other high-minority high schools.

The interviews, focus groups, and observations shed light on Russell High School's approach to dual enrollment and which students should participate. From the research four themes emerged around dual enrollment experience, practices, and attitudes at Russell High School. First, Russell High School has intentional college course planning and coordinated execution. Second, dual enrollment flourishes in a strong college-going culture. Third, dual enrollment classes stretch students, and both teachers and students note the positive impact on students' college readiness. Fourth, racial inequities exist at RHS, but they do not define the program.

Table 5.1 List of participants at Russell High School

Russell High School			
Name	Position	Name	Position
Adrienne	Counselor	DeDe	Student
Rachel	Counselor	Fiona	Student
Tina	Administrator	Elizabeth	Student
Gigi	Student	Nancy	Student
Henry	Student	Sheldon	Student
		Calvin	Student

Table 5.1 lists the participants and their position within Russell High School. A pseudonym is used for all participants. A more detailed description of the participants can be found in Appendix J. These findings do not provide pseudonyms for focus group participants. Focus group participants are simply identified as teacher or college access staff member. I interviewed 25 people with knowledge of or an affiliation with RHS.

Theme 1: Intentional Programming and Coordinated Execution of Dual Enrollment

“Bringing the College in the Schools [courses] was very intentional.” - Teacher

Russell High School gravitated to concurrent enrollment because staff found issues with the PSEO model. The issues, related to academic success and a lack of communication, hampered student success enough that the administration concluded PSEO could not effectively meet students’ needs. The teachers and administration collectively decided to move to a concurrent enrollment program model. The coordinated execution of concurrent enrollment succeeded because a strong leader – the principal – drove it and an excellent staff supported it. Once started, RHS utilized data driven decision making to determine how to expand the program, and to recruit and enroll the students. This approach has led to an organized, intentional, and well-executed concurrent enrollment program.

Issues with PSEO. For years, Russell High School’s high achieving students looked to PSEO for a challenge and to become college ready. The school’s experience with PSEO shaped the course for development of concurrent enrollment. PSEO, by design, demands that high school students show an independence similar to college students, but uncharacteristic for high school students. With that model, some students

did not succeed and were not ready for this level of independence. Thus, counselors attempted to ameliorate this problem through an imposed independence, much different than the high school approach. Adrienne described the process and how much independence is needed:

Honestly us counselors, in general, don't hand-hold very much with PSEO. 'Cause if we start hand holding at the beginning, they need to navigate that college once they get there ... they have to take the Accuplacer, they have to possibly have an ACT score, official transcript... if we just hand all that stuff to them... they need to have some independence on it or they're gonna really struggle when they get over there. They need to call over there, they need to make an appointment. We've found when we hand hold too much, they don't show up for orientation. Once you're over there, it's on you... it's all on you.

Historically, postsecondary institutions devoted limited resources to PSEO and did not communicate with secondary partners. High school counselors did not have a consistent contact from the postsecondary to help students with the process. Adrienne stated:

PSEO just being very mysterious at every college is an issue. So you call over to a college, they kind of know who the PSEO contact is, or that PSEO contact says, "Yeah I did it last year, but I'm not helping this year." And who is the person my student's supposed to talk to?

The lack of communication between secondary and postsecondary institutions forces students to navigate both systems on their own to meet their graduation requirements.

According to Adrienne, postsecondary institutions did not understand what type of courses students need to enroll in to meet their high school graduation requirements:

[There is a] disconnect [between secondary and postsecondary] on graduation requirements, so you send them over there [with a specific plan]. I've told the student, "Make sure you get a freshman composition or literature because you have to have it for your English 12 credits." And they come back with History of Women's Literature or something just random. And I'm like, "No, no, no that doesn't count."

Finally, without strong communication students' success remained at risk.

Adrienne lamented, "When we can't see their grades or monitor, or we ask how they're doing, they say, 'Great,' and then they end up failing and it's a mess." Thus, Russell High School intentionally shifted away from PSEO toward concurrent enrollment. Adrienne said, "So we are really pushing students to stay here [for concurrent enrollment rather than going off campus for college classes]. We kind of changed the lingo to say it's PSEO here 'cause they really want PSEO, they just know that term." Adrienne added later:

We tend to push College in the Schools or the programming where they can get college credit here, Advanced Placement [or] Project Lead the Way... We've had much better success with students actually getting credit and the support they need in a high school, [rather] than sending them away [to a college] and crossing our fingers that they'll pass the class.

Beyond the lack of communication, other factors played into Russell High School's shift to concurrent enrollment. First, other programs, such as Advanced Placement, did not produce college credits because students received low test scores. A teacher said, "We dropped AP English completely this year, and we're doing only CIS. And it was because of the low test rates." Second, PSEO required students to leave campus, and schools did not want to lose students. Adrienne said, "No adult in a high school wants to see their best leaders leave. And so that is one of the huge, ethical dilemmas, because those strong amazing leaders run a building, and if they all go to PSEO... high schools suffer." One of the teachers explained how the shift from PSEO to concurrent enrollment occurred.

[We] saw an increase in the number of students that were going to PSEO. And it was increasing kind of surprisingly every year. And I think that kind of galvanized a lot of people, especially our principal, saying, "We need to have opportunity here in the school. Our kids are not leaving our building to have these opportunities." And so bringing the College in the Schools was very intentional. I think we also have the support of our co-workers, like the people who don't necessarily teach a class seem to be very supportive. And I've been in buildings before where that wasn't necessarily true. So I think we're very fortunate that we don't have anybody bad-mouthing the program around us.

With the staff committed to concurrent enrollment, the growth of the program has been tightly coordinated and executed. In fact, part of the expansion of the program included adding a different postsecondary provider. RHS sought out an additional partner

to meet the needs of the student population and provide more experiences to students, particularly to the academic middle. Adrienne said:

We're up to about seven classes from College in the Schools, and those are awesome, they're just at a higher level and you have to be in the top 20 percent, have to be proficient in all your reading levels, and everything like that. [Our 2-year] college would have slightly more lenient requirements and so we're working with that.

Furthermore, when asked how to determine additional courses or subjects, Adrienne stated an intentional focus driving the expansion. Adrienne said:

The Minnesota Transfer Curriculum is driving it. Minnesota Transfer Curriculum, we want to make sure we have a Freshman Comp. We want make sure we have a Science that meets the science. We want to make sure we have an Algebra that meets the College Algebra. So ... that it could hopefully transfer to any Minnesota Transfer Curriculum school, MnSCU school.

Students recognized the intentionality behind the course selection. Sheldon said, "They've done a pretty good job of picking [concurrent enrollment] classes which high school kids can actually manage and if you can do better, they point you to the right direction [next step] which is PSEO." This addition of the two-year college partner with the growing four-year partner courses provides more opportunities and should allow more students to start their postsecondary journey early.

At other high schools, students, teachers, and counselors cited scheduling as problematic, but few at RHS saw scheduling as a problem. Russell's unique schedule was

designed to meet students' varied academic needs. Tina explained the structure, "Ten hours over two days and academic courses offered during 'extracurricular time.'"

Adrienne described the willingness to be flexible with courses and use extracurricular time to meet students' needs:

We've had CIS offered in the extended day to modify for scheduling before. Last year, we had a writing course that would not fit in students' schedules so we moved it into [our required extended day]. There are only about 13 or 14 [students] that took it during that time, it was gonna have to be canceled. Instead, we moved it to the extended day.

RHS identified a key issue and provided a well-organized and coordinated solution to retain students and create an environment where students earned college credit without leaving the school building. This approach gave more control to counselors and administrators to execute their vision for RHS students.

Recruiting students. In addition to the intentional course placement and selection, RHS counselors and teachers coordinated students' recruitment. RHS did "self-selected and invited" recruitment. Tina stated:

We'll do an announcement, we'll do advertising and then through their Foundations classes and through the IDTs [interdisciplinary teams], teachers can either make a recommendation or counselors can make a recommendation. Or we do a little spiel on it and if students want to apply, they can apply.

To help students self-select for concurrent enrollment, Russell High School used multiple methods to reach students. Adrienne described some of the approaches, "We

have good luck with sending mass emails to students and putting stuff up on the TV screens, to get the word out.” Teachers even took recruiting to a new level. A teacher said, “We will teach different CIS Math [courses], so we made a video that was shown in the Algebra II classrooms.” RHS staff optimized opportunities to advertise, on top of face-to-face reminders to bring students to the courses. Rachel shared:

We advertise a lot on our TV monitors for morning announcements... And just getting into the classrooms, on Foundations days, going around and advertising the different opportunities. I’ll go around and say “Accuplacer’s coming in December... anybody want to sign up?” and during Foundations pass that list around. So I go to the students but then because of the TV monitors and just the students knowing where the College Center is, they pop in too.

RHS counselors and teachers also intentionally sought out students ready to attempt a more challenging course. Tina further described the “invited” recruitment approach. Tina said:

Test scores are always looked at, but I think it’s even bigger than that here, especially with the IDT teams. Just the teachers recognizing students who have that great potential and then seeking them out and really having conversations.

In those conversations, counselors and teachers delivered one message to students.

Adrienne said, “Basically the message that we give during registration is, ‘We want you to challenge yourself.’”

Students remembered the intentional conversations with the counselors and teachers about concurrent enrollment. These conversations served as a key source of

information and inspiration for students to attempt concurrent enrollment. Sheldon described his experience, “I didn't know about CIS before last year and my counselor just came up to me ‘You know, you should do CIS.’ I'm like ‘Okay, what's CIS?’, and then she explained it to me.” Elizabeth identified how the counselors help students select the right course or to reach higher. Elizabeth said, “She, Ms. Adrienne, would pull out students from class period to say, ‘How you're doing in your class? Is it challenging?’ ...If it is not she would [say] ‘Oh you can do this or take a higher level class.’” Calvin added, “They [counselors and teachers] always push us to not take easy courses, but maybe expand and take a risk and experience it ourselves.” Gigi added her perspective on the role of counselors and teachers to support students selecting challenging courses.

Counselors are always ... the initial person who's always trying to get you to do something [new]... They see the potential in you and then they try and push you into it. ... When they finally succeeded in making you go into a harder class that you may not have wanted to go to in the first place, and then the teachers actually ... introduce you to the class and then you feel comfortable in the class.

Counselors played a significant role in the recruitment of students into more challenging courses. RHS's continuous messaging and intentional recruitment of students helped students select more challenging courses. RHS held high expectations for students in their high-minority high school, a counter to the literature suggesting high-minority high schools lower expectations based on perceived barriers or challenges encountered by the students.

Enrolling students. The recruitment techniques and messages to students about challenging themselves worked. Courses at RHS consistently attracted significant student interest; therefore, RHS developed a selection process. A teacher shared her experience:

This is the first year that we've offered the Lit to the seniors and I thought to get enough students am I going to have to go beyond the twenty percent [criteria], but just [taking students from] the [top] twenty percent got me all the students that I need. So I also had to turn students away.

RHS used students' most recent grades and test scores to make accurate determinations about enrollment. Adrienne explained that they have to refine their enrollment decisions between registration and the start of the term, when some results arrived:

Registration is in the middle of third quarter and they don't have their third and fourth quarter grades yet. And so, we say, "You need C's across the board first, second, third, fourth." Well they might have C's or better first and second quarter, and then D's and N's third and fourth quarter. So we end up having to pull 'em. Or the MCA: the Reading MCA is in April. We don't get scores back until summer and we use those as a weeding factor as well. And so if they've chosen a CIS Literature and then their MCA scores [show] that they're at a sixth grade reading level, we pull them.

Additionally, students' enrollment is determined subject by subject rather than one overarching requirement necessary to participate in any of the courses. Adrienne explained:

So then they [students] may have requested College in the Schools Physics, College in the Schools Math, and College in the Schools Literature and we end up keeping them in the Math and Physics because all scores all grades show that they're ready. But then they're very low on their reading ability and so we pull 'em out of the Literature.

RHS staff recognized and took advantage of the nuances in program requirements for the concurrent enrollment courses. Adrienne shared that the course requirements were different across courses, some have "strict cutoffs for high school rank," while in others "the high schools can somewhat determine it [the cutoff] for proficiency." Therefore, the interdisciplinary teams, comprised of teachers and counselors, work together to determine students' eligibility through a deep review of the students' academics and perceived potential rather than focusing solely on program requirements. A teacher added, "I spend probably twenty hours trying to go over all the kids who applied and going through all their stuff and bothering some people in this room and others, trying to figure out if they're ready or not." This type of effort and attention given to selecting the right students through a holistic approach meant more students may be given the opportunity to enroll. Adrienne noted the IDT team's philosophy, "We try not to pull students based on one factor."

As RHS became more experienced with specific concurrent enrollment courses, decisions became even more data-driven and intentional. A few teachers implemented their own data collection to identify successful students. A teacher shared, "I have a [prerequisite] math test, and I look at their GPA. I'm tracking it based on, if they're

successful in my class, does that track with their GPA, their math tests, their other math tests, their grades?” Adrienne noted, “Our CIS Math teacher has now taught it for four years and she’s made very clear cuts because her data shows that the students who have D’s and N’s in Algebra II the previous year have never passed her class.” RHS teachers used data to select students and set students up for success.

RHS’s intentional and well-coordinated shift from PSEO to concurrent enrollment provided the backdrop for the growth of concurrent enrollment. RHS intends to bring more students into concurrent enrollment through the addition of a two-year college, the expansion of courses, and through continued thoughtful recruitment and enrollment of the students. This approach made the program accessible to many students, providing an environment where students can succeed, and counselors open doors rather than close them. Through a coordinated execution, RHS brought students closer to achieving their postsecondary plans, which for most students included higher education.

Theme 2: Strong College-Going Culture

“They all say they want to go to college, that’s it, end of conversation.” – Teacher

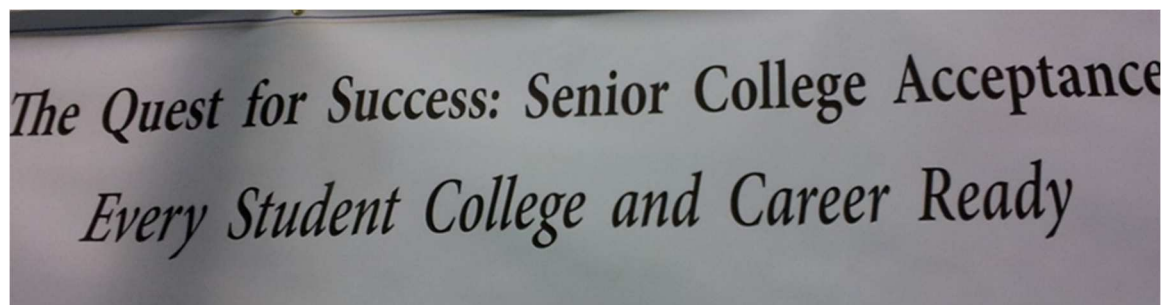


Figure 5.2 Photo of sign hanging in cafeteria at Russell High School

The desire to provide students an opportunity to earn college credits during high school stemmed from the strong college-going culture at RHS. A strong college-going

culture includes college talk, information and resources, faculty involvement, comprehensive counselors, college partnerships, and clear expectations (Byard, 2012). Russell High School successfully implemented all of these aspects. Most notable included the consistent and continuous message about college, dedicated space and staff for postsecondary planning, plus the visual reminders throughout the school. Therefore, interviewees described Russell High School's college-going culture as "pervasive," "manic," "obsessive," "ingrained," and "blatant."

Messaging. Russell High School's mission is "Every student college and career ready" and is posted for all students to see (Figure 5.2). Students received this message daily, sometimes hourly, and this mission succeeded because of the building leadership. The principal clearly articulated his vision to students and staff and he consistently delivered the message to set the expectation for students. One college access staff highlighted the principal's impact:

He is the driver just because he always emphasizes college and talks to students about how great our numbers are, because 100 percent of our students go to college and that sort of a thing. So that lets the students know, okay this is a school where 100 percent of the students go to college, so I have to be on that same track.

To enhance students' understanding and commitment to college, RHS adopted a "college knowledge" curriculum. Rachel explained, "The school...has the Ramp-Up curriculum, and so every other Wednesday in Foundations or Advisory, students are getting a college lesson that's tailored to their grade level, to get them thinking about

that.” Moreover, the high school opened its doors to multiple college access programs to create an environment where academic readiness, college knowledge, and support can be provided for nearly every student. A college access staff member said:

[The principal] makes it open for other college access programs to exist. ‘Cause I’ve never seen two Upward Bound programs exist in the same school [before, or anywhere else]. It may happen but the fact that there are so many resources for our students is really, really great. Because in some way or form everybody in the school is being helped.”

RHS ensured students continually receive the college-going message from multiple sources and in multiple settings.

Furthermore, the school intentionally shifted its language to promote postsecondary education. Adrienne described:

[Counselors] don’t talk very much about graduation minimum requirements... We talk about college readiness requirements. College readiness requirements are [higher], you need more and I think just changing that lingo the last four or five years ... has been really powerful. And teachers... everyone’s onboard.

Students heard the message, especially as the conversations about college become embedded in classrooms. Sheldon, a student, said, “[Teachers are] always bringing up [the] college conversation. You’re sitting in history class and the teacher talks about her college or his college, and it’s just fun to have those little conversations with them.” A teacher added:

I think we are so encouraged to share with the students, like our own experience in college, to promote the [university] through the College in the Schools. We have [college] connections... [in] so many of our classes ... that it just becomes part of our natural conversation.

Another teacher highlighted how the message spilled into other classes.

I was just gonna say in our advisories ... it's what we have to do every time we get together is talk about college. Talk about how you study for college, how you make your plans for college, stuff like that, especially in our homerooms and then at least in my CIS... it's continuous.

The embedded college talk translated into students internalizing the message. Nancy provided a powerful example of internalization of the college-going message. "I don't [just] see it, I can feel it. ... Every teacher wants to help you succeed. So they all want us to go toward the same goal and that is college."

The college-going culture at RHS drove students to meet the high expectations set for them. Unfortunately, students' aspirations may be ahead of their academic readiness. This disconnect caused some staff to feel uncomfortable with the college-going message.

One teacher expressed:

There's a huge delusional factor there. We get these kids who are by no means even close to ready for college, telling us they want to go the U and study. Want to be a veterinarian. And there's a huge disconnect with a lot of our students.

Another teacher went even further to state the college-going culture stifles some students and created unrealistic expectations. She said:

[We have a] reality disconnect... We have a party line that is held, that they're gonna do college, they're gonna do this, they're gonna do that... it's just not realistic. And so that's why I came up with manic and obsessed. But we have plenty of students in my CIS class particularly that are just fantastic. And they are there. And we're reaching some of the kids, but ... we have a one size fits all and we're cramming the rest in there.

Counselors and administrators were aware of the issues with the intense college-going culture, and have initiated some processes to ameliorate those issues. Rachel, a counselor, described one of the foci for the college access programs.

We really work on match and fit with the students. And just through classroom lessons, kind of just letting students know what a typical U of M student looks like, ... so I don't have the 1.6 GPA student thinking they're going to the U of M. We're very realistic here and we have hard conversations with a lot of students based on that.

While one downside of the strong college-going culture may be the creation of unrealistic expectations, the positives outweighed those concerns. Creation of a school with students historically overlooked and unengaged in advanced courses clamoring to join dual enrollment courses is a win for equity in education.

College Center. The heart of the college-going culture at RHS resided in the College Center. RHS's College Center employed two full-time, grant-funded college counselors. Both of the counselors have been at the school for multiple years and worked in college admissions prior to becoming school counselors. Each counselor in the College

Center had a slightly different role. Rachel, the 12th grade counselor, helped with the college application and selection process. She maintained information about scholarship deadlines, college representative visits, and upcoming testing dates (see Figure 5.3).

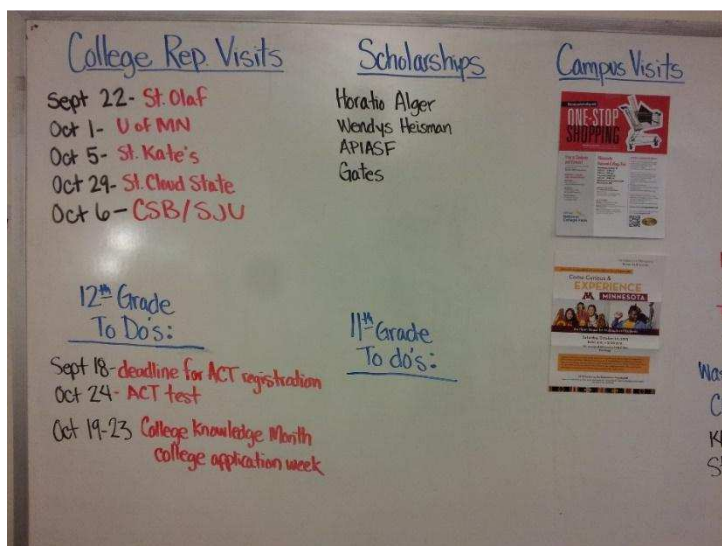


Figure 5.3 White board with college application information

Adrienne, the 11th grade counselor, assumed the role of helping students navigate college credit. Adrienne identified as the sole point person for navigating college credit, particularly PSEO. Adrienne said:

The other counselors funnel to me because I... have a relationship with some of the PSEO contacts at [local colleges] and a few of the places we've had students go. So yes, I'm definitely the champion of any way to get college credit while in high school.

RHS intentionally selected the location and decorations of the College Center based on the role of the staff and the activities that take place there. (See Figure 5.4). Also, RHS recently renamed from the College and Career Resource Center simply to the College Center, an intentional move that clearly communicated the focus of the staff and

resources. Students visited the College Center and used one of the 10 computers to complete applications, take the Accuplacer, or meet with college representatives.



Figure 5.4 A wall of college pennants in College Center at RHS.

A main role of the College Center was to engage students with college representatives. Rachel noted that college representative visits are “very well attended. Between thirty to fifty students per visit.” Other high schools reported lower numbers for college representative visits. RHS achieved these numbers because a supportive administration strategically located the College Center and a savvy College Center staff created a process to bring students to college representatives that disrupts students’ classtime as little as possible. Adrienne discussed the process:

Again we got our administration to allow students to leave class five minutes early, grab a lunch, meet an Admissions rep and eat lunch the entire time and be five minutes late to class, which I know at some high schools they aren’t allowed to miss any class. So they’re only missing about 10 minutes but it works really nice. Our College Center was purposely located right next to the cafeteria for that reason. So we can pull students out of the lunchroom really easily.

This system created an environment that makes it easy for students to engage and learn more about college options. Students gained the most accurate information from attending college representative visits, especially helpful for students with limited first-hand information about college.

Visuals. The college-going culture in the school had a visual presence outside of the College Center. RHS divided each of the grades into houses, with a set of teachers and an assigned counselor to create a sense of community. Rachel described one way students engage with the college-going culture. “Each house, each grade level, like 6A or 6B, they adopt a college and are named by college” (see Figure 5.5). The college became the identifier for the houses. Rachel added, “When we have pep fests, the grades are recognized by their college and do a little cheer about their college.” College visits to that “named” house’s college may be arranged by teachers or counselors, further embedding the college-going culture.



Figure 5.5 Example of the house bulletin boards at Russell High School.

Bulletin boards that highlighted the college process for RHS seniors were spread throughout the building. When Rachel joined the staff, she implemented the bulletin boards as a way to improve the college-going culture. As she continued in her role as the 12th grade college counselor, she maintained the responsibility for updating them. Each of the bulletin boards reflected a different stage of the application process. Rachel described the process and vision behind the bulletin boards:

There's bulletin boards around the school showing where students have gone to college, where they've applied, been accepted. The beginning of the school year, when the seniors are applying to college, I make a bulletin board with the students' name on a pennant, saying that they've applied. There is the next phase when they're getting their acceptances. There's a huge bulletin board in our Great Hall, which is our cafeteria. And every student's name is on there. Then for every college that they get accepted to, I put a sticker with the logo of that college next to their name (see Figure 5.6). So some students might have two stickers, some students might have ten stickers with their acceptances. And over the last two years, we've had 100 percent for students accepted to at least one post-secondary college.

To completely infuse the message and importance of college into the high school, Rachel added a very intentional and powerful bulletin board. Rachel said, "Once the students have made their college decision, I have them write their name on a little whiteboard and take their picture with that. And make a bulletin board with their final decision." (see Figure 5.7). Those pictures Rachel took then make their way into the

graduation ceremony. Rachel added, “Then that [set of photos is made into a slideshow and] is played right before our graduation ceremony for all the parents.”



Figure 5.6 Picture of college acceptance wall in cafeteria at RHS.



Figure 5.7. Pictures from college commitment bulletin board

These visual representations of the college-going culture made RHS’s message incredibly strong. With such a strong visual message, the school received unsolicited

positive feedback about the impact of visuals in the building. Adrienne described an experience with visitors new to the building:

[They said] “You know in this building that the expectation is college, because every bulletin board in every house is named after a college. The College Center is very visible and colorful with all the pennants.” They said, they’ve walked through the building and seen all the staff wearing college-wear, which, it’s Wednesday so we’re wearing it today. They literally knew nothing about us, what we were doing, they just happened to be visiting our building and that was what they mentioned.

RHS staff conveyed the college-going message both verbally and visually, which created an environment ripe for high expectations. The high expectations facilitated students starting their postsecondary journey earlier and allowed students, who have typically been overlooked, access the college experience. This proved especially meaningful to disrupting racism as students of color dominate the student body at RHS. Dual enrollment courses filled with students helps students shift away from the research suggesting they will not attend college or are at-risk of dropping out of college. As the next section details, this exposure to college courses early has increased students’ perceived college readiness.

Theme 3: Dual Enrollment Courses Boost College Readiness for Students

“And CIS, it’s really challenging, it’s like college level, so it’s really nice ‘cause it will prepare me for college.” – Elizabeth

Russell High School has a high population of immigrant and first-generation college students. First-generation students often have a steep learning curve to understand

the intricacies of the college environment and process. RHS helped students navigate and diminish the learning curve through the college knowledge curriculum, engaged staff, and concurrent enrollment courses. Yet, the intensity of learning curve caused concern for some staff at RHS. One teacher shared,

They know that [college is] good and that they should want to go and they really do have the desire to make a better life for themselves and their family, but they honestly don't have a clue what faces them in college.

While first-generation students may need more guidance, exposing students to college material while in high school can increase students' academic momentum and persistence in college (Adelman, 2006). At RHS, students and teachers recognized the positive impact of dual enrollment on the student's aspirations, college readiness, and overall commitment to education.

Student aspirations. Teachers reported that concurrent enrollment, while only in its third year, elevated both the rigor of the school and the expectations for students. It provided a framework and set of expectations that oriented students and teachers towards college readiness rather than focusing on only high school graduation. Tina stated, "I think its [CIS] good for the overall academic culture of the school." Russell High School's attendance and work philosophy in its regular courses differed dramatically from its postsecondary partner's concurrent enrollment approach. The university courses set strict standards for attendance, assignments, and completion of work. One teacher explained the differences: "For attendance policies and for late work policies the CIS model is entirely different from the RHS model. 'Cause at RHS attendance is not a part

of the grade ever. And you can retake everything.” Sheldon explained how he adjusted to the new policies:

You're in high school and you expect your professors to be like your high school teachers. [But] in high school you miss homework, they say, 'Oh you can turn it in tomorrow'. [But in college] there's none of that... Late work is late work, you can't do anything about it. So you challenge yourself to get it in [on] time.

The RHS model of retakes until passing meant some students at RHS may graduate without college readiness skills. The influx of concurrent enrollment courses changed the conversation with students who lacked college readiness skills and appeared unprepared for the concurrent enrollment courses. A teacher noted:

Finally, 'cause they haven't seen... [rigor] up until now. You can be a nice student, you can be a nice student and do all of your work and you can get straight A's and not have the skills there. I mean that's kinda the way it is and it's finally good to have some sort of point where you say, “No, no, no... you have to have these skills, you're not ready [for this course] because you don't have these skills yet.”

Additionally, teachers reported that the impact of the college-going culture and concurrent enrollment courses raised the bar for the students, especially those in concurrent enrollment courses or those on the cusp. A teacher stated:

College-going culture and what CIS does for advancing that here is with as many CIS as we now have, the message is getting out there that grades matter. And you aren't guaranteed that you're gonna get into this course, and that has been a giant

eye-opener for a lot of kids and they don't understand. "Well I passed the other class..." "... You passed with a C- or D average. You are not ready."

Moreover, concurrent enrollment courses provided more benefit and incentive to the senior year. Teachers saw students engaging more deeply during their senior year, something that has been missing from students who met graduation requirements by the end of junior year. Concurrent enrollment courses enriched the student body, by keeping seniors in classes and engaged. A teacher said:

And I think it [CIS] does better for seniors. I've been in the Senior IDT meeting or group for a long time and one of our concerns every spring is, "How do we keep the kids interested in coming to school?" And it does.... CIS isn't gonna be the magic bullet by any means, but it does take a whole 'nother group of kids who have a whole 'nother invested interest in certain classes they wouldn't have a vested interest in because now they need the credit. Not to graduate but to go to college.

Nancy added how much the CIS course and the instructor challenged her to shift her own perception of her abilities:

[The teacher] really challenged us. ... that [Anatomy] was a very hard class. I'm still surprised at myself that I aced that class when she really challenged us to the point where ... I was done, like I can't do this no more, but then that's what I like about her. She became my favorite teacher because she really saw the potential in us.

Increasing access to concurrent enrollment pervaded the student body, increased expectations and confidence, plus shifted the culture from a focus on finishing high school to acquiring college credit.

Concurrent enrollment courses provided students an opportunity to take college-level courses in a controlled environment where students could test drive college expectations with individuals they trust by their side. RHS capitalized on these benefits as many students at RHS did not begin the concurrent enrollment courses with the necessary skills to succeed in a college course. Students struggled to meet expectations and follow a more rapid pace for learning. The shift in expectations and rigor from high school to college caused many students to experience shock. One teacher stated, “Some of these kids were ...so smart that they were kind of able to just walk through a lot of our other classes and then they get to this class and they’re like, “Wait, what [are] we doing?”” The first-hand struggles students encountered in these college-level courses forced students to acknowledge their lack of readiness. One teacher candidly reported:

The wonderful thing about CIS is ... for some of them it’s a slap in the face, like “Yes, you have this writing assignment due. No, I’m not going to tell you what to write about. No, I’m not giving you a nice little outline to write out. It’s gotta be two pages, it’s gotta be from you and it’s gotta address the article”, and its like, “What am I supposed to write about?” Well, this is what it is and it is a slap in the face.

To help students meet the expectations and adjust, RHS teachers and counselors followed the policy requiring students to stay in the course for one quarter before

dropping. Moreover, consensus among teachers on expectations for attendance, syllabus, and assignments provided little options for deviation. Furthermore, because the teachers invested in the selection of students, they believed the students could achieve. This mentality and consistency in message prevented students from leaving when they would prefer to quit. One teacher described this scene:

This is the first time where it has hit them and hit them hard and so at the beginning it's a really rough transition and they're grumbly and they're upset and they want out. And they're freaking out and they're running to the counselor and they're crying and whatever, calling their parents, "Get me out of here." And this is the first time where it is much more solid wall defined, this is the expectation. It's not just Ms. X's CIS that she's just so mean and she won't let us do retakes, its writing and AP and English and History and Physics and us in Math.

Teachers at RHS reported students rising to meet the challenges of concurrent enrollment. Teachers saw students who previously struggled meeting expectations after a short time in the course. "I demand four or five pages of writing a week...At first they were like "I can't believe we have to do all this." Now they're actually starting to say, "I see why we're doing this, this is making sense." Another teacher jumped in, "[Soon they think] 'I can pound out that essay now.'" Yet another teacher added, "Two pages doesn't seem as overwhelming as it did at the beginning and it's only been a month. And all of a sudden they're already like, "Oh, that's not so bad.'"

Another teacher shared a story of two recent graduates and the impact the concurrent enrollment course had on the students' confidence to perform in college.

And part of that was that they felt like the classes they took with the teachers that were sitting there, made them so that when they go to college and they felt overwhelmed and people were telling them because they were both Hmong, “You’re not really supposed to be here... Are you sure you should be in this class?” and stuff, they were able to say with somewhat confidence, “Yes, I am really supposed to be here. Yes, I really can do this.” Cause they had already done it.

Overall, teachers felt that concurrent enrollment served the purpose of providing college opportunities in a controlled, safe space. One teacher noted, “It’s a nice bridge between high school [and college]. Throwing them into PSEO.... they just weren’t ready for that. And so this [concurrent enrollment] is a nice bridge for them.” Furthermore, one teacher shared how some students welcomed the challenge:

I’ve had a student already thank me for that, that my course is hard enough now that she actually has to do something. And she’s like “Yeah, I was worried I wouldn’t be ready [for college] but then your course was really hard and I have to study.”

The students reported feeling more challenged by the instruction and content in the college courses compared to their high school courses. Calvin highlighted the difference in rigor, “In that class particularly, the teacher, she, they teach just like how college professors would. They have higher expectations than regular teachers in high school.” Elizabeth added, “And CIS, it’s really challenging, it’s like college level, so it’s really nice ‘cause it will prepare me for college.” Nancy added, “[PSEO] definitely a

different feeling from high school... Different like the way the instructors they teach, is super different.”

Students underestimated the rigor of the concurrent enrollment course because it occurred in the high school, with a high school instructor, and had a name similar to a course taught in high school. DeDe talked about the challenge of the college course and her expectations:

For College in the Schools, I've taken one course...the Algebra course. I really liked it, how it was really challenging because even though it was algebra and I thought that since I've already been through algebra this would be a cinch. It was not. Not at all.

Students adjusted to the new challenges and expectations. Students noted necessary changes to their study habits to be successful in dual enrollment courses. Gigi discussed the change for her:

[I] started PSEO this year and CIS this year too. And it's a lot of work, a lot of work but [I] enjoy it more. I feel like this year it's a lot of work ... I have to almost use my brain this year....Last year and the year before that, oh I can blow off a couple [assignments], procrastinations here and there, but this year's if I procrastinate, oh my goodness my GPA.

Not only did students find a need to study more frequently. Students noted the need to manage themselves and their time. Students reported dual enrollment courses helped them to figure out time management, self-advocacy, and organizational skills. Nancy shared, “If you don't do your homework, it gets hard. PSEO, it's all about reading

[the] syllabus and following the syllabus and keeping yourself on track. Time management that's all that PSEO is." DeDe added her perspective about the growth that comes with dual enrollment:

In some ways it kind of feels like a high school, but in so many ways it's so different. Because you don't meet every day and you have so much work that you have to do independently by yourself. And then nobody asks you if you need help. You have to ask if you need help. So, I like that because it helps me grow and gives me insight as to how real college is going to be like.

RHS students articulated the impact dual enrollment courses had on their ability to feel prepared for college. Teachers also saw the change in students, and recognized the importance of these college courses for students' long-term success. Most of the teachers, college access workers, and counselors identified the two-year colleges as the top choice for graduates from Russell High School. A college access staff member said, "It varies year to year, but usually two-years. Or at least 50/50. Four-year to two-year." Rachel added, "Fifty-four percent of my students go to a two-year college and about 30 percent go to a four-year." The teachers of CIS reported that CIS students enrolled in the four-year institutions. A teacher detailed where his students attend:

A lot of my CIS students from last year ended up at [local private four-year colleges like] St. Bens, St. John's...Gustavus..... And quite a few at the U of Minnesota, which is hard to get into. I think we had one out of state. And it wasn't my CIS, but somebody else had him for CIS, that they ended up at the Navy Academy, which is quite amazing.

All of the students interviewed identified four-year institutions as part of their postsecondary plans. Dual enrollment courses show potential to mitigate the college undermatching for underrepresented students, through increased college readiness and support to reach higher levels of academic rigor.

Commitment to education. The rigor and experience in dual enrollment courses led students to engage more deeply with their education, teachers, and course selection. Students described how experiences with dual enrollment lead them to seek more college level courses. DeDe said, “She teaches it like it's an actual course. I really like that because that was my first input into how a college course is like. And from then on, that's when I decided to take more college courses.”

The students felt connected to their concurrent enrollment instructors and saw the effort teachers put into the course. Gigi explained how this commitment affected her commitment to the course.

And so the teachers who are teaching the classes, they're teachers who want to get a connection with the kids. ...and I really like that... I kinda see they're trying and that's what really wants me to try harder too. If you're putting in the effort to come here early in the morning and leave so late at night, I should at least do my homework.

Lastly, students recognized the need to intentionally select the college courses and have the right mindset to succeed. Gigi suggested students ask themselves before registering for a course, “Are you determined to be in this class? Are willing to put in the work and the effort?” She then went on to say students must acknowledge the difference

in effort between high school and college courses. “You're gonna ... kick up ... the effort you put in from the accelerated class into your CIS class. Cause it's different now, there's a university standard you have to follow.” Sheldon added:

They [teachers] know if you there, you're there to learn. You know you don't pick CIS classes or PSEO classes just to be with your friends. That's just not how it works. You know you will decide to drop out the second day if you do that. Especially when they bring out the 20 piece syllabus and you're like, “Oh... no, this is not for me”...People who stay there the whole year they...we have the same mentality and challenge ourselves.

Overall, RHS students recognized the importance of the opportunity and the commitment necessary to succeed in dual enrollment courses. Nancy, a junior, enrolled in multiple CIS courses, expressed her struggle to keep up, but also showed a deep commitment to succeed.

They're throwing all these stuff on me and ... I hit my limit and it was just so hard. ... I just broke down. But I had to give up on a lot of sleep. I had my mindset through my junior year was that I just wanted good grades and it's... you just wanted to pass these classes.

Calvin beamed when describing his experience with PSEO, “Being a smaller classroom with older kids and then a professor who teaches class at their level, and for me to be there, I feel like it's a really great opportunity. And I feel like it's one of the greatest things that's happened.” Being in the college environment as a PSEO student increased Calvin’s confidence and excitement about education.

Russell High School students benefited from dual enrollment courses and became more college-ready. Students' cognitive and non-cognitive skills grew through participation with dual enrollment. In addition, RHS staff reported the rigor within the school increased. Moreover, students identified a deeper commitment to their education. Dual enrollment at RHS worked as an avenue to create more college-ready students and disrupt structural racism.

Theme 4: Racial Inequities Exist

“You find that the students who are eligible ... aren't maybe the race that we would like to see.” - Tina

According to MDE, for the 2014 academic year RHS had 95 percent students of color, 91 percent of students qualified for free and reduced price lunch, and 49 percent identified Limited English Proficiency. In school year 2013-2014, White students made up eight percent of participants in concurrent enrollment courses compared to under five percent of the student population. Additionally, Asian students represented about 67 percent of the student body, but accounted for 70 percent of the concurrent enrollment participants. These overrepresentations, not one as dramatic as other high-minority high schools, showed disparities based on race/ethnicity at RHS. Eleven percent of Black/African American students participated in concurrent enrollment, which is not proportionate to the 22 percent of Black/African American students that made up RHS's student body. Hispanic/Latino students showed proportionate rates for participation, 11 percent enrolled in concurrent enrollment courses. At RHS, the staff expressed greater knowledge and concerns about racial inequity in advanced courses than the students.

Staff experience. Staff recognized the racial/ethnic differences, discussed issues and solutions, but mostly recognized how different RHS was for including as many students of color in the concurrent enrollment courses. RHS's student population consisted of mostly students of color, which led to higher numbers of students of color in dual enrollment. Adrienne said, "In general almost all of the students who do CIS or PSEO here are students of color. So that's very different than the other high schools, just because we have a higher percentage." A teacher added:

Coming from my experience in other buildings... we have a very different perspective. The disparity between the amount of diversity within our CIS courses compared to the amount of diversity in the school at wide. The gap there is miniscule compared to what it is in other schools.

The diversity within RHS's concurrent enrollment courses became apparent to the students after attending "field days." Field days are a college visit held at the public four-year university for high schools participating in concurrent enrollment courses. A teacher said, "Well, I talk about that [lack of students of color enrolled] after field days. [Students usually say,] "Wow, there's a lot of White kids there." Another teacher described her experience:

Well for me, for the last three years I have three classes of CIS so I'm taking a hundred students. The first year I took all 107 of them at the same time and we came in and it was like a flood of diversity. I'm sure that the students that were there from other schools had never seen that many colors, backgrounds, languages in their entire life. And it was this sharing back and forth, it was a really neat

experience for those kids...I prepped them [the students] with, "Okay, so, I'm just tellin' ya, for some of these kids [at field day, you] may be the only fill-in-the-blank they've interacted with on a personal level." ... so you get this smattering of all the kids from all these different backgrounds...But they can talk about it and they have a mechanism to do that. I just think it's a really good for both sides.

While the gap for students of color may be a sliver of an issue compared to other high schools, the counselors and teachers have taken note. Adrienne said:

We have a lower representation of African American students in that [CIS/PSEO], as unfortunately we do in all of our accelerated classes across the district....But I don't have that [data] in front of me, but I just know that from my heart, because out of the students that we've had do it [PSEO/CIS], the vast majority have been Hmong. Definitely an overrepresentation percentage-wise of students who do it...

RHS staff mentioned a variety of factors driving the lower enrollment numbers of specific racial/ethnic groups. Some of the factors included academic readiness, family and peer support, and relationships with people who take this path. One teacher said, "I think there were some African American males who wanted to register but couldn't because of their test scores." Adrienne confirmed the issue with academic readiness for specific groups:

Test scores and grades and GPA and class rank, of a few of the ethnic groups including the African American, and American Indian and Hispanic groups,

weed[s] them out of being able to participate. ... We have a very under-represented student population of those racial and ethnic groups in that top area.

The impact of peer and family support emerged in the teacher focus group. One teacher highlighted:

I have very low Hispanic numbers in CIS compared to what I have in other classes. So that seems to be a factor there. Their peer and their familial and whatever support, it's just not quite there. And in my class I have kind of a low African American population as well. So it's really... again I think its friends and knowing people and stuff.

Throughout the interviews with RHS teachers, administrators, and counselors, few demonstrated a deficit mindset about students of color or low-income students. Largely the conversation focused on the drive of students and the supports available for them to succeed. However, some Russell High School staff exude racist attitudes or behavior. Tina identified issues of racism within the school as a factor connected to students' success. She said, "We still have teachers and adults who can't interact with students in a positive way for some reason. And some of that is based on race, which is why we have some of the issues that we have."

To address some of those issues, the administration and staff at RHS acknowledged disparities exist and sought solutions. Collectively, RHS has implemented a few programs in an attempt to close the gap. Tina acknowledged the racial disparities and noted the various approaches to addressing them:

You find that the students who are eligible ... aren't maybe the race that we would like to see. But I see that changing and I see that changing at Russell, especially...because of the consistency that's happening here And how teachers start identifying students early on and really just targeting those students and making sure that they are getting what they need to be academically successful. And starting to have those conversations real[ly] early.

Russell High School recognized the importance of intentional relationships in improving students' academic preparation and connecting teachers and staff more deeply to students. Tina provided details on programs created to address specific racial or ethnic groups' poor academic readiness. "We started an AVID [college readiness program] African American course. So two years ago, Mr. W and Mr. M took [it] on and they started it as a [required extended day] class and it's all African American boys." Also, Russell created a mentoring program, which Tina described: "All the adults in the building, no matter who you are..., have at least one or two students that you choose to mentor. And you go do home visits and you follow that kid at least through the year."

Overall, RHS staff focused on the successes of students of color, demonstrated a belief that students can succeed, and sought solutions for the racial/ethnic disparities that existed. RHS staff recognized the need for increased involvement from the high school and a coordinated, committed approach to increasing academic readiness.

Students' experience. The RHS students hardly acknowledged the race questions in the interviews. In fact, some students struggled to answer the question regarding the impact of race on their participation in dual enrollment. Most students provided brief

answers like Henry, “My race... I see, I don't really see how that affects my position to do CIS or PSEO.” Another student, Calvin, after multiple attempts to avoid an answer, finally responds, “I think it's all around. I mean there is not majority of any race anywhere.” Others provided an answer with greater length, but with little substance and perceptible discomfort on the topic. Gigi said:

No, not really. I mean like, actually, ‘cause this school is actually pretty diverse. It's really diverse and so I don't really see any conflicts with my race or my gender. In fact, I only see benefits sometimes, ‘cause sometimes, oh this class is mainly girls or whatever and just oh, we're like mainly minorities here or whatever. So it's kinda you don't feel like they didn't want to put us in that, there because I'm this race or I'm this gender. So, I don't really feel that. And if it does happen, I don't really hear about it much. So you know, they try to tackle this kind of issues when it comes and not look over it, so that's good.

Students quickly brought up ability and a “worthiness” of students to be in the class. Elizabeth indicated she did not feel judged by her race, but also felt the need to share how she viewed her classmates’ ability. “No, they don't judge us on our race... you're there, that means you have the ability to be there.” When asked to describe the composition of race in her classes, Gigi described an equitable distribution, and finished up with an affirmation of the students’ right to be in the room.

In my anatomy class, it's juniors and seniors and they're all mixed races ... it's almost like a percentage of the school into a smaller quantity put into the class. So how the school's literally I think 65 to 70 percent Asians. You see the most

majority are Asians and then the next minority is I think it's African Americans and then Hispanics. So you see them mix in my anatomy class. And my U.S. History class, it's juniors in that class. And it's mixed race too, you have almost every race to represent Russell in the class. And they deserve to be there too.

Sheldon provided a bit more nuance to the racial makeup of his courses and how courses may end up feeling more representative of one racial group over the other:

Considering there are more Asians in the school, it's obvious that there'd be more Asians in classes but it's not like Africans Americans or Mexicans are restricted from taking those classes, there are some [in the classes]. At the beginning of the year you see a lot of them. And then by the end of the week you [see] less and less, so I think it's fairly spread out.

High-minority high schools can successfully engage students of color in dual enrollment courses with the right practices, attitudes, and policies. The intention and vision behind Russell High School's dual enrollment courses led to a well-executed and coordinated program. This provided a backdrop for students to challenge themselves through difficult courses. Additionally, the dual enrollment program received necessary support from the integrated and strong college-going culture. With practices and policies in place, students enrolled in dual enrollment courses and successfully grew their college readiness skills, both cognitive and non-cognitive. Furthermore, the asset-minded approach evoked by the RHS staff provided an environment for students of color to focus on the courses rather than their sense of belonging. As a high-minority high school, RHS

figured out a way to move beyond the usual barriers and successfully provided a college-preparatory program for historically overlooked and underrepresented students.

Chapter Six: Arthur High School

“One-third of students are here to get ready for college, one-third, probably the first-generation students, who need a little boost in that direction, and one-third I don’t know what they are doing here.” – Teacher at AHS

Arthur High School, a senior high located in an urban city of the Twin Cities metropolitan area, enrolled approximately 335 students per grade. Arthur High School has a reputation within the region as a leader in providing high quality education to its students. The student body at Arthur High School reflected the community and region it served: 75 percent students of color, 72 percent qualified for free and reduced price lunch, and 26 percent English Language Learners.

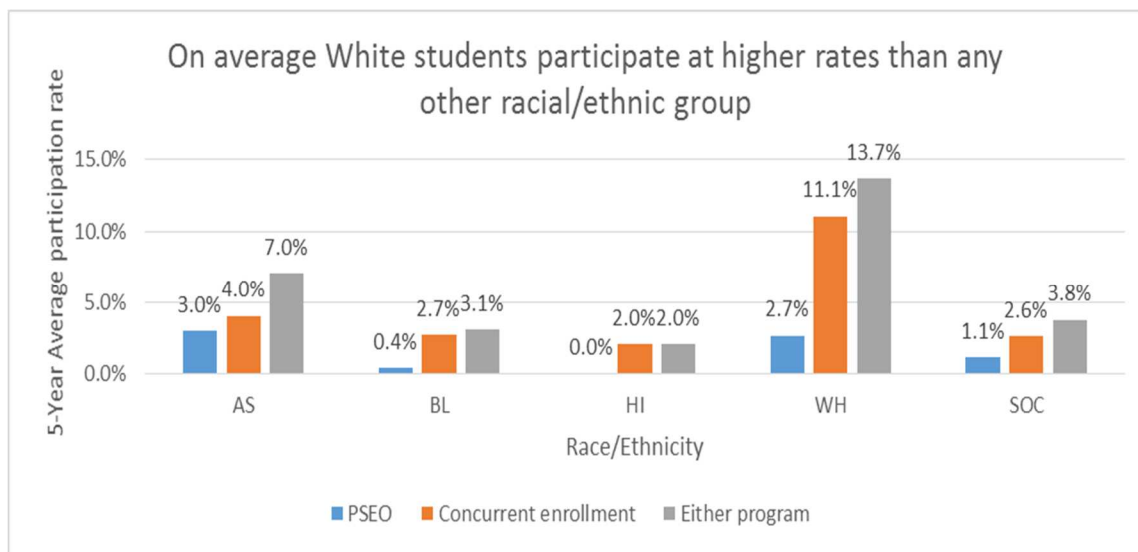


Figure 6.1 Five year average participation rates by race/ethnicity at Arthur High School.

According to Minnesota Department of Education (MDE), the five-year average dual enrollment participation rates showed approximately six percent of AHS students participated in either PSEO or concurrent enrollment. Of that six percent, almost five percent participated in concurrent enrollment and a little more than one percent of students participated in PSEO. Additional data from MDE shows that AHS had a pattern

of providing fewer dual enrollment opportunities to students of color than White students (see Figure 6.1).

The five-year average rate of participation for students of color at AHS was 10 percentage points under the five-year average participation rate for White students (3.8 versus 13.7, respectively). Disaggregating the data to the four largest racial/ethnic categories show obvious disparities between groups. Hispanic students had the lowest average of at two percent, followed by Black/African American students with an average participation rate of three percent. The rate of participation for Asian students (7 percent) was more than double the rate of Black/African American students. Black/African American students represented the largest population in the school year after year, but continued to participate in dual enrollment at the lowest rates. The disparities in participation rates between students of color and White students led to the selection of AHS for this case study.

Four themes emerged from the interviews, focus groups, and observations at Arthur High School. First, PSEO and concurrent enrollment lacked the same status as the Advanced Placement (AP) program at Arthur High School. Second, Arthur High School dual enrollment participation was negatively affected by a weak college-going culture. Third, AHS staff believed program requirements, students' choices, and family background hindered students' participation in dual enrollment rather than their deficit approach. Last, students of color viewed advanced courses as courses intended for White students only.

Table 6.1 identifies the participants and their position within the school. A more detailed description of the participant can be found in Appendix J. Also, the focus group participants are not named; they are identified by their role within the school. Overall, I interviewed 16 individuals associated with Arthur High School.

Table 6.1. List of participants Arthur High School.

Arthur High School			
Name	Position	Name	Position
Sandy	Counselor	Bree	Student
Quinn	Counselor	Laura	Student
Patty	Counselor	Kristen	Student
Lucy	Counselor	Jenny	Student
Ivan	Administrator	Makayla	Student
		Olivia	Student

Theme 1: Tension between Advanced Placement and Dual Enrollment Programs

“But I think the AP program, I think they’re pushing more kids to stay here than look at the PSEO route.” – Quinn

The Advanced Placement (AP) program defined Arthur High School’s college readiness track. AHS relied on this AP identity to differentiate itself from the other high schools in the district. Students and staff identified the school’s commitment to AP as a main tenet of the high school. When asked what made AHS unique, a teacher said, “Strong AP program and AP tradition.” Students indicated they selected the high school based on the AP tradition. Kristen said, “I just like that Arthur has the most AP classes of the city’s public schools. So that’s one of the main reasons I came here instead of [another school].” Laura added, “My old school didn’t have as many of these advanced choices.” The tradition of AP programs within the school continued to direct the current operations. Ivan added, “There’s been this culture of AP, like I said before, [a] longtime history of this being kind of a[n] AP mecca in the district here. So that continues.”

AHS staff demonstrated commitment to AP and believed it drove college attendance and success; however, their single-minded focus on AP limited the ability of other programs, like concurrent enrollment or PSEO, to gain strong footholds in the school. Because of this, students who did not respond well or qualify for AP did not gain access to the college readiness opportunities they needed to prepare for college. It is interesting to note that while staff touted AP as a positive feature of their school, students viewed concurrent enrollment courses more favorably than AP courses.

High school sequence. AHS's focus on a nationally recognized and transferable college credit, such as AP courses, left dual enrollment courses lacking a strategic place within the high school sequence. AHS offered concurrent enrollment courses in three subjects, English, French, and Physics. However, English was the only CE subject that had an assigned place in the course sequence and the only CE course to reach enrollment capacity year after year. The standard course sequence for the English department had students enrolled in concurrent enrollment their senior year after completing the AP sequence as juniors. Patty described the process, "For English basically cause they've done the AP their junior year, so ... [CIS English is] the next level."

In the two other subject areas, the CIS courses did not have a set place in the curriculum to drive enrollment to them. Instead students must first know the course existed and then determine whether it fit in their schedule. Patty explained, "For Physics, it's more they choose. I think the Science department does recruit too as well." Students identified inconsistencies in finding out about courses. Laura, an AP student and a senior, said, "I was actually unaware of the CIS English and CIS French classes [even] though I

took French. And yet CIS Physics was in my face, take this class, this class is here.” This type of recruiting led to low enrollment for both French and Physics CIS courses.

Without intentional course selection or development by the leadership, concurrent enrollment courses were placed into the schedule with little consideration for the consequences for interested students. These “singletons” in the schedule made it difficult to schedule for counselors and students. Lucy shared,

College in the Schools seems to be like a singleton in the schedule that’s hard to structure around, so if a teacher just teaches one of those classes and if they aren’t a full class, then you know it strains the schedule.

Not only did this strain the schedule, but also forced students to make difficult choices, because courses ended up occurring at the same time or competing with other required courses. Sandy identified the challenge of scheduling for students, “[One of the] barriers is the [school] schedule because if we only have one class a lot of students maybe can’t fit it into their schedule with the other things that they choose.” Competing courses, required students to be very committed to taking the course and rearranging their schedule or not taking other courses. Kristen, a student, described her dedication to scheduling her desired concurrent enrollment course, “I had to redo my schedule two or three times to be able to get the class. But that’s because I was also taking AP classes.” Olivia discussed the sacrifices she had to make and how she decided:

Some of the classes are the same hours of other AP classes, so it’s either a choice of choosing which one do I think I would do better [in] and will I like better than the other. ... What if I want to take this class and it’s the same hour as that one

that means I have to drop this? And what if I don't have the time to take that class again, or what if it doesn't fit into my schedule. So I think it's because some are in the same hours.

Without the intentionality of placement of the concurrent enrollment courses in the high school sequence or in the high school schedule, students' access to the courses remained limited and commitment tepid, at best, for most students.

Students interested in PSEO faced a different obstacle, the vision for PSEO limited access to all eligible students. Counselors articulated that PSEO had a place in the course sequence, but only after exhausting all AP courses options. Patty explained her view, "They should cap out [exhaust] at our AP classes [before enrolling in college courses], we have so many AP classes that a lot of students don't get through our curriculum to get to PSEO." However, this placement was not convenient or desirable for all students. Students uninterested or ineligible for AP or those seeking PSEO for financial reasons met resistance to their PSEO participation. Jenny, a student, shared how her lack of involvement with AP affected her ability to apply for PSEO:

Getting it approved was hard. My counselor...didn't want me to take PSEO because I haven't taken an AP class yet. And she said that, "If I haven't taken an AP class then I shouldn't take PSEO". Which I understand, but in my situation financially, I would rather take PSEO now because then I get the college credits early. And my parents were really enforcing it, they really wanted me to take it. So I went to Ms. X and she said, "Yeah, your GPA is good, so I don't see why not." So that was probably the hardest part, getting accepted.

Without a vision for the placement of dual enrollment options, the courses became second tier behind AP. This approach resulted in low enrollment and participation in dual enrollment courses, fewer opportunities for teachers to recruit students, and limited exposure to non-AP, college courses for students.

National recognition. The national recognition of the AP program fueled support at AHS. The College Board, the organization behind AP, provided enrollment, participation, and passage rates for the AP program participants. The College Board also provided a national comparison for students, something dual enrollment programs cannot provide. In fact, it was difficult to even establish an accurate participation rate for PSEO attendance at the local colleges for AHS. When asked how many students currently participate in PSEO, Sandy initially responded, “I do not have those numbers and they are not easily found,” highlighting that no system or process existed for regularly gathering the data. While some concurrent enrollment programs provided information on number of participants, demographics of enrolled students, passage rates, and number of credits earned, this analysis may not indicate a student’s rank or compare him/her to other students in the district, state, or nation. This lack of data and national comparisons served as one of the reasons Ivan believed the AP program remained more highly regarded by AHS staff:

And I think that there still is some elitism about AP, is that you take this, this is a nationalized curriculum here, okay? The test you take gives you specific data about how you compare with the other kids nationwide, in this area. You get your score at the end of it. Giving the grade here in the school is one thing, but that test

score is so important. And I think that the teachers say that to kids, “If you see yourself there, this is the best way that you can prove that and get the feedback about it.”

Counselors at AHS worried about the transferability of the CIS and PSEO course credits and impact on creating a transcript during high school for students. The counselors did not express the same fear for AP courses, in fact they expressed more belief in a universal understanding of what an AP test means. Patty described her concerns about CIS and preference for AP:

When a student passes an AP test, the colleges know what that means, okay? And CIS credits from the U will transfer, [if] someone’s going to the U. They don’t transfer universally and it is a college transcript. So if someone doesn’t do well in a CIS class that goes on your [university] transcript. The AP results, if somebody doesn’t test well, they don’t have to send them. It doesn’t go on a transcript, it’s not forever. ... And the colleges know what passing an AP test [is], they know exactly what that means.

Patty went on to add another concern about concurrent enrollment: the lack of quality control. Patty said:

In CIS they don’t have to pass a test. So there’s not really a lot of control of what they’re teaching... as far as colleges are looking at it. We hope that it’s a rigorous curriculum but there’s no real way to know that. Cause there’s no final test.

Lucy added to the concern about transferability of credits received from a local community college:

The go-getters, they can earn a lot of credits, but they aren't necessarily going to go to a school where they actually get an Associates, they're going to a 4-year school, which is a tougher school that won't even allow a lot of those credits anyway.

Staff at AHS believed students involved with AP programs received more information on their rank and status, plus have more opportunities to earn portable college credit than participants involved with CIS or PSEO. The national recognition and perceived portability of college credit made AP the preferred option for AHS students to access college-level material. AHS's dedication to AP underscored their college readiness objectives, which stemmed from a desire to maintain a high quality program for eligible students that provided college credit students can put to use anywhere. This approach limited access for most students and enabled an environment focused on college readiness for only the highest achieving students in the high school.

Finite number of students. Arthur High School staff members viewed programs, such as PSEO and CIS, as competitors to AP. One of the underlying tensions between dual enrollment and AP stemmed from a belief that only a finite number of students at AHS can and would qualify to participate in such programs. These "top-notch" students must decide which program to participate in and where to take the courses, which can negatively affect the school. Quinn shared her views on the impact of students participating in PSEO:

We don't want to deplete our program. We don't want to send all our top-notch kids to the U and other college campuses. We want to keep them in-house. I

wouldn't say tension, I would say...maybe a tug-of-war. Because I've had kids that did both [AP and PSEO]. I've had kids who participated in AP classes and then still did some PSEO. So they did like a split deal. But I think the AP program, I think they're pushing more kids to stay here than look at the PSEO route.

Furthermore, with multiple options and a finite number of students, teachers feared low enrollment and cancelled classes. Ivan noted, "If we had more teachers in offering more [CIS], their number one obstacle would be fellow staff who are gonna say you're taking my AP kids away." Patty explained how this has happened within the science department, "So last year when that class [Anatomy and Physiology] was offered, there was a drop in AP and that was a concern to me."

While AP teachers felt threatened, teachers of concurrent enrollment recognized the place and importance of AP at their school. One teacher repeatedly said during the focus group, "AP has its place." Another teacher expanded on this concept indicating that CIS courses may not challenge all students, "[We] need AP because [some students] would blow through CIS course." Finally, another teacher suggested a delineation of students who belong in dual enrollment courses, "Some students are great test takers, but for those who are not strong test takers, but strong thinkers, hard workers, CIS is a wonderful place for them." AHS had not figured out how to identify new or different students for the dual enrollment programs, leaving teachers to create their own distinctions between programs and ultimately scrambling to recruit from a finite, already stretched pool of students.

The student interviewees did not demonstrate an awareness of tension between AP and dual enrollment programs. However, students did share opinions on AP versus CIS courses. Of the six interviewees, five of them preferred CIS courses to AP courses. Bree said, “Just kind of like the whole [AP] class was just preparing for a test instead of just teaching on how to think.” Bree added her dislike for the process to get college credit, “If you don’t pass [the test] at the end, you don’t get the credit.” Laura provided more insight into her issue with AP courses and contrasts it to her feelings about CIS:

I feel like ... [AP is] a lot of repetition and memorizing and just getting ready for this big test. Whereas in the CIS [course], because I know it’s not a class about memorizing and repetition, I know that no matter what, I’ll be constantly and consistently learning.

Only one of the adult staff members felt as strongly as the students about CIS. Ivan identified his preference for CIS:

What does the greatest good for the greatest number of kids there, I would say probably CIS has a lot to offer that AP, you know it’s a good talk and all that stuff, but when it comes down to it, you get so much more for your time with the CIS transcript versus the AP one.

Arthur High School relied heavily on AP to provide students’ access to college credit and to prepare them for the rigor of college, regardless of how students felt about the experience. AP continued as the premier program at AHS because of the lack of staff consensus, no placement for dual enrollment courses, a belief in the superiority of AP to meet the college readiness needs for students, and no initiative to groom more eligible

students. AHS lacked the tools and the vision to bolster dual enrollment and provide a coordinated effort to encourage all students to seek avenues to college readiness courses.

Theme 2: Ineffective College-Going Culture

“[I’d say] that the main college-going message is coming from us and from a few select teachers.” – College access staff member

Arthur High School lacked a strong college-going culture. A high school with a strong college-going culture has clear expectations, information and resources available, faculty involvement, comprehensive counselors, college talk, and college partnerships (Byard, 2012). Arthur High School’s college-going culture was described as “non-existent, but growing.” Few opportunities existed for teachers and counselors to connect with one another around student success, common messaging, or opportunities for growth. Furthermore, AHS utilized passive recruitment efforts for dual enrollment programs.

Ineffective approach. AHS recognized the need for students to access information on colleges and the application process, but the current approach remained ineffective. Currently, Arthur High School committed one part-time counselor to staff the Career and College Readiness Center (CCRC), a dedicated space for college and career activities. At AHS, all counselors supported seniors, as the school divided counselors by alphabetical order rather than grade levels. This arbitrary system required all counselors to provide the full range of service to students, rather than allowing a few individuals to focus and provide expert support. Moreover, the CCRC counselor had a limited case load and lacked the authority to enroll students in PSEO or CIS:

It's alphabet counselors, yeah. I don't have a choice. I mean, I think I could talk to the student and encourage them and I don't see that there'd be a barrier if they fit the requirements. Alphabet counselors kind of are the ones that do the final steps of getting the [PSEO or CIS] application on its way.

A student still must meet with his or her "alphabet" counselor to get permission and send off the proper paperwork, thus eliminating an opportunity for students to engage with the designated college expert at the school.

A main component of the CCRC was to bring colleges to the students. However, at Arthur High School, few students visited the college reps. Lucy explained, "From my point of view it's tough to get students ...for reps, and it could be from the student perspective and I don't know what the message they're getting from teachers is."

Allowing students to leave the classroom for potentially valuable meet and greets with colleges rarely happened at AHS. No established process existed to guide students to the CCRC to meet college representatives and develop an intentional postsecondary plan.

Visual cues, which are central to a strong college-going culture, cannot be found at AHS. When asked about how students saw the college-going culture, counselors and teachers referenced "college gear on payday Friday" most frequently, followed by "door signs" and "pennants in the CCRC." However, the efforts were not integrated into the school culture. Lucy shared her opinion, "We have the door signs that are provided by the district that people put up and teachers will wear their college gear, but... [it] could be more prevalent....It's a coordinated day, but it isn't routinely reminded."

I confirmed the lack of visual cues in my tour and through my visits to Arthur High School. During my visits, I did not find one bulletin board or poster highlighting or celebrating college. College representative visits were advertised on small posters near the cafeteria, but were not heard on the morning announcements. While the CCRC was decorated with pennants from various colleges, it did not clearly post information about important college deadlines, scholarships or process. Additionally, the college door signs were found on fewer than one-quarter of the doors. Lastly, I did not find one sign or wall indicating a mission for students after their time at Arthur High School.

Additional items offered up as signs of a college-going culture included four programs geared for special populations and three one-time events: “college fair,” “career day,” and “national college fair.” These items, while excellent capstone activities, did not provide ongoing efforts that infused college knowledge and understanding about a postsecondary plan for students. Furthermore, AHS did not offer opportunities for students to explore college campuses. Only students in the special programs visited colleges, and no universal plan or program existed for other students to visit colleges or explore postsecondary career options.

The current practices at AHS to instill a college-going culture did not provide enough depth and richness to positively affect the student body’s view of higher education as a pathway for any and all students. Students did not have the opportunity to see and hear about college regularly nor do all students have the opportunity to explore a range of postsecondary options. Without a full-time commitment to the college message, the college-going culture remained incomplete at AHS.

Teacher – counselor interactions. A main component of a healthy college-going culture included faculty involvement and comprehensive counselors. Ideally, faculty and counselors come together to shape the college-going culture and message. At AHS, no formal or regular opportunities existed where teachers and counselors gather together to discuss a student’s pathway and develop strong colleague relationships. In fact, teachers and counselors often interacted only via email and usually on an as-needed basis. According to one counselor, communications about a student occurred informally. Quinn shared:

They’ll email us, they’ll come down and talk to us, if there’s a concern or a recommendation. A lot of it’s kinda via email, especially at the start of the year: “I think so and so should be in an accelerated class,” or, “I think we should bump them down.” So, that’s kinda how we communicate.

The registration process could have served as an ideal time to connect teachers and counselors, specifically for the placement of a student in a particular course, but AHS did not utilize a systematic process to determine student pathways. Instead, students sought teacher signatures for recommendations in isolation and counselors registered students based on the paperwork and any communication that arrived in their office. This led to counselors placed in an awkward position when teachers provided the wrong message to students. Quinn described one scenario:

I always tell teachers, “Don’t sign”... [Because when] it’s time to register... for an accelerated class, the teacher ... would have the kids come up [after class] and they [teachers] might feel pressure to quick sign [the registration form].... I would

like to see them work more one-on-one... I know it's difficult in a class setting, but sometimes they feel the pressure, they don't want to embarrass the kid. So they go ahead and sign it and then later when we sign 'em up for the fall, "Well Jimmy shouldn't be in Accelerated Biology," "Well let's take a look, how come you signed it?" So then I gotta pull Jimmy or talk to him.

If AHS provided built-in time and intentional communications, teachers and counselors could discuss a student's progress, potential, and interests, potentially leading more students to seek challenging courses. These opportunities would also encourage teachers and counselors to determine the supports necessary for a student's success.

Moreover, without an opportunity for teachers and counselors to co-create a unified college-going message, students received multiple, sometimes conflicting, messages. Lucy shared her experience:

We're not a very big high school but I think that... [students are] getting part of a message [because] they see all these adults in the building as experts. So they get a little bit from the ELL teacher, who says, "No. We need to keep you here for five years, possibly six years." And then they have their other counselors or other people, like me, say, "Oh, but you could take a class at [two-year college]," and the ELL teachers want to wring our necks. So it's hard to figure out what your message is.

Lastly, without the practice of active face-to-face discussions, the teachers and counselors did not build trusting colleague relationships, which can positively affect the climate and culture at the school. Without intentionally creating relationships, trust built

slowly. Lucy described how she hopes building trust with teachers will help AHS improve its college-going culture:

You know finding out more from teachers, the more I get to know teachers and make a personal relationship. The more they see my face, I think that could be improved upon to know like I am being serious with the students' time and that it's not a time-waster. I'm keeping track of them and giving them passes back to where they should be. So I think building on those relationships with teachers will be important to hopefully grow the college-going culture.

Teachers and counselors at AHS must find time to regularly meet and discuss students' success to improve the college-going culture and the outcomes for AHS graduates, especially graduates of color.

Passive recruiting. AHS used passive recruiting techniques to educate students about college options, dual enrollment opportunities, and graduation requirements. Counselors referenced classroom presentations as the main way to inform students about college and dual enrollment options. Classroom presentations occurred quarterly, delivered during one class period, and did not target any specific group of students, nor did they provide time for significant discussion. Quinn explained the process:

We do classroom presentations, I was just up in a classroom. I did two senior classes last Wednesday, a PowerPoint, just talking anything from military to work to post-secondary. Just kinda showing 'em these are the type of jobs and this is the type of education that goes with it and just being proactive and applying....So just kinda putting the word out there.

Lucy recognized room for growth with the presentations and acknowledged that this approach does not work for all students:

[They] have scheduled senior class visits, junior class visits where the counselors will go in and talk to the students. I see that as improving, because right now it's just the counselors up there talking for probably a half hour about these are the credits you need to graduate. These are your opportunities, bam bam bam bam. And if we had something that was a little more polished, you know something visual, you know I think that would help. Because you could lose a lot of those that tune out.

With this approach counselors rarely learned anything additional about a specific student's college plans or expectations. This approach required students to either seek out their counselor or find an outside resource after the presentation to gather more specific and individualized information. Furthermore, one of the teachers expressed concern with the current approach: "Counselors aren't well informed. I don't think they are really counseling them. [I think] 'Why are these students who are fabulous not in my [CIS] class?' I am wondering how the connection with counseling goes."

AHS did not do intentional recruiting for CIS courses, such as direct or tailored conversations, nor did anyone dig through data to identify additional or appropriate students. Patty shared how she provided data to counselors about which students belonged in AP programs, but did not feel confident that all counselors used the information to seek out students. Patty said:

I get information from the College Board about who should be in [AP]....These kids should be in AP classes. So I go through that every year and tell the counselors. And I think there are some...counselors that are really strong in pushing their kids.

Moreover, counselors insisted students get the information, but again cited passive techniques for sending out the information. Quinn stated, “We post it in the bulletin, we post it sometimes in the newsletter... It’s well advertised.”

Without active, intentional recruiting, course enrollment can be inequitable. Patty acknowledged some challenges to enrollment, especially with classes added at the last minute. “If it isn’t done on a request basis like in previous spring then it becomes a scramble and it’s not really equitable on who gets to be a part of this. Or who’s to see that this is an option for them.” Additionally, Ivan suggested students must self-select. “I don’t think they are really pushing anybody to do that [PSEO] unless it comes from them [the students] first.”

Students also indicated no intentional recruitment for advanced courses occurred after ninth grade registration. AHS used designated tracks of students from freshman year to fill advanced courses, rather than challenging new students to reach for more rigorous courses. Makayla shared her perspective:

And I feel like the students who did take accelerated [in 9th grade] are the ones who went on to AP, like automatically, no one even questioned that, and the people who took non-accelerated [in 9th grade]..., everyone just assumed, “oh, you’re gonna go to non-AP.”If you didn’t know about accelerated or you just

thought maybe I should be in a non-accelerated, I don't think you should be judged for all for years, just for making that one decision [in 9th grade]. And then ... some kids aren't necessarily given that opportunity and they just don't feel encouraged enough to enter AP or CIS or accelerated classes.

Overall, Arthur High School must adopt visual cues, a unified message, time for teachers and counselors to engage, and plans to develop an intentional approach to its dual enrollment programs. Without a coordinated approach, students navigated the college process or found dual enrollment options haphazardly, which led to low participation and enrollment numbers, particularly for students of color. AHS needs to reimagine its college-going culture to increase dual enrollment participation and encourage students' success.

Theme 3: External Factors Limit Participation of Students not the High School

“Nobody at home can help you. Nobody at home's ever done anything like this. And they won't feel the support at home or at school that we could be doing for them.” - Patty

Arthur High School staff cited external factors, such as program requirements, students' choices, and family background, as reasons behind Arthur High School's low participation by students of color in dual enrollment. The staff at AHS saw these external factors as insurmountable, and viewed the high school as doing all that it could for students to engage with advanced courses. Viewing students through their challenges did not allow staff to see the any strengths students brought to the table. Thus, this deficit mindset limited students' opportunities for academic growth and college exploration.

Program requirements. Dual enrollment program participation relied on program guidelines set forth by the postsecondary institutions and state law. The

guidelines for PSEO are written into law, making the baseline requirements universal and much less flexible. However, concurrent enrollment requirements differ by postsecondary institutions and often course by course. These requirements can be seen as guideposts for participation or as barriers to limit opportunities for students. At AHS, staff often focused on the program requirements as absolutes and drew attention to these requirements when discussing the programs with students. Quinn shared the message she sent to students:

I tell kids, “You guys just don’t walk in my office and say, ‘Here I am - sign me up for PSEO.’” It just doesn’t happen that way. So you have to meet the certain criteria: top 33 percent as a junior, top 50 percent as a twelfth grader, and here’s the options. A lot of my tenth graders, I’m talking to now and they want to apply for PSEO in the fall of 2017, this is what you need, here’s your grades, here’s the deadlines.

The high school website for the concurrent enrollment program listed two requirements: “You must be a junior or senior and in the top 20 percent of your class.” Upon analysis of the postsecondary partner’s website, one can see that no two course requirements are alike and many have more nuance and flexibility in academic requirements than simply top 20 percent of class (Appendix I). Yet, most AHS teachers and counselors did not challenge this requirement and did not advocate for a student’s engagement if outside of the 20 percent. Quinn shared an experience with this:

Sometimes the heartbreaking thing is when I tell a kid they can’t get in. I had a kid who wanted to do English, they had to be top 20 percent, you know, that’s the criteria. So I had to remove a couple kids at the start of the year that would’ve

been excellent candidates but again that's a [university] requirement, not [a] Mrs. Quinn requirement.

Sandy reinforced this belief in the university's requirement:

We used to have two sections of Physics and now we only have one. It's pretty rigorous to get in. The University has strict requirements, so we can't just have students in that [class] just [because they] want to be in that [class]. [They must] meet a certain criteria. Twenty percent or higher of their class, some are twenty-five percent, but most of 'em are pretty high achieving students.

CIS English, with a set place in the high school sequence and higher enrollment, focused heavily on enrolling those in the top 20 percent. Sandy described the process, "[With] English – it's their rank and there are only...25 kids, so that's pretty easy." The English teacher added her approach to enrolling students. She explained a willingness to meet with students about determining a good fit for the course, but stressed the 20 percent requirement:

[Students can] see the syllabus and talk through the work load in there if they want to give it a try, they do...I'm pretty open if they are in the top 20 percent. Because this [CIS] is a college level course and [is] writing intensive, [I have] some expectations that the students have these skills. [It's] accessible to all of our kids if they meet that basic threshold. Top 20 percent [and] most students can come in.

Not all courses at AHS exclusively used the 20 percent guideline. The experience for Physics, an elective science course, differed from English and showed more flexibility in enrollment. Sandy explained the registration process:

Physics is a little more gray than the black and white... After the requests come out ... [teachers will] look through and make sure that each kid is qualified and sometimes if the numbers are lower, they can take somebody that's right on that border [for CIS].

The Physics teacher added, "We float the rule for the 20 percent. Absolute baseline is a basic grade in Algebra II." However, nowhere was this flexibility communicated to students outside of word of mouth, and not all counselors knew this information to help guide students to the courses and expand the base of students.

The rhetoric at Arthur High School around eligibility to participate in PSEO and CIS showed rigidity and little nuance. Counselors appeared unaware of the other options for eligibility. Students received the message in multiple settings (web, classroom presentations, counseling sessions, etc.) about the selectivity and exclusiveness of the courses. AHS staff did not push the boundaries of the program requirements to provide more students opportunities. Instead AHS staff used program requirements to justify lower participation in dual enrollment courses, which occurred most frequently for students of color.

Students' choice. While teachers acknowledged that the program requirements limited some students, most of the staff and students at Arthur High School believed that students *chose* not to participate. Arthur High School staff intimated that they do

everything possible to give students the choice and opportunity to select an advanced course, and despite that students chose not to pursue the rigorous courses. Instead of identifying alternative steps to develop high potential students, counselors stopped at this point and focused on how little control they have over these perceived barriers

Quinn shared her attitude: “The opportunity’s there. The opportunity’s always there so, like I told kids during their presentation, I said, ‘You control that.... We provide the resources we want you to take advantage of.’” Students at AHS were exposed to the message of opportunity starting in ninth grade. Counselors shared the message early in hopes of helping students understand the process and requirements of the programs, plus encourage students to stay on track from ninth through twelfth grade. Quinn stated how early his message started:

But that’s why as ninth graders we focus on, “If you do well, you’ll see the opportunity.” That’s life, if you do well, put the work in, the doors of opportunity will open wider and wider for you. Period. So that’s why we really try to preach and kinda pound it in their heads as ninth graders. If this is what you do, these are the connections. This is how everything kinda flows.

AHS students have internalized this message of choice, even if initially they felt differently. Olivia, a student, shared her journey to understanding the reason so few students of color enrolled in advanced courses: choice.

For my first AP class, there wasn’t a lot of Black people in our class. So I thought oh maybe Black people don’t take AP classes or they’re not good enough for it. But I guess it was just my perspective of it. But once I started that class it was my

choice of taking it and other people have other choices...they all, other people have different choices as me. So at first I really thought it was a race thing that, oh my god, there's a lot of White people in there. So maybe it's because all the White people are smarter than the Black people. But I saw that it was choices that did that.

Counselors and students alike speculated about the reasons why students, especially students of color, did not choose the advanced courses. One of the theories presented, identified a lack of student readiness, both academically and mentally, as an excuse for students to avoid a more rigorous course pathway. Sandy shared:

Anybody who qualifies is able to get in regardless of their race. It's just the fact that a lot of those students don't qualify. But if you earn your way in there, you can obviously get in. We just have to figure out how to get those students achieving before it gets to that level. And prioritizing that that's what they want to do and that's a goal of theirs.

Next, counselors pointed to fear or a lack of understanding associated with participation in advanced or college credit courses as reasons students avoided rigorous courses. Sandy said: "Sometimes, they're not motivated to do it. Even if they are capable and have a high GPA, they just don't wanna take that risk or put themselves out there 'cause they might fail." Patty added that sometimes students lack the understanding of how the advanced course works: "A lot of our immigrants don't understand a weighted GPA and why it's important to probably get a C [in a challenging course with a weighted

grade] over an A [in a regular course without the weighted grade]. So a lot of times they're trying to protect their GPAs.”

Patty noted students shied away from college credit experiences because of lack of support from home, which affected students' confidence in their abilities:

They don't... I feel like they... it's terrifying when you feel like you can't do it. Nobody at home can help you. Nobody at home's ever done anything like this. And they won't feel the support at home or at school that we could be doing for them. And the confidence ... if you don't have anybody supporting you, your confidence is really low. So I think confidence, support, [and] time management [affect success].

Not only did counselors suggest students struggled with a lack of support at home, others assumed students had additional responsibilities outside of the classroom or at home which limited participation. Sandy described these other layers of obligation and the impact on students' day-to-day life:

It's sometimes very hard to get a full class. Because... it's hard, I mean it is a college-level course and students have other things like sports activities, clubs, jobs that they're trying to balance. Possibly responsibilities at home. You know this isn't the only thing that a lot of these students have going. There's only 24 hours in a day, they gotta try to do what they can. And we don't want them to be stressed out and spending all day and all night up and not getting sleep and all that kind of stuff, so there's gotta be a balance.

Students identified several different reasons other students may not feel empowered to take more challenging courses. Some students noted a lack of teacher encouragement, or concern for a hard class, or a lack of community. Makayla felt teachers could do more to encourage students to enroll:

Once... [students] don't take AP classes, they don't feel like motivated enough to take an AP class the next year. So I feel like maybe if there was more motivation [by teachers] to be like, "Hey, you did really well. I feel like you could really like do well in this class," maybe [it would help]. There is some of that [message], but not a lot.

Olivia shared her interpretation of why Black students did not select more advanced courses: a lack of community and desire to take the challenging course:

[I] think the reason why I based it on race was because not a lot of the people or the Black people I met here wanted to challenge themselves to take the AP classes. Cause they [said]... it's either, "Oh, it's hard, I don't have time for it" or, "It's for White smart people." So I think it's the choices that they made, cause they thought, "Oh why would I go in there if I'm gonna see a whole bunch of White people in there. And why don't I just take regular [courses] when I can be with my friends, and I will be with the same people I have [been with]."

Students and staff at AHS put the onus of course selection on students. While counselors acknowledged barriers to students' enrollment, most expressed little frustration with the barriers or offered solutions to overcome these barriers. Furthermore, counselors intimated the school was doing all that it could to help students become

prepared and aware of the course options, expecting nothing to change unless students made different choices. Students recognized racial inequities in the courses and hinted at a lack of encouragement and support from teachers as a factor in students' choice to disengage in rigorous course taking.

Family background. The conversations with AHS staff and students pointed toward different student experiences based on students' race or class backgrounds. The adults recognized racial inequities, but regularly cited a lack of support at home, families' inexperience with college, or poverty as the real cause for the inequity.

AHS staff suggested poverty as a main factor in the lack of a connection or understanding of the opportunities for college-credit or access to courses. Sandy felt strongly about the impact of poverty and noted its connection to race:

I think socio-economic is a huge factor, because parents can't focus on these other things, they're just focusing on getting through the next day or two, or week. That's more of a factor than I think gender or race [or] anything to me. But obviously... race is tied into it because you look at the demographics of who's in poverty and so that's how that's connected.

According to the counselors, the lack of support from home affected opportunities and understanding of the options. Patty noted: "We have professors' kids to homeless kids. We have just everybody here, so the minorities are really the ones who don't necessarily hear of these opportunities or understand." Yet, few of the adults articulated the ways "minorities" and their families missed learning about the opportunities. AHS

staff cited multiple ways they connect with students and parents, including “parent teacher meetings,” “Parent Academy,” and “communications home.”

The lack of connection with the families caused counselors to feel frustrated and created an image of families that did not support their students. Quinn recognized the school may need a new approach to working with parents, but also expressed frustration:

And as far as from a parent perspective, we do need to do a better job as far as educating parents, but we also need parents to come in... it's a two-way street, you have to come in and inquire about it as well. Hey, I can put the plate down, but I can't force you to eat it. The information's there, we just need more parents to take advantage of it.

Counselors at AHS felt that students' home life, particularly minority students, limited students' ability to excel in the classroom. In the interview with Patty, she suggested on multiple occasions that the school must compensate for challenging home lives. Patty also noted that the current school services did not provide adequate support:

I think the biggest issue I see is: Are we able to support our minorities who don't get the support at home with our AP program? Administrators for all last year, starting again, we need something during the day where if these kids want to drop in, we have a place where they can go, to say we're gonna support you during the day, here you go... we say we want minorities, but how are we supportive of [them]. We can't just say “Stay after school,” it's just not enough. The teachers all stay after, we provide bus tokens. They're very accessible, I'm very accessible, but we have to have something during the day.

AHS staff identified families' inexperience with college as a main factor in students' college-going and college readiness activities. Ivan stated, "We have [a]...really large first generation population here you know. And so there's an awful lot of enrollment at our community colleges." In addition to affecting students' college selections, counselors suggested parents' college status and income drove who participated and sought out dual enrollment courses. Sandy indicated lower income families missed dual enrollment opportunities for the reasons below:

Parents who, I believe, who have either gone to college or graduated college or are in professions that are high-level, ...they're in white-collar jobs, not necessarily blue collar jobs. Where they're knowledgeable about those things, typically are the ones who would be pushing [their student], the ones who maybe wouldn't get as much financial aid when their student goes to college. I think a lot of it has to do with the money because a lot of our maybe students will get their schooling paid for so their parents maybe don't have to push them as much to be looking for ways to save money. Or maybe their parents aren't even aware of the situation that's available to them, 'cause they're worried about other things.

Almost none of the teachers, administrator, or counselors spoke about underrepresented (low-income, first generation, students of color) students with an asset based mindset; most saw insurmountable deficits. Therefore, AHS staff felt justified in low student enrollment numbers as students were excused for their lack of participation or knowledge of the college process based on rigid program requirements, challenging family backgrounds, and students' choice. Finally, Arthur High School did not hold itself

accountable for the lack of students of color enrolled in dual enrollment or advanced courses.

Theme 4: Perception that Advanced Courses are only for White students

“I’m not sure even such classes are actually... introduced to those sort of minorities unless they’re doing exceedingly well than the rest [of the students].” - Laura

According to MDE, three-quarters of AHS’s population identified as low-income and one-third identified as Limited English Proficiency. Over 77 percent of the student body identified as students of color; however, White students made up 59 percent of participants in concurrent enrollment courses in 2014 (See Appendix K).

Disproportionately low participation by students of color at AHS created a narrative among AHS students about which students belong and gain access to advanced courses. Few adults in the building subscribed to this narrative, but indicated it existed. A key piece of the narrative included a common story about the challenges of being a student of color enrolled in these advanced courses created for White students.

Who belongs? Most of the student interviewees mentioned diversity as a strength of AHS; yet, the students were quick to point out where you would not see diversity. Bree stated Arthur has “a lot of diversity, maybe not in the AP or CIS classes.” Students’ experience highlighted the limited diversity in AHS’s advanced courses. According to Laura, “Upon coming here and even in my class itself, I’ve realized that it’s more predominantly White. Like there’s probably only a handful of people of color in [CIS].”

Students at AHS expected White students to dominate AP and concurrent enrollment courses. Olivia shared, “If I told my friends, “Oh my god I’m in AP class” they’d be like, “What, you’re in AP class?” like they expect that more White people are

in there.” To help explain the disparities in the advanced classrooms, students created a narrative about why specific students belonged and enrolled in the courses. Olivia expressed her narrative:

Well I've heard that they [other students of color] think... [AP or CIS courses have all] White people with money and that their parents are rich so they enforce that to their kids. They're just smart because their parents have maybe degrees in engineering and so they want their kids to be like that, so they taught them from when they were little by teaching them and giving them hard things to do. So that when they grow up they are all smart and they come from White families with money. And I guess they think that Black people have no money. Because... maybe the way Black people act, so they try to put that as every black person acts that way.

While Olivia shared the student narrative about White students as smart and wealthy, adults acknowledged the existence of this perception and a need to combat it. One teacher said, “We need to change the perception of upper level class [advanced courses] as predominantly White.” Interviewees reported that staff, like students, also viewed White students in a similar vein. One teacher cautioned against this narrative. She said, “It would be wrong to assume all White students are middle class. [The] White kids are from different social groups. The social class is mixed.” Yet, AHS students and staff defaulted to putting White students in the same box, lending credibility to the students' narrative about who belonged in advanced courses.

This narrative also included commentary on those who did not belong. Makayla added to the narrative by describing the stereotypes surrounding Black/African American students at AHS. These biases influenced the culture and reinforced the idea that advanced courses are for White students rather than for Black ones. Makayla said:

Most of the time it's mostly African American students, which is their fault, [they] fight and stuff. ... I feel like that creates the bias in the teachers' minds of the African- American students and they [teachers] just kind of see like, oh maybe, they just see us all the same. And I never fought and I don't have any intentions of fighting anyone any time soon. So, it's like once I get in there it's like I have to prove I'm not disruptive, I'm not one of those students. I'm just here to learn just like the rest of the students.

With this narrative in place, students suggested specific groups of students did not receive the same encouragement or attention to their course plans as other groups of students. Laura expressed a concern that her people did not get the same opportunity as other students. "I'm the only Native person in our class, which is weird, because with all honesty, I'm not sure even such classes are actually... introduced to those sort of minorities unless they're doing exceedingly well than the rest." Later in the interview, she implicated the high school's approach to recruitment and described a tension between groups of students:

[The] majority of my friends are actually people of color and they weren't really getting told to join these classes or that they were fit for the classes and yet I would see White kids kind of mocking those who took the regular classes saying

they were ‘ratchet’ [very poor in quality or ability] and all that stuff when it didn’t really make sense to me. How could a kid feel as though they’re capable of taking a class when nobody’s giving them that initiative to?

The students desired change and Bree concluded her interview by saying, “I hope there is more people of color in CIS. It’d be nice to see.” To accomplish this, one student suggested that a rebranding or marketing campaign may be needed to encourage students to see they can belong in this environment. Olivia stated:

I think that showing that black people are in there... kind of doing an advertisement but trying to say that the options are open for everyone. It’s not just that White people ... are the only smart people or anything, but that there are black people that take CIS classes or AP classes and... like it was their choice and they wanted to take it and that doesn’t mean that it’s a White people thing. ‘Cause it wasn’t created for White people, it was for everyone to experience how it feels like.

Students of color at Arthur High School struggled to understand the gaps in advanced course participation for racial/ethnic minorities. Yet, their experiences at AHS created an image and narrative regarding those welcomed into advanced courses. This narrative led to low participation and a challenging experience for those who persevered.

Experience. Advanced course class rosters with few students of color enrolled perpetuated the notion that students of color did not belong in these courses. Therefore, the few students of color enrolled in the advanced courses described uncomfortable experiences wrought with a perceived teacher bias and a need to prove themselves to all

in the classroom. Also, the classroom composition limited access to diverse perspectives in the class.

Makayla shared her perspective on what she believed teachers thought when she walked into the room on the first day. Makayla stated, “[The] teachers are like, “What’s she gonna be like? Is she gonna be disruptive or is she gonna be one of those students?” But then once they find out that I’m just as willing to learn then they’re really supportive.” Makayla went onto describe a persistent discomfort in the classroom:

And then you walk in the class and you have a majority of ... mostly White students. And...I’m usually maybe the only one or like one of a few African American students and I just feel out of place sometimes and I feel like it’s this huge elephant in the room. Because everyone knows it’s there. I know it’s there, the teacher knows it’s there, but no one really like says it’s there. Then I feel the pressure to like prove myself, that I’m actually there to learn and I always feel like I have to prove to them that I’m not just like fooling around.

Bree also expressed discomfort in a room with so many White people, which was different than her non-school life. She felt her educational experience was lacking with fewer students of color in the room. She struggled at getting to the issue, but eventually shared how her educational experiences were stymied due to a lack of perspectives and diversity:

I don’t actually have that many White friends so when I am like around a bunch of White people it is kinda like I don’t feel as [comfortable]... it does feel limited cause you’re used to having flavor in your friendship ... When I’m around just one

whole race, you feel a little like left out. Like can I relate to these people, different culture and kind of stuff like that?

When asked to dig a little deeper, Bree shared that she desired a more diverse environment: “I guess more stories, more evidence, not more evidence... more stories, more culture... I’m having a hard time finding the right words. I guess more diversity... Yeah, just to see how actual people of color live their actual life.”

While some students at AHS may not be academically prepared to achieve in advanced courses, AHS did not hold itself accountable to help them overcome this lack of preparation. Instead AHS created an environment where students opted out of challenging courses because the classes are filled with those who do not look like or represent them, which may be perceived as an uncomfortable environment. Only a few students bravely enrolled in courses, only to experience bias and spend time proving their worthiness to their classmates, teachers, and themselves. AHS must work on its narrative of who belongs and strive to change the composition of its advanced courses.

Arthur and Russell High Schools operated quite differently, thus demonstrating different commitment and involvement with dual enrollment. Arthur High School’s commitment and identity with Advanced Placement hampered its dual enrollment programs and limited opportunities for less academically prepared students, often student of color. Conversely, Russell High School aspired to have the highest postsecondary enrollment for its graduates, which started with earning college credit during high school. RHS’s strong college-going culture backed up the expanding concurrent enrollment

opportunities, while AHS struggled to convey a unified college-going message and an understanding of the importance of dual enrollment opportunities to students.

Students at RHS clearly articulated the positive impact of participating in dual enrollment courses on their college readiness, while AHS students casually mentioned the importance of the course for college preparation. RHS students' barriers included the learning curve necessary to maintain success in the college courses. AHS students cited feeling unwelcome or having no sense of belonging in their advanced courses as main barriers, instead of the rigor of the courses.

The concept of racial inequities resonated in different ways at RHS compared to AHS. At RHS, teachers discussed using racial inequities for a statistics problem, and sought to understand more about the issue. Counselors and the administrator at RHS owned the inequity problem and put forth solutions to change the patterns. At AHS, on the other hand, the counselors, teachers, and administrator focused on the magnitude of external factors affecting student access, emphasizing the students' deficits. Unfortunately, not one AHS staff interviewee put forward a solution, and only one teacher felt a need for a rallying cry to make change. None of the counselors addressed the race issue with a sincere, intentional, or serious attention; in fact they often dismissed racial inequity as an issue with student choice or poverty.

Russell High School's pervasive college-going culture may need more nuance to help students internalize realistic and likely individualized pathways to postsecondary. However, students strive to reach the high bar that has been set, and continued to be supported wherever they fall on the spectrum. RHS staff take chances on students believe

students can make it and deliver a unified message of challenging oneself to the students. The policies and practices in the school support teachers and students to stretch themselves and take risks.

On the other hand, Arthur High School needs a significant culture shift to support students' postsecondary goals and increase the number of students of color in its advanced courses. Arthur High School subscribes to a belief that the school can do no more. I challenge that notion, and encourage AHS to review its attitudes, practices, and policies, and how they affect students' ability to reach their postsecondary goals, even when socioeconomic factors, academic readiness, and family influence create challenges.

Chapter Seven: Summary, Implications, and Future Research

The purpose of this research is twofold. The first purpose addresses how structural racism limits dual enrollment opportunities for students of color. The second purpose highlights how high-minority high schools use dual enrollment programming, and whether or not the current practices serve as a tool for access and readiness for a baccalaureate degree. These two purposes guide the final chapter. This chapter begins with a summary of the findings, moves to theoretical implications, then offers policy proposals on multiple stages, and concludes with suggestions for future research.

Summary

This research provides a first look into dual enrollment participation rates for students of color and is the first review of the policies, practices, and experiences in Minnesota's high-minority high schools. With the dearth of analysis on this subject, this research enhances the conversation on dual enrollment engagement by contributing a rigorous study. Furthermore, this research adds to the college access and readiness literature and reveals a need for continued collaboration between secondary and postsecondary partners. This analysis shows Minnesota's education system practices and policies reflect the predominantly White student population that has comprised the schools for the past century and a half. Chapters four, five, and six identify themes suggesting most of Minnesota's students of color remain excluded from and overlooked in dual enrollment programs.

Chapter four explored the question: Does state level data identify a pattern of racial inequities in dual enrollment participation and opportunities? The analysis showed

differences in dual enrollment participation by racial/ethnic groups, particularly the low participation rates of students of color throughout the state. This research demonstrates that students of color are concentrated in less comprehensive high schools, which results in both less opportunity to take part in dual enrollment programs, and less actual participation in those programs. Furthermore, *if* high-minority high schools partner with postsecondary, it is usually with less selective, two-year colleges, rather than four-year universities. The quantitative analysis of the data suggests structural racism may affect dual enrollment participation rates.

Chapters five and six, the qualitative phase, focused on two research questions. The first question: How do different organizational practices and administrators' expectations influence dual enrollment opportunities for students of color? This research suggests the organizational practices and expectations from administrators can influence dual enrollment opportunities for students of color. Russell High School's administrators held clear beliefs on students and student success. The expansive dual enrollment programming at RHS stemmed from an administrative desire to provide college-level opportunities to most, if not all, students. Additionally, Russell High School did not treat college-level courses with elitism, but rather focused on challenging students to reach higher and start their postsecondary journey earlier in an environment with good supports.

Administrators can create, guide, and strengthen the college-going culture, which affects the organizational practices and influences the educators and students. Therefore, this research suggests a connection between the strength of the high school college-going

culture and the level of engagement in dual enrollment by students of color. An effective college-going culture meant a supportive and more robust dual enrollment environment for students of color. Russell High School represented an effective and intentional college-going culture directed by the principal. The organizational practices at Russell High School created a model that effectively uses dual enrollment programming as a tool for college readiness and success for students, especially for students of color. Arthur High School, on the other hand, lacked a strong message from the administration and had few organizational practices that promoted access and opportunities to dual enrollment for students of color.

At Russell High School, students were actively recruited for dual enrollment through multiple modes and clear pathways existed to participate in dual enrollment courses. At RHS, large numbers of students enrolled and attempted college-level courses, creating an environment where taking challenging courses was becoming the norm, and students had a place to safely fail. At Arthur High School, conversely, a unified message from the adults in the building on college courses and dual enrollment did not exist. Students often heard messages excluding them from the programs and no clear recruitment process existed for the courses. Additionally, a pathway into dual enrollment courses and opportunities remained elusive.

The approach of Russell High School led to 100 percent of students reporting postsecondary plans. Of the RHS graduates from the Class of 2015, 38 percent enrolled in four-year colleges, 54 percent enrolled in two-year colleges, five percent enlisted in the military, and three percent enrolled in additional learning, apprenticeship or work

programs. Russell High School has made great strides in changing the college readiness landscape for students of color. In time, if RHS continues its college-going message and access to dual enrollment courses, it may change the college access landscape by preparing more students of color to enroll at four-year institutions.

In contrast, Arthur High School reported different college-going rates. Arthur High School stated the postsecondary plans for the Class of 2014, 37 percent attending four-year schools, 36 percent enrolled in two-year schools, 25 percent undecided, and two percent entered the military. Even with Arthur High School's focus on more selective colleges, nearly the same number of AHS students attended four-year colleges as at RHS. Additionally, AHS has one-quarter of graduates with no postsecondary plans. AHS's approach to college readiness did not apply to all students.

The organizational practices and guidance from administrators, teachers, and counselors can affect the outcomes for dual enrollment participation, especially in diversifying the students enrolled in the courses. Russell High School with its clear mission, organized practices, and leadership made great strides in pushing students historically overlooked into challenging and rigorous courses. While Arthur High School, on the other hand, struggled with its practices and did not articulate a vision from administration.

The second question: How do those who administer or participate in dual enrollment programs describe their experiences? How do their descriptions differ based on their positionality (e.g. administrators, teachers, students, etc.)? This research suggests

the college-going culture and demographics of dual enrollment courses affected the experiences for students, teachers, and counselors.

Arthur High School's limited college-going culture created dual enrollment courses with few students of color enrolled. This research suggests that students without a critical mass of other racial/ethnic minorities in dual enrollment classes reported discrimination and bias from teachers and felt initially unwelcome in the courses. Additionally, AHS students of color expressed a need to prove their worth and ability in the course to both their teachers and classmates. For students at AHS, classroom demographics, perceived teacher attitude, and less diverse environment led to fewer students of color pursuing these rigorous pathways.

The clear vision and robust college-going culture at Russell High School kept dual enrollment courses diversified and accessible. RHS students did not identify a lack of belonging or discrimination challenges. Instead RHS students reported academic and college readiness challenges to being in the courses, but ultimately felt more prepared to succeed in college after the course.

With few students of color engaged in dual enrollment, the counselors and teachers at AHS discussed their experience with recruitment and retention of students of color in dual enrollment through a deficit mindset. Furthermore, staff and administrators at AHS normalized the lack of success and poor academic outcomes for students of color. Without a strong desire to increase the college-level options for all students, the staff at AHS felt little to no connection to the dual enrollment options or courses and appeared unaware of the discomfort students expressed in their interviews.

The model and approach to dual enrollment at Russell High School provided an intimate connection to the courses and student selection for staff. Counselors and teachers alike described intentional selection of students, deep understanding of students' academic prowess, and a belief in the success of the courses to prepare students for college. RHS staff expected students to engage with dual enrollment programming and created multiple avenues for students to become involved.

Overall, Minnesota's dual enrollment participation rates for students of color demonstrate the ramifications of a historically White-led and White-used system. Structural racism remains embedded within the educational system and the individuals who lead it. This research suggests inherent racism within the educational system limits access and opportunities to dual enrollment for students of color, but can be overcome with intentional planning, a clear vision, and strong college-going culture.

Theoretical Implications

This research reinforces a number of tenets within Critical Race Theory (CRT), furthering the validity of CRT within an educational framework. First, student perspectives, especially at Arthur High School, provided a counter-narrative to the adults or authority figures within the building. Second, the myth of meritocracy as a pathway to accessing opportunity emerged in the stories from students and staff at both high schools. Third, racism is normal and ordinary and embedded in Minnesota's educational system. Lastly, the intersection of race and class created a colorblind approach for describing students' lack of engagement with dual enrollment.

Authority figures within Arthur High School suggested that systemic or structural issues related to race did not exist. However, the student narratives added a different perspective contrasting that of the building staff. This study offers counter-narratives by engaging the voices of persons of color in identifying power differentials and presents a deeper narrative than the one provided by the dominant culture. AHS staff wanted to frame the lack of engagement by students of color in dual enrollment as a lack of readiness and poverty; however, students shared a narrative linked to inequity and bias for students of color to access and enroll in college-level courses.

The participants, adults and students alike, clung tightly to a belief in meritocracy. Counselors, teachers, and administrators in both high schools perpetuated the belief of meritocracy, and reinforced the notion that opportunities are open to all, especially those who work hard enough. Students absorbed that message, for example, Fiona stated, “I guess mostly the smarter students [enroll in the course]”. Throughout most of the interviews, the lack of academic readiness emerged as a key barrier for students of color. Sandy said, “To me it’s not a race issue, it’s an achievement issue.” *If* only students could achieve at higher levels, then they, too, can join the course. Quinn stated she informed students, “If you do well, you’ll see the opportunity.” With the low numbers of participation in dual enrollment for students of color across the state regardless of the school type shows that the opportunity is not accessible for all students. Yet, the myth of meritocracy as a pathway to success continued in some high-minority high schools.

Furthermore, racism is common and ordinary in Minnesota, a state where demographics and hyper-segregation create spaces filled with mostly or only White

people, an experience considered normal rather than cause for concern. Thus, those representing Minnesota's dominant culture fail to ask where are, or what happened to, communities of color. At both Russell and Arthur High Schools, the district-driven racial equity initiative drove the conversations about disparities between racial/ethnic groups in classrooms, rather than the school's internal desire to create equity. Minnesota's racism remains normal and ordinary and can be seen across multiple institutions. This reality makes it easy for the dominant culture and system to believe other reasons must be at play for any disparity, especially individual issues such as a lack of readiness or poverty.

In Minnesota, communities of color continue to struggle economically, creating a prime environment for the intersection of race and class. When race and class intersect, Minnesota schools can deny the effects of racial bias on disproportionate participation rates and instead blame poverty, a more palatable option that holds the students and family accountable, rather than forcing the schools and staff to evaluate the policies and procedures as contributors to the discrepancies. This research suggests the intersectionality of Minnesota's communities of color creates opportunities to avoid discussions on race and structural racism. Without a conversation on race, systemic barriers remain in place.

An educational system that supports the myth of meritocracy, situates racism as normal and ordinary, and excuses participation based on the barriers of poverty, affects the outcomes and opportunities for dual enrollment participants of color. This system must continue to be refined and ultimately dismantled for students of color to flourish in Minnesota. To address the institutional racism embedded in our schools, policy level

changes must be made. Individuals and institutions alike need to understand the impact of their personal and organizational values on entire groups of students.

Practical and Policy Implications

It is a perfect time for reshaping and refining the engagement in dual enrollment for students of color. The education headlines continue to focus attention on the low high school graduation and success rates for students of color. Plus, dual enrollment, especially concurrent enrollment, has gotten the attention of the legislature, school boards, and postsecondary institutions. Dual enrollment has the potential to help increase the graduation rates and success for students of color. In order for this to succeed, a number of key changes on the local and state level must occur. In the next section, I highlight the high school, postsecondary, and state level changes necessary for more students of color to participate in dual enrollment.

School-level policy changes. Counselors, teachers, and administrators cited a lack of academic readiness as a key reason students of color do not participate in concurrent enrollment. Academic readiness relates directly to the low graduation rates Minnesota high schools have been under scrutiny for in the past decade. While administrators seek solutions, innovative programs, and funding to mitigate this issue, most high schools do not need additional funding to shift the problem; rather, they need to create environments where students feel supported to take risks that may end in failure, and students have the opportunity to challenge themselves. Without significant culture shifts, the graduation rates and concurrent enrollment participation rates will remain low for students of color.

To change the culture and expectations, schools will need to implement three changes. First, schools must commit to an inclusive and all-encompassing college-going culture. Second, build on the college-going culture through an intentional dual enrollment program. Lastly, create formal spaces for teachers to engage with other school staff (i.e. counselors) to create trust among one another and formalize necessary advocating for students.

The first step is to implement a solid college-going culture. An inclusive college-going culture supports all forms of postsecondary educational options and encourages students to select the appropriate avenue to achieve their goals after high school. The judgment by staff of less selective institutions, which puts elite institutions on a pedestal, does not belong within the college-going culture. Students select the best fit for their academic readiness and desired career pathways. Additionally, supportive environments create avenues for students to rise to the challenge, and provide a space for students to take risks and safely fail. To determine the current college-going culture, schools should use a rubric to evaluate the current climate (sample found in Appendix L). The following questions must be part of the discussion:

- Does the school staff support postsecondary goals for all students?
- How and where does postsecondary planning fit in the school curriculum?
- In what ways do students see, hear, or feel this college-going message?
- What interventions are necessary to increase the success for students?
- What messages need to be shaped or changed?

After the assessment of the college-going culture, schools must determine how to implement changes to positively impact the college-going culture and postsecondary plans for their students.

Second, schools need to create an intentional dual enrollment program that includes a clear vision reflecting the school's goal for dual enrollment. Some schools may choose to provide each student with a college-level course before graduation, or others may seek to increase the participation rates for specific populations. Whatever the goal, the overarching vision of the program must be communicated regularly to the student body and the community. In alignment with the high school's vision, the school must identify pathways for students to access college level courses, determine eligibility for enrollment, and design interventions to encourage student enrollment. The program should include opportunities for students to gain access to college level material, prepare students for college expectations, and increase confidence to succeed in college. Lastly, the courses and the postsecondary partner selected for dual enrollment should meet students' postsecondary needs and desires.

Third, schools must build up a culture where student advocacy by the adults in the building can thrive. This includes more intentional communication between the adults in the building. School staff and teachers must operate under an expectation that they are accountable to invest time and effort into formal conversations about specific students and advocate for their needs and potential to succeed. Success for students, programs, and schools rely on positive relationships and these relationships must exist among staff members as well as with students. Creating clear communication pathways between

departments provides both teachers and counselors the opportunity to advocate for student's individual academic and personal needs.

While the three changes listed above will significantly increase the opportunities to diversify who participates in dual enrollment courses, more needs to be done to achieve racial equity. First, each school staff member must participate in an on-going assessment of the unconscious or conscious bias and assumptions that lead to often unconscious, but detrimental racism. The majority of Minnesota's high school teachers are White, middle-class women who commute into the neighborhood where they teach. Each of these teachers bring with them years of experiences, stereotypes, and bias regarding student success, motivation, and family involvement. Schools need to provide space for school staff to access data, engage in dialogue, be uncomfortable, and find mentors or supports to assist them with this development. This must be an on-going and ever-present part of school staff conversations. Staff should be encouraged to ask "I wonder" questions, such as, "I wonder why students choose to do this?" or, "I wonder why parents do not visit during conferences?" Eventually the staff should shift to asking questions like, "I wonder what I could do differently?" This opens the discussion and helps to make change in individual classrooms. *If* the racial equity agenda works, staff should enter classrooms or review rosters with the questions such as, "Where are the students of color? How do we discourage access?" or "What can we change to improve this situation?" or "How am I responsible?"

In conjunction with each staff member/teacher's development as an ally for racial equity, schools must implement school-wide policy changes and plans for accountability.

The entire school should review policies and practices targeting inherent bias towards the dominant culture. The dual enrollment assessment should include a detailed review of how students access college level material, information, and guidance. For example, Arthur High School needs to evaluate how students learn about dual enrollment opportunities, and what image the program has among students. Questions the school should ask include: What information do students receive about who enrolls? How is the information or message conveyed? What course scaffolding exists to lead students to college-level courses? How do we engage parents? In what ways do we build relationships with students and know their goals and desires for after high school?

To move high schools forward and create more diverse dual enrollment classrooms, high schools must develop a clear vision for dual enrollment and embed that in their college-going culture. They also need to assess the policies and procedures within the school district that may negatively affect the outcomes for students of color. Finally, all educators must engage in a plan that addresses their bias and assumptions and brings to light the negative effects of White privilege in the classroom and school building.

Postsecondary policy changes. Minnesota, and particularly the Metro area, is home to a variety of postsecondary institutions, and the Twin Cities Metro area is home to numerous private, not-for-profit institutions. Historically, the private not-for-profit institutions do not participate in dual enrollment, especially concurrent enrollment. To increase access and opportunities for students of color to pursue a baccalaureate degree, more four-year partners must participate. The University of Minnesota-Twin Cities, a main provider in the Metro area, has reached capacity. Metropolitan State University, the

local four-year MnSCU partner, will not enter the concurrent enrollment arena. Therefore, to increase the baccalaureate degree completion for students of color, more Metro area four-year institutions need to provide dual enrollment opportunities. This could be a mutually beneficial as private, four-year institutions seek to diversify their student body, and dual enrollment opens the door to increasing the matriculation rates to partner institutions. Institutional level data suggests one-fifth to one-quarter of dual enrollment students' matriculate to the institution providing concurrent enrollment. It is unknown whether simply accessing dual enrollment through a four-year institutions increases baccalaureate completion, but engaging high-minority high schools with more four-year partners would expand the possibilities for students.

Postsecondary institutions also need to consider utilizing multiple measures for acceptance into courses and/or tailoring specific courses to the academic middle students. Reliance on only one measure, such as a placement test score or GPA, does not provide enough room for high schools to reach students who may be initially deemed "ineligible", but may succeed if given the opportunity and the right supports. Multiple measures could include demonstrated success in prerequisite courses, improved academics, specific interest or aptitude, recommendation letters, or a combination of any factors. Colleges and universities, especially those not state-governed, have flexibility in determining student eligibility.

Multiple measures help diversify the student participation, but also programs focused on the academic middle make even more progress. Current examples of programs designed to meet the academic middle include: the Entry Point Project at

University of Minnesota-Twin Cities and the partnership between Anoka-Ramsey Community College and Mounds View School District. These programs use multiple measures to determine students' enrollment, with a focus on the academic middle. The adoption of programs that aim for the middle section of students creates more opportunities for students of color, who historically underperform and miss traditional cut-offs to participate. Developing a program in conjunction with a school district and allowing the school district to select students from the academic middle will dramatically change the demographics of dual enrollment programs in Minnesota.

Research suggests that students succeed at higher levels when attending four-year institutions. Within the Twin Cities Metro area, the public four-year partners have either met capacity or are disengaged with dual enrollment. Therefore, private, not-for-profit postsecondary institutions are needed to fill the concurrent enrollment needs. Private institutions must connect their desire for a diverse student body with the opportunities to grow dual enrollment. Additionally, to increase the diversity in dual enrollment programs, postsecondary institutions must create multiple measures to assess students' eligibility. Combined these two changes could dramatically shift the enrollment patterns for students of color.

State-level policy changes. One of the limitations of the quantitative study is the data used does not reflect the dramatic growth in dual enrollment programming in the past five years. The State of Minnesota's statute, §124D.09, for dual enrollment has been amended each year by the legislature, expanding the opportunities and reshaping the intent of dual enrollment programs. Minnesota's dual enrollment environment is

dynamic, with few policies and procedures remaining static for long. Dual enrollment began as an option for only the top students within a school, but has shifted to serve a more academically diverse population.

Often, a lack of academic readiness affects the opportunities for students of color, but with a scaffolded curricula students could prove their readiness in high school and then move into concurrent enrollment. For example, a student could enroll in a developmental reading course during fall semester of senior year, and upon successful completion, enroll in the college-level reading course during the spring semester. Approaches like this could allow more students to arrive on college campuses academically prepared to start their journey. Currently, state law prohibits dual enrollment programs from providing zero credit or developmental education courses to traditional high school students. However, a bill has been introduced to the Senate to expand the opportunity for developmental courses to all high schools. The ability to bring developmental education into high schools creates a pathway for students, particularly underachieving or academically underprepared students of color, to begin their postsecondary education.

The State must support two additional educational endeavors. First, it must lower the ratio of students to counselors. Students, particularly those in our most vulnerable school districts, need access to counselors who can guide students through not only their high school courses, but ensure that students have the information and tools necessary to succeed at the postsecondary level. Navigating the process for applying and registering for dual enrollment programs requires a dedicated and trained counselor. The State

should support funding to increase the number of counselors and create positions dedicated to college knowledge and resources.

Moreover, the State needs to help districts and schools with more challenging environments attract and retain highly qualified teachers. Per Minnesota's postsecondary accreditor, Higher Learning Commission, concurrent enrollment high school teachers should meet the same credentials necessary for postsecondary faculty (Master's degree in field). High-minority high schools often lack highly trained and skilled high school teachers. Without highly educated instructors, the high school cannot provide the necessary concurrent enrollment opportunities. Thus, creating funding structures or incentives to support teachers to succeed and see the value of working long-term in high-minority high schools remains necessary. The State can set the tone for the needs and expectations of dual enrollment opportunities for students of color by ensuring that staff within their building can provide access to the necessary courses.

The State of Minnesota can help increase the number of students of color engaged in dual enrollment through three avenues. First, by allowing developmental education courses into traditional high schools to create pathways for students to postsecondary education. Second, decreasing the student to counselor ratio and encouraging districts to designate a dual enrollment specialist. Third, increasing the talent pool at high-minority high schools. Any and all of these endeavors will help change the racial/ethnic status quo for dual enrollment.

Future Research

To further the conversation on dual enrollment and racial equity in Minnesota, future research should include an updated review of the participation rates by race/ethnicity and see if new legislation shifts the number of racially diverse students. Additionally, a study using regression analysis to determine what factors impact dual enrollment participation would be helpful to support the themes found here. Questions to examine include the following: Is academic preparation as an important factor in dual enrollment participation? What factors influence students in selecting a course? What impact does the college-going culture have on students' participation? What aspects of the dual enrollment program impact student's future college success?

This research focused on Minnesota's Twin Cities metropolitan area, but to provide a more complete picture of the state, I recommend further research in rural and suburban areas, including a similar qualitative study in the outstate districts with larger populations of communities of color. Adding more high schools is necessary to gather more information on how the policies and practices work, while gathering information to help schools identify areas to modify so more doors open for our students of color.

Another study needed in dual enrollment is the effect of specific courses on students' success, specifically addressing the outcomes for students of color. Further research is needed on the types of courses students enroll in, how the course helps the student achieve postsecondary credentials, and whether or not specific courses lead to better postsecondary outcomes. Questions to ask include: Do the course-taking patterns of dual enrollment students' improve success? Does participating in Public Speaking,

Composition I, or Introduction to Marketing lead to better outcomes than Personal Finance, Digital Design, or Introduction to Spanish? Also, how does participation in Career and Technical Education courses for concurrent enrollment affect success? Do more of these students acquire a necessary credential than those who do not take concurrent enrollment? Finally, do we see any difference in course taking patterns by race/ethnicity, income, and/or English language learners?

Additional questions regarding race and ethnicity to be answered include: As high schools move to create partnerships that enable students to earn at least one college credit before high school graduation, how will students of color fare? Also if students of color do not have access, how much financial benefit do they stand to lose? In Minnesota, communities of color often report the lowest incomes and the highest cumulative school loan debt. Theoretically, students of color can benefit from early course taking to shorten time-to-degree and lower the overall bill. However, little is known in the dual enrollment research about whether students save money overall, as they supplement their college education rather than shortening it. A few studies presented evidence to suggest dual enrollment students choose to a.) take fewer credits per semester (12 versus 15) or b.) participate in additional activities such as study abroad or c.) add another area of study or major. How do racial/ethnic minorities leverage their credits? Are there differences in between racial/ethnic groups?

Lastly, a deeper look at the new model for concurrent enrollment, which allows state-approved alternative programs (SAAP)s the opportunity to provide both developmental education and college-level material to students seeking their high school

diploma. Does this approach work? Do students end up acquiring a postsecondary credential? This is especially interesting as co-requisite models for higher education identified as a key success strategy for underprepared students. Is this model replicable in a high school or alternative learning center? Does this type of programming identify avenues and supports necessary to increase access for this population?

Conclusion

The heart of this research sought an answer to the first research question. To what extent does dual enrollment programming increase access for students of color and disrupt structural racism? To what extent does dual enrollment programming perpetuate systemic racial inequities? Opportunities exist for dual enrollment to disrupt structural racism, but this hinges on the high school culture, mission, and intention behind postsecondary planning and partnerships.

The model and approach to dual enrollment at Arthur High School perpetuated systemic racial inequities through the narrative of who enrolls in advanced courses, few intentional efforts to encourage students of color to participate, and even less acknowledgement of the unconscious racial bias within the school staff and policies. The perpetuation of the dominant narrative left students of color who did participate feeling isolated and uncomfortable in the courses. Moreover, Arthur High School does not have a plan in place to address these disparities between racial/ethnic groups, nor does the staff consider it their responsibility to ameliorate these disparities.

In contrast, the approach at Russell High School worked to disrupt structural racism. The commitment to providing college readiness and access for all shifted the

focus away from those who can or cannot succeed to seeing each student as a potential participant. RHS fills more than nine college courses to the maximum class size and often with a waiting list. These courses engage students and successfully provide them with building blocks necessary for college success. The continued success of RHS students creates a new image and description of the successful student, challenging the dominant culture's image of success. RHS's ability to encourage large numbers of students with perceived and real disadvantages to succeed at the college level redefines the high-minority high school and sets the bar higher, disrupting structural racism.

To continue to disrupt structural racism and ensure more equitable opportunities throughout Minnesota's high schools, especially in high-minority high schools, the policy changes listed above are imperative. With Minnesota's political climate highlighting racial inequities, dual enrollment at the forefront of multiple bills in the legislature, and high schools acknowledging their role in increasing students' success, I remain hopeful that real change can occur. We must see high school environments that empower students, provide challenges, reflect on institutional policies, and address individual bias and assumptions.

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Appendix A.

Variables and Coding for SLEDS data analysis

Variable	Source	Type of Variable	Coding for Study
Acceleration Programs Variables			
Student level	SLEDS	To compute dual enrollment indicator variables. This variable identifies high school students enrolled in postsecondary institutions	19 = high school student enrolled in postsecondary institution
Indicator of participation in Postsecondary Enrollment Option (PSEO)	SLEDS	Student characteristic	1 = participated in at least one PSEO course, 0 = did not participate in any PSEO course
Indicator of participation in Concurrent Enrollment/College in the Schools (CIS)	MDE	Student characteristic	1 = participated in at least one CE course, 0 = did not participate in any CE course
Indicator of participation in Other Dual Enrollment program	Computed	Student characteristic	1 = postsecondary enrollment record prior to HS graduation, 0 = did not have postsecondary enrollment record prior to HS graduation
Student Characteristics			
SLEDS person ID	SLEDS	Analytic sample creation	n/a
Status end code	SLEDS	Analytic sample creation: Identification of cohort	n/a
Student race, 2010–11	SLEDS	Used to compute student characteristic	n/a
Black Student	Computed	Student characteristic	=1 if student race is Black =0 otherwise

Variable	Source	Type of Variable	Coding for Study
Hispanic Student	Computed	Student characteristic	=1 if student race is Hispanic =0 otherwise
White Student	Computed	Student characteristic	=1 if student race is White =0 otherwise
Other Race Student	Computed	Student characteristic	=0 if student race is Black, Hispanic, or White =1 otherwise
Student gender, 2010–11	SLEDS	Student characteristic	=1 if female =0 if male
Student FRPL status, 2007-08 through 2010–11	SLEDS	Student characteristic	1 = eligible for free or reduced-price lunch 0 = not eligible for free or reduced-price lunch
Student grade of enrollment, 2006–07 to 2010–11	SLEDS	To compute student MCA-II composite scores	n/a
English Language Learner (Limited English Proficiency Indicator)	SLEDS	Student characteristic	Added for MDE reference
High School Characteristics			
NCES number	MDE website	To merge with high school data	n/a
Dual credit awarding college characteristics			
Unit ID	IPEDS /Barron's Profile of American Colleges	To merge with college data	n/a
OPEID	IPEDS /Barron's Profile of American Colleges	To merge with college data	n/a

Appendix B.

Focused interview questions for use with administrators, counselors, and students

Hello! Thank you for agreeing to talk with me about the dual enrollment programs and offerings at [insert school name]. My name is Jennifer Trost and I am from the University of Minnesota. I am working on my dissertation and I am interested in understanding more about dual enrollment opportunities at this high school. I am recording this session because I don't want to miss any of this great conversations. However, no names will be used in the report and all answers will remain confidential.

Interview protocol

Administrators	Counselors	Students
Name, position/organization, and years at the school	Name, position/organization, and years at the school	Name, year, and length at the school
What makes this high school unique?	What makes this high school unique?	What makes this high school unique?
What type of postsecondary institution do you see your students attending after high school?	What type of postsecondary institution do you see your students attending after high school?	What is your plan after high school?
How does this high school support students in their quest for postsecondary education?	How does this high school support students in their quest for postsecondary education?	In what ways does the school support your goals for after high school?
How would you describe the college-going culture of your school? In what ways do you see this?	How would you describe the college-going culture of your school? In what ways do you see this?	How do you see or feel this support?
What partnerships do you have with postsecondary institutions?	What partnerships do you have with postsecondary institutions?	Tell me about your experience with CIS or PSEO.
How do these partnerships develop? Who decides which postsecondary institutions to partner with?	How do these partnerships develop? Who decides which postsecondary institutions to partner with?	From what college/university are you receiving credit?
How do students learn about opportunities at the postsecondary institutions?	How do students learn about opportunities at the postsecondary institutions?	What class(es) have you participated in?

What do you offer for CIS? How do you determine which courses to offer?	What do you offer for CIS? How do you determine which courses to offer?	Who introduced you to CIS/PSEO?
What is your role in enrolling/encouraging students to participate in CIS or PSEO?	What is your role in enrolling/encouraging students to participate in CIS or PSEO?	What courses do you wish were offered at your high school?
Who are the biggest supporters of students participating in college in the schools (CIS) or postsecondary enrollment options (PSEO)?	Who are the biggest supporters of students participating in college in the schools (CIS) or postsecondary enrollment options (PSEO)?	What administrators/teachers are the biggest supporters of students participating in college in the schools (CIS) or postsecondary enrollment options (PSEO)?
What role do you see participation in these programs playing in your students' postsecondary education?	What role do you see participation in these programs playing in your students' postsecondary education?	What barriers have you experienced in participating in CIS/PSEO?
What role does race/ethnicity play in students' participation/engagement?	What role does race/ethnicity play in students' participation/engagement?	Describe the enrollment of each of your CE or PSEO courses (number of student, gender, race, age or grades)
What role does gender or social class play in students' participation/engagement?	What role does gender or social class play in students' participation/engagement?	In what ways does your gender or family background impact your experience with CIS/PSEO?
What systematic/structural barriers are there to offering CIS courses? And enrolling students in PSEO?	What systemic/structural barriers do you see to offering CIS courses? And enrolling students in PSEO?	How does your race impact your experience in CIS/PSEO?
What are the benefits to participating in CIS?	What barriers do students experience when participating in CIS/PSEO?	What do you hope participating in CIS/PSEO will do for you?
Is there anything else you would like to share?	Is there anything else you would like to share?	Is there anything else you would like to share?

Appendix C.

Focus group protocol for college access partners and teachers

Good evening! Thank you for joining me for our discussion of dual enrollment programs and offerings. My name is Jennifer Trost and I am from the University of Minnesota. I am working on my dissertation and I am interested in understanding more about dual enrollment opportunities at this high school.

I invited you here today because you are a [insert group name] and have a connection to this high school. Throughout the discussion I want you to think back your encounters with the high school regarding dual enrollment opportunities.

I want you to share your opinions and experiences. There is no right or wrong answer and some of you may disagree with one another. I am interested in all experiences and perspectives, so I encourage you to share your thoughts even if they are different than others or the group as a whole.

I am recording this session because I don't want to miss any of this great conversations. However, no names will be used in the report and all answers will remain confidential. I am using name tents tonight because I would like for it to be a conversation. Feel free to be on a first name basis with one another.

Before we begin let me remind you of some ground rules. Please make sure to contribute, but only one person at a time. Please listen respectfully to others. If you agree, disagree or want to follow-up on someone's comment, please do. My role here is to guide our discussion by asking questions, listening and ensuring everyone has a chance to speak. If you are contributing a lot, I may ask you to give others a chance. Also, if you aren't saying as much I may call on you to share your perspective. All comments are welcomed – both positive and negative.

Our session tonight will last approximately one hour and we will not take a formal break. Please take a moment to turn off your cell phones and grab more refreshments if you like. Now let's take a moment to find out more about one another. We will go around the table. Please tell me your name, years you have worked here, and subject you teach.

Focus Group Questions – Teachers and College Access Partners

Question Type	Question	Time allowed
Opening	Name, position/organization, and years at the school	1 min
Introductory	What makes this high school unique?	5 min
Transition	What type of postsecondary institution do you see your students attending after high school?	5 min
Transition	How would you describe the college-going culture of your school?	10 min
Key	In what ways do you see a presence of the college-going culture? List on the flip Figure.	10 min
Key	Who are the biggest supporters of students participating in college in the schools (CIS) or postsecondary enrollment options (PSEO)?	5 min
Key	How do students learn about opportunities at the postsecondary institutions?	10 min
Key	In what ways do you see race/ethnicity as a factor in students' participation with PSEO or CIS?	10 min
Key	What is your role in enrolling/encouraging students to participate in CIS or PSEO?	10 min
Ending	Is this summary accurate of what was said in our discussion?	5 min
Ending	Is there anything else you would like to share?	5 min
		Total: 75 minutes

Thank you very much for your time. Upon completion of all the focus groups, I will provide a summary of the findings for your review. If you think of anything else you would like to share after we leave, please contact me. I appreciate your participation.

Appendix D.

Bottom quartile of dual enrollment participation by high school

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Hennepin	277 Westonka Area Learning Academy	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Hennepin	ALC Eden Prairie HSIS	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Houston	Bluff Country Learning Center	41	low	14	0%	*	*	0%	14	*	0%	*	14	-100%	0%
Isanti	Cambridge ALC West	41	low	55	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Chisago	Chisago Lakes HS Alt Learning Prog	42	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Brown	Comfrey Secondary	33	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Anoka	Compass OnLine	46	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Grant	Herman Secondary	33	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Wright	HLWW Alternative Learning Program	42	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Houston	Houston Secondary	33	low	30	0%	*	*	0%	32	*	0%	*	32	-100%	0%
Kittson	Lancaster Secondary	33	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Wilkin	Learn At My Pace Online High Sch	46	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Lincoln	Lincoln Secondary (Ivanhoe)	33	low	29	0%	*	*	0%	28	*	0%	*	28	-100%	0%
Koochiching	LittleforkBig Falls Secondary	33	low	30	0%	*	*	0%	30	*	0%	*	30	-100%	0%
St. Louis	Mesabi Area Learning Center	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Ramsey	MN Correctional FacilityLino Lakes	70	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Isanti	Oak Land Learning Center Princeton	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Winona	Riverway Secondary	33	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Hennepin	SECA IS	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Isanti	St Francis ALC	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Houston	Summit Learning Program	42	low	14	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Ramsey	Transition 2 Success	41	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Martin	Truman Secondary	33	low	32	0%	*	*	0%	30	*	0%	*	30	-100%	0%
Pine	Willow River Area Learning Program	42	low	*	0%	*	*	0%	*	*	0%	*	*	-100%	0%
Carlton	CromwellWright Secondary	33	low	31	0%	*	*	0%	29	*	0%	*	30	-97%	-3%
Marshall	Marshall County Central High	33	low	27	0%	*	*	0%	25	*	0%	*	27	-96%	-4%
Lyon	Minneota Secondary	33	low	51	0%	*	*	0%	49	*	0%	*	51	-96%	-4%
Cass	Pine RiverBackus Area Learning Ctr	41	low	49	0%	*	*	0%	11	*	0%	*	11	-96%	-4%
Sherburne	Ivan Sand After School Credit Recov	41	low	19	0%	*	*	0%	*	*	0%	*	*	-95%	-5%
Becker	Lake Benton Secondary	33	low	34	0%	*	*	0%	11	*	0%	*	11	-94%	-6%
Wilkin	Rothsay Secondary	33	low	16	0%	*	*	0%	13	*	0%	*	14	-94%	-6%
St. Louis	Lake Superior High School	32	low	43	0%	*	*	0%	27	*	0%	*	29	-93%	-7%
Isanti	Braham Area Learning Program	42	low	13	0%	*	*	0%	11	*	0%	*	13	-92%	-8%
McLeod	Hutchinson Night Alt Learning Ctr	41	low	21	0%	*	*	0%	*	*	0%	*	*	-90%	-10%
Anoka	Step	60	low	114	0%	*	*	0%	*	*	0%	*	10	-89%	-11%
Stearns	West Central Area Learning Center	41	low	18	0%	*	*	0%	10	*	0%	*	11	-89%	-11%
Le Sueur	Ziebarth Alternative Learning Ctr	41	low	*	0%	*	*	0%	*	*	0%	*	10	-89%	-11%
Sherburne	Ivan Sand Community School IS	41	low	54	0%	*	*	0%	*	*	0%	*	*	-87%	-13%
Le Sueur	EdVisions Off Campus School	46	low	*	0%	*	*	0%	*	*	0%	*	*	-83%	-17%
Crow Wing	Lincoln Education Center	71	low	18	0%	*	*	0%	*	*	0%	*	*	-83%	-17%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Stearns	Great River Education Center	32	low	17	0%	*	*	0%	*	*	0%	*	*	-82%	-18%
Kanabec	Mora Alternative Learning Center	41	low	17	0%	*	*	0%	10	*	0%	*	10	-82%	-18%
Mower	Lyle Secondary	33	low	11	0%	*	*	0%	11	*	0%	*	12	-82%	-18%
Polk	Climax Secondary	33	low	16	0%	*	*	0%	11	*	0%	*	14	-81%	-19%
Otter Tail	Fergus Falls Area Learning Center	41	low	33	0%	*	*	0%	10	*	0%	*	11	-79%	-21%
Hennepin	Lionsgate Academy	33	low	14	0%	*	*	0%	*	*	0%	*	*	-79%	-21%
Otter Tail	Perham Area Learning Center	41	low	21	0%	*	*	0%	12	*	0%	*	14	-76%	-24%
Carver	CSEC ALC S Ind	41	low	*	0%	*	*	0%	*	*	0%	*	*	-75%	-25%
Mille Lacs	Isle Area Learning Center	41	low	12	0%	*	*	0%	*	*	0%	*	*	-75%	-25%
Wright	Knights Academy	42	low	16	0%	*	*	0%	10	*	0%	*	13	-75%	-25%
Pennington	Northwest Area Learning Center	41	low	11	0%	*	*	0%	*	*	0%	*	12	-73%	-27%
Anoka	Crossroads Altn High School	41	low	156	0%	*	*	0%	11	*	0%	*	15	-71%	-29%
Lyon	MATEC	41	low	19	0%	*	*	0%	*	*	0%	*	*	-68%	-32%
Becker	DETROIT LAKES Area Learning	41	low	22	0%	*	*	0%	*	*	0%	*	*	-68%	-32%
Becker	Detroit Lakes Alternative Prog	41	low	22	0%	*	*	0%	*	*	0%	*	*	-68%	-32%
Roseau	Border Area Learning Center	41	low	15	0%	*	*	0%	*	*	0%	*	*	-67%	-33%
Blue Earth	Central Freedom School	41	low	*	0%	*	*	0%	*	*	0%	*	*	-67%	-33%
Stearns	Central MN ALC Sartell	41	low	*	0%	*	*	0%	*	*	0%	*	*	-67%	-33%
Olmsted	ESC Area Learning Center	41	low	*	0%	*	*	0%	*	*	0%	*	10	-67%	-33%
Meeker	Litchfield Area Learning Program	42	low	15	0%	*	*	0%	12	*	0%	*	18	-67%	-33%
Aitkin	McGregor Area Learning Program	42	low	*	0%	*	*	0%	*	*	0%	*	*	-67%	-33%
Ramsey	MN Correctional FacilityRush City	70	low	*	0%	*	*	0%	*	*	0%	*	*	-67%	-33%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Pine	Crossroads Area Learning Center	41	high	10	0%	*	*	0%	10	*	0%	*	10	-60%	-40%
Kandiyohi	Prairie Lakes School	41	high	15	0%	*	*	0%	*	*	0%	*	*	-60%	-40%
Ramsey	Rivers Edge Academy	32	high	19	0%	*	*	0%	*	*	0%	*	*	-58%	-42%
Ramsey	General John Vessey Jr Leadership	32	high	26	0%	*	*	0%	11	*	0%	*	16	-58%	-42%
Hennepin	IS The Alternative Program	41	high	*	0%	*	*	0%	*	*	0%	*	*	-56%	-44%
Hennepin	270 Hopkins Alt Prg - Off Campus	41	high	26	0%	*	*	0%	*	*	0%	*	*	-54%	-46%
Sherburne	Ivan Sand Community High School	41	high	*	0%	*	*	0%	33	*	0%	*	35	-50%	-50%
Nicollet	MN Security Hospital YAAP	70	high	*	0%	*	*	0%	*	*	0%	*	*	-50%	-50%
Nicollet	Rock Bend HS ALC	32	high	*	0%	*	*	0%	*	*	0%	*	*	-50%	-50%
Hennepin	The Alternative Program TAP	41	high	22	0%	*	*	0%	*	*	0%	*	*	-41%	-59%
Clay	RED RIVER AREA LEARNING	41	high	25	0%	*	*	0%	*	*	0%	*	11	-40%	-60%
Le Sueur	Area Adult Learning Cooperative	42	high	*	0%	*	*	0%	*	*	0%	*	*	-38%	-63%
Ramsey	MN Correctional Facility Shakopee	70	high	*	0%	*	*	0%	*	*	0%	*	*	-33%	-67%
Hennepin	ALC Armstrong HS - IS	41	high	*	0%	*	*	0%	*	*	0%	*	*	-33%	-67%
Hennepin	281 Highview HS - IS	41	high	25	0%	*	*	0%	*	*	0%	*	*	-32%	-68%
Hennepin	Menlo Park Academy	43	high	40	0%	*	*	0%	*	*	0%	*	*	-20%	-80%
Hennepin	Learning For Leadership Charter	40	high	*	0%	*	*	0%	*	*	0%	*	*	-17%	-83%
Hennepin	Mpls HS Alternative Program	41	high	*	0%	*	*	0%	*	*	0%	*	*	-17%	-83%
Hennepin	Four Directions Charter Schools	33	high	14	0%	12	*	0%	*	*	0%	*	13	-14%	-86%
Hennepin	North Vista ALC	41	high	31	0%	*	*	0%	*	*	0%	*	*	-13%	-87%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Ramsey	MN Correctional FacilityStillwater	70	high	10	0%	*	*	0%	*	*	0%	*	*	-10%	-90%
Hennepin	El Colegio Charter School	32	high	15	0%	12	*	0%	*	*	0%	*	13	-7%	-93%
Hennepin	Center School	43	high	23	0%	*	*	0%	*	*	0%	*	*	-4%	-96%
Hennepin	American Indian OIC	43	high	28	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Hennepin	Community Campus	32	high	*	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Hennepin	Downtown Campus	32	high	*	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Ramsey	MCF Oak Park Heights	70	high	*	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Ramsey	MCFMoose Lake Willow River	70	high	*	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Hennepin	North Education Center Academy	41	high	*	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Beltrami	Red Lake Alternative Learning	41	high	16	0%	*	*	0%	*	*	0%	*	*	0%	-100%
Hennepin	Richfield Career Education Program	42	high	16	0%	12	*	0%	*	*	0%	*	12	0%	-100%
Ramsey	Hmong College Prep Academy HS	32	high	101	2%	62	*	2%	*	*	0%	*	64	0%	-98%
Ramsey	LEAP High School	41	high	158	2%	58	*	2%	*	*	0%	*	58	0%	-98%
Olmsted	Rochester Area Learning Center	41	high	78	2%	23	*	0%	33	*	3%	*	56	-53%	-44%
Winona	LewistonAltura Secondary	33	low	62	2%	*	*	0%	53	*	2%	*	55	-93%	-5%
Lake of the Woods	Lake of The Woods Secondary	33	low	45	2%	*	*	0%	42	*	2%	*	43	-91%	-7%
Clay	Barnesville Secondary	33	low	60	3%	*	*	0%	60	*	3%	*	61	-97%	0%
Hennepin	281 Highview Alternative Program	41	high	90	3%	22	*	5%	16	*	0%	*	38	-47%	-49%
Sibley	GFW High School	32	low	76	3%	*	*	0%	61	*	3%	*	65	-81%	-16%
Winona	Winona Area Learning Center	41	low	49	3%	*	*	0%	29	*	3%	*	32	-80%	-16%
Steele	Owatonna ALC 912	41	low	15	4%	*	*	0%	19	*	5%	*	28	-61%	-33%
Houston	Spring Grove Secondary	33	low	27	4%	*	*	0%	26	*	4%	*	27	-92%	-4%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Dakota	S St Paul Community Lrng Cntr	41	low	43	4%	*	*	0%	19	*	5%	*	26	-58%	-37%
Chippewa	MN RIVER VALLEY ALC	41	low	14	4%	*	*	0%	20	*	5%	*	25	-66%	-29%
Ramsey	Metro Heights Academy	41	low	76	4%	*	*	0%	22	*	5%	*	25	-60%	-36%
Ramsey	Fairview Alternative High School	41	high	67	4%	10	*	0%	13	*	8%	*	23	-25%	-67%
Hennepin	Minnetonka Senior High	32	low	710	5%	52	*	6%	630	28	4%	31	682	-88%	-2%
Beltrami	TrekNorth High School	33	low	26	5%	*	*	0%	19	*	5%	*	22	-72%	-23%
Scott	Prior LakeSavage Area ALC	41	low	39	5%	*	*	20%	17	*	0%	*	22	-67%	-13%
Clay	Moorhead High School	32	low	384	5%	27	*	7%	318	14	4%	16	345	-85%	-3%
Wright	Howard LakeWaverlyWinsted Sec	32	low	103	5%	*	*	0%	84	*	5%	*	86	-92%	-3%
Hennepin	Metro Schools Charter	32	high	70	5%	43	*	5%	*	*	0%	*	43	0%	-95%
Ramsey	White Bear Area Learning Center	41	low	110	5%	21	*	0%	83	*	6%	*	104	-74%	-20%
Ramsey	East View Academy	41	high	140	5%	30	*	7%	11	*	0%	*	41	-35%	-58%
Grant	Ashby Secondary	33	low	26	5%	*	*	0%	22	*	5%	*	22	-95%	0%
Dakota	Randolph Secondary	33	low	45	5%	*	*	0%	37	*	5%	*	40	-90%	-4%
Clay	UlenHitterdal Secondary	33	low	21	5%	*	*	0%	18	*	6%	*	20	-85%	-10%
Hennepin	279 Osseo Sr Hi ALC	41	high	120	5%	23	*	0%	18	*	11%	*	41	-32%	-57%
Hennepin	Prestige Academy Charter School	32	high	20	5%	19	*	5%	*	*	0%	*	19	0%	-95%
Chippewa	Montevideo Senior High	32	low	103	5%	*	*	13%	84	*	5%	*	92	-87%	4%
Hennepin	St Louis Park Senior High	32	low	308	6%	64	*	8%	176	*	5%	14	240	-61%	-26%
Hennepin	Augsburg Fairview Academy	32	high	45	6%	15	*	7%	*	*	0%	*	16	-2%	-91%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Fillmore	Lanesboro Secondary	33	low	32	6%	*	*	0%	33	*	6%	*	33	-94%	0%
Hennepin	Lincoln International School	32	high	33	6%	32	*	6%	*	*	0%	*	32	0%	-94%
Redwood	Wabasso Secondary	33	low	31	6%	*	*	0%	30	*	7%	*	31	-90%	-3%
Hennepin	Edina Senior High	32	low	614	7%	77	*	8%	490	31	6%	37	567	-78%	-8%
Chisago	North Branch Lab School ALC	41	low	21	7%	*	*	0%	15	*	7%	*	15	-93%	0%
Wright	Wright Technical Center ALC	41	low	81	7%	*	*	0%	58	*	7%	*	60	-89%	-4%
Beltrami	VOYAGEURS EXPEDITIONARY	33	high	27	7%	12	*	8%	*	*	0%	*	15	-33%	-58%
Ramsey	Face To Face Academy	33	high	24	7%	10	*	0%	*	*	20%	*	15	-13%	-67%
Washington	South Washington Alternative High	42	low	40	7%	*	*	0%	25	*	8%	*	29	-60%	-33%
Olmsted	Chatfield Secondary	33	low	76	7%	*	*	0%	64	*	8%	*	69	-86%	-7%
Chippewa	MN River Valley ALC Ind Study	41	low	39	7%	*	*	0%	25	*	8%	*	28	-89%	-3%
Yellow Medicine	ECHO Charter School	40	low	20	7%	*	*	0%	14	*	7%	*	14	-88%	-5%
Hennepin	VOA Opportunity HS	43	high	68	7%	14	*	7%	*	*	0%	*	14	-1%	-91%
Blue Earth	Life Lines Adult Connection	42	low	*	8%	*	*	0%	12	*	8%	*	13	-92%	0%
Wright	Phoenix Learning Center	42	low	16	8%	*	*	0%	12	*	8%	*	13	-85%	-6%
Dakota	Dakota Cty ALC	41	low	144	8%	13	*	23%	65	*	5%	*	78	-76%	4%
Dakota	West Heights ALC	41	high	38	8%	*	*	0%	*	*	11%	*	13	-36%	-53%
Itasca	Grand Rapids Area Learning Center	41	low	53	8%	*	*	0%	42	*	10%	*	51	-73%	-17%
Washington	St Croix Valley Area Learning Cntr	41	low	91	8%	10	*	0%	66	*	9%	*	76	-73%	-18%
Dakota	Burnsville Senior High	32	low	723	8%	131	18	14%	447	31	7%	49	578	-62%	-18%
Hennepin	270 Hopkins Alternative	41	high	37	8%	17	*	6%	21	*	10%	*	38	-42%	-43%
Ramsey	North Senior High	32	low	513	8%	109	13	12%	328	22	7%	35	437	-64%	-18%

County	SLEDS School Name	Type	SOC enroll	Total Sr	% of grads in DE	# of GO C	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Hennepin	Osseo Senior High	32	low	540	8%	112	*	7%	277	24	9%	32	389	-56%	-28%
Olmsted	Rochester OffCampus Charter High	32	low	25	8%	*	*	0%	21	*	10%	*	24	-78%	-12%
Hennepin	MTS High School	32	high	146	8%	33	*	6%	*	*	33%	*	36	26%	-86%
Hennepin	Maple Grove Senior High	32	low	555	9%	51	*	18%	463	35	8%	44	514	-81%	6%
Ramsey	Mounds View ALC	41	high	65	9%	15	*	13%	31	*	6%	*	46	-50%	-30%
Hennepin	Perpich Center For Arts Education	32	low	140	9%	*	*	0%	133	12	9%	12	136	-89%	-2%
Washington	Woodbury Senior High	32	low	442	9%	101	11	11%	318	26	8%	37	419	-68%	-13%
Hennepin	North Senior High (Mpls)	32	high	89	9%	53	*	8%	*	*	33%	*	56	27%	-86%
Hennepin	Park Center IB World School	32	high	507	9%	234	18	8%	144	16	11%	34	378	-17%	-64%
St. Louis	Chisholm Secondary	33	low	49	9%	*	*	25%	41	*	7%	*	45	-82%	15%
Ramsey	City Academy	33	high	96	9%	82	*	10%	*	*	0%	*	90	-10%	-80%
Ramsey	Community of Peace Academy Sec	32	high	42	9%	32	*	9%	*	*	0%	*	34	-5%	-86%
Rice	Discovery Public School Faribault	40	low	23	9%	*	*	0%	*	*	11%	*	11	-72%	-17%

Appendix E.

Top quartile of dual enrollment participation by high school

County	SLEDS School Name	Type	SOC	Total Sr	% of grads in DE	# of GOC	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Watowan	St James Secondary	33	low	96	46%	20	*	10%	64	37	58%	39	84	-21%	-11%
St. Louis	Hermantown Senior High	32	low	155	46%	*	*	80%	152	69	45%	73	157	77%	-51%
Carlton	Lincoln Secondary (Esko)	33	low	91	47%	*	*	0%	84	41	49%	41	88	-4%	-47%
Sibley	Sibley EastArlington Senior High	32	low	96	47%	11	*	27%	77	38	49%	41	88	11%	-34%
Mille Lacs	Onamia Secondary	33	low	41	47%	11	*	36%	34	17	50%	21	45	17%	-30%
Pennington	Lincoln Senior High	32	low	140	47%	18	*	33%	121	59	49%	65	139	20%	-38%
Dodge	Hayfield Sec	33	low	66	47%	*	*	0%	61	29	48%	29	62	-5%	-48%
Renville	Bold Senior High	33	low	71	47%	*	*	25%	60	29	48%	30	64	11%	-38%
Scott	Belle Plaine Senior High	32	low	111	47%	*	*	25%	94	45	48%	46	98	18%	-45%
Anoka	St Francis High	32	low	352	47%	18	*	39%	341	163	48%	170	359	33%	-47%
Benton	Sauk RapidsRice Senior	32	low	295	48%	12	*	42%	240	115	48%	120	252	36%	-46%
Roseau	Warroad High School	33	low	89	48%	*	*	33%	77	38	49%	41	86	23%	-41%
Cook	Cook County Senior High	32	low	42	48%	*	*	25%	36	19	53%	21	44	11%	-33%
Beltrami	Bemidji Senior High	32	low	338	48%	23	*	39%	240	118	49%	127	263	24%	-36%
Rice	Faribault Senior High	32	low	290	48%	21	*	19%	225	115	51%	119	246	4%	-34%
Faribault	United South Central High School	33	low	80	48%	*	*	25%	60	30	50%	31	64	19%	-44%
Lyon	Tracy Secondary	33	low	74	49%	11	*	64%	57	26	46%	33	68	46%	-37%
Martin	Martin County West Senior High	32	low	71	49%	*	*	40%	65	32	49%	34	70	32%	-42%
Wadena	WadenaDeer Creek Senior High	33	low	90	49%	*	*	0%	71	36	51%	36	74	-4%	-45%

County	SLEDS School Name	Type	SOC	Total Sr	% of grads in DE	# of GOC	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Becker	Fraze Secondary	33	low	73	49%	*	*	43%	56	28	50%	31	63	32%	-39%
Chisago	Chisago Lakes Senior	32	low	316	49%	11	*	18%	253	128	51%	130	264	13%	-45%
Clay	DilworthGlyndonFenton Senior High	32	low	83	49%	*	*	25%	75	38	51%	39	79	20%	-45%
Goodhue	Red Wing Senior High	32	low	210	49%	17	*	35%	173	88	51%	94	190	25%	-39%
Sherburne	Big Lake Senior High	32	low	216	49%	17	*	12%	179	95	53%	97	196	3%	-38%
Polk	East Grand Forks Senior	32	low	147	50%	20	*	5%	115	66	57%	67	135	-15%	-23%
Hennepin	271 - SHAPE - IS	41	low	*	50%	*	*	0%	*	*	100%	*	*	0%	0%
Dakota	Academic Arts High	33	high	19	50%	*	*	100%	*	*	0%	*	*	53%	-53%
Freeborn	AldenConger Secondary	33	low	24	50%	*	*	0%	19	10	53%	10	20	-8%	-39%
Redwood	Cedar Mountain Secondary	33	low	33	50%	*	*	40%	23	12	52%	14	28	22%	-30%
Clearwater	ClearbrookGonvick Secondary	33	low	28	50%	*	*	22%	19	12	63%	14	28	-10%	-5%
Carver	CSEC ALC C Ind	41	high	14	50%	*	*	100%	*	*	33%	*	*	43%	-10%
Chippewa	MACCRAY Area Learning Prog	42	low	19	50%	*	*	100%	*	*	0%	*	*	89%	-89%
Mahnomen	Mahnomen Area Learning C	41	high	*	50%	*	*	33%	*	*	100%	*	*	-24%	57%
Ramsey	MCFRedwing, Maginnis High School	70	high	47	50%	*	*	33%	*	*	63%	*	14	-45%	41%
Ramsey	MCFRedwing, Maginnis High	70	high	47	50%	*	*	33%	*	*	63%	*	14	-45%	41%
Rice	MN Correctional FacilityFaribault	70	high	*	50%	*	*	67%	*	*	0%	*	*	-33%	0%
Norman	Norman County West Secondary	33	low	14	50%	*	*	0%	13	*	54%	*	14	-7%	-39%
Le Sueur	WatervilleElysianMorristown	32	low	79	50%	*	*	50%	68	34	50%	35	70	42%	-42%
Cottonwood	Windom Senior High	32	low	72	50%	*	*	33%	69	35	51%	36	72	28%	-44%
Wright	Buffalo Senior High	32	low	452	50%	26	*	27%	387	201	52%	208	413	20%	-41%
St. Louis	Proctor Senior High	32	low	131	50%	*	*	40%	106	54	51%	56	111	35%	-44%

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Hennepin	South Senior High	32	high	445	51%	120	48	40%	169	99	59%	147	289	-10%	9%
Big Stone	Ortonville Secondary	33	low	52	51%	*	*	50%	51	26	51%	27	53	46%	-45%
Nobles	Adrian Secondary	33	low	42	51%	*	*	0%	42	22	52%	22	43	-2%	-45%
Blue Earth	Maple River Senior High	32	low	90	51%	*	*	40%	77	40	52%	42	82	33%	-41%
Mower	Austin Senior High	32	low	300	51%	39	11	28%	199	111	56%	122	238	7%	-23%
Sherburne	Becker Senior High	32	low	185	52%	*	*	57%	175	90	51%	94	182	53%	-44%
Brown	Springfield Secondary	33	low	59	52%	*	*	33%	55	29	53%	30	58	27%	-40%
Stearns	Holdingford Secondary	33	low	81	52%	*	*	0%	79	42	53%	42	81	-2%	-44%
Hubbard	Park Rapids Senior High	32	low	99	52%	*	*	40%	76	40	53%	42	81	32%	-39%
Chisago	North Branch Senior	32	low	279	52%	12	*	42%	223	117	52%	122	235	36%	-41%
Carlton	Carlton Secondary	33	low	53	52%	*	*	67%	46	23	50%	27	52	55%	-39%
Lake	Two Harbors Secondary	33	low	74	52%	*	*	0%	70	37	53%	37	71	-3%	-44%
Red Lake	Red Lake County Central High School	33	low	23	52%	*	*	0%	21	12	57%	12	23	-4%	-39%
Carlton	Barnum Secondary	33	low	51	52%	*	*	25%	40	22	55%	23	44	17%	-37%
McLeod	GlencoeSilver Lake Senior	32	low	149	52%	14	*	21%	127	71	56%	74	141	10%	-33%
Dodge	KassonMantorville Senior	32	low	138	53%	*	*	11%	124	69	56%	70	133	2%	-36%
Douglas	Osakis Secondary	33	low	55	53%	*	*	0%	54	29	54%	29	55	-2%	-44%
Steele	Blooming Prairie Secondary	33	low	53	53%	*	*	0%	48	26	54%	26	49	-6%	-40%
St. Louis	Memorial High School	33	low	49	53%	*	*	0%	47	26	55%	26	49	-4%	-41%
Carlton	Moose Lake Secondary	33	low	65	53%	*	*	100%	60	30	50%	34	64	92%	-42%
Koochiching	Falls Secondary	33	low	125	53%	20	12	60%	91	47	52%	59	111	35%	-24%

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Crow Wing	Brainerd Senior High	32	low	486	53%	15	*	47%	399	214	54%	221	414	43%	-42%
Otter Tail	Perham Senior High	32	low	128	54%	*	*	20%	109	60	55%	61	114	15%	-40%
Martin	GranadaHuntley East Chain	33	low	30	54%	*	*	0%	25	15	60%	15	28	0%	-40%
Goodhue	Pine Island Secondary	32	low	88	54%	*	*	100%	80	42	53%	44	82	98%	-45%
Isanti	CambridgeIsanti High School	32	low	364	54%	23	10	43%	306	167	55%	177	329	35%	-37%
Clearwater	Bagley Secondary	33	low	85	54%	*	*	29%	71	40	56%	42	78	17%	-32%
Polk	Fosston Secondary	33	low	58	54%	*	*	29%	45	26	58%	28	52	15%	-28%
Mille Lacs	Milaca Secondary High	33	low	124	54%	*	*	67%	112	60	54%	62	115	63%	-42%
Cottonwood	Red Rock Central Secondary	33	low	37	54%	*	*	0%	36	20	56%	20	37	-3%	-42%
Dakota	Eagan Senior High	32	low	495	54%	48	32	67%	414	219	53%	251	462	55%	-35%
Carver	112 ALC After School & Summer Sch	42	low	11	55%	*	*	33%	*	*	63%	*	11	6%	-10%
Mower	Grand Meadow Senior High	32	low	23	55%	*	*	0%	21	12	57%	12	22	-9%	-34%
Le Sueur	Le SueurHenderson High	32	low	103	55%	*	*	25%	87	50	57%	52	95	16%	-34%
Yellow Medicine	Yellow Medicine East High	33	low	74	55%	15	*	33%	58	35	60%	40	73	13%	-19%
Renville	Buffalo LakeHector Sdry	33	low	36	55%	*	*	0%	30	17	57%	17	31	-6%	-38%
Hennepin	Richfield Senior High	32	high	263	55%	86	38	44%	100	65	65%	103	186	-11%	20%
Scott	Shakopee Senior High	32	low	442	55%	78	30	38%	299	179	60%	209	377	12%	-14%
Becker	Detroit Lakes Senior High	32	low	212	56%	21	*	24%	168	100	60%	105	189	11%	-28%
Morrison	Royalton High School	33	low	62	56%	*	*	50%	52	29	56%	30	54	47%	-41%
Le Sueur	Cleveland Secondary	33	low	36	56%	*	*	0%	33	19	58%	19	34	-3%	-40%

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Benton	Foley Senior High	32	low	109	56%	*	*	25%	105	60	57%	61	109	21%	-39%
Meeker	ACGC Secondary	33	low	58	56%	*	*	33%	51	30	59%	32	57	21%	-29%
Stearns	Paynesville Area High School	32	low	81	56%	*	*	100%	72	40	56%	41	73	98%	-42%
Itasca	Deer River Secondary	33	low	68	56%	*	*	50%	56	32	57%	36	64	34%	-27%
Lac qui Parle	Lac qui Parle Valley Sdry	33	low	89	57%	*	*	17%	77	46	60%	47	83	7%	-30%
Red Lake	Lafayette Secondary	33	low	34	57%	*	*	0%	29	17	59%	17	30	-3%	-38%
Todd	Browerville Secondary	33	low	60	57%	*	*	50%	47	27	57%	28	49	47%	-39%
Hennepin	FAIR School Downtown	40	high	19	57%	*	*	29%	*	*	86%	*	14	-40%	54%
Cass	WalkerHackensackAkeley Sec	33	low	73	57%	*	*	0%	45	31	69%	31	54	-19%	-12%
Nicollet	St Peter Senior High	32	low	137	58%	11	*	27%	113	69	61%	72	124	17%	-29%
Stevens	Hancock Sec	33	low	13	58%	*	*	100%	11	*	55%	*	12	92%	-38%
Pine	HinckleyFinlayson Secondary	33	low	78	59%	*	*	50%	64	38	59%	41	70	41%	-32%
Isanti	Braham Area Secondary	33	low	63	59%	*	*	0%	56	34	61%	34	58	-8%	-31%
Grant	West Central Area Sec	33	low	61	59%	*	*	50%	56	33	59%	34	58	43%	-35%
Murray	Fulda Secondary	33	low	47	59%	*	*	50%	44	26	59%	27	46	41%	-32%
Hennepin	Spectrum High School	32	low	66	59%	*	*	0%	59	36	61%	36	61	-3%	-36%
Otter Tail	New York Mills Secondary	33	low	50	59%	*	*	100%	46	26	57%	29	49	94%	-37%
Marshall	WarrenAlvarado Oslo	33	low	35	59%	*	*	0%	33	22	67%	22	37	-14%	-19%
Wright	Annandale Senior High	32	low	146	60%	*	*	17%	120	74	62%	75	126	11%	-33%
Douglas	Alexandria Area High School	32	low	334	60%	12	*	58%	263	158	60%	165	275	54%	-35%
St. Louis	Cotton Secondary	33	low	15	60%	*	*	0%	14	*	64%	*	15	-13%	-22%
Lincoln	RTR High School	32	low	47	60%	*	*	0%	39	24	62%	24	40	-4%	-34%
Pine	Willow River Secondary	33	low	31	60%	*	*	100%	23	13	57%	15	25	94%	-37%

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Meeker	Eden Valley Secondary	33	low	75	60%	*	*	67%	75	45	60%	47	78	64%	-37%
Polk	FertileBeltrami Secondary	33	low	36	61%	*	*	33%	30	19	63%	20	33	17%	-20%
Le Sueur	Le Center Secondary	33	low	52	61%	*	*	13%	38	27	71%	28	46	-7%	-10%
Stearns	Apollo Senior High	32	low	296	61%	59	34	58%	189	117	62%	151	248	32%	-13%
Stearns	Sartell Senior High	32	low	240	61%	12	*	33%	215	135	63%	139	227	29%	-33%
Olmsted	Stewartville Senior High	32	low	129	61%	*	*	100%	109	66	61%	68	111	96%	-36%
Polk	WinEMac Secondary	33	low	34	61%	*	*	100%	30	18	60%	19	31	97%	-37%
Stearns	Melrose Secondary	33	low	123	62%	14	*	50%	103	65	63%	72	117	37%	-24%
Itasca	Grand Rapids Senior High	32	low	260	62%	26	*	35%	207	135	65%	144	233	23%	-23%
Watonwan	Madelia Secondary	33	low	34	63%	*	*	67%	26	16	62%	20	32	46%	-18%
Cass	Northland Secondary	33	low	45	63%	10	*	40%	33	23	70%	27	43	18%	-8%
Kanabec	Mora Secondary	33	low	147	63%	*	*	67%	126	79	63%	83	132	63%	-34%
Wilkin	Breckenridge Senior High	32	low	74	63%	*	*	0%	67	45	67%	45	71	-9%	-23%
Norman	AdaBorup Secondary	33	low	41	63%	*	*	50%	37	24	65%	26	41	40%	-25%
Swift	Kerkhoven Secondary	33	low	49	63%	*	*	100%	49	30	61%	33	52	92%	-31%
Aitkin	Aitkin Secondary School	33	low	94	64%	*	*	50%	77	50	65%	53	83	44%	-29%
Rock	Luverne Senior High	32	low	81	64%	*	*	80%	70	44	63%	48	75	71%	-29%
Blue Earth	St Clair Secondary	33	low	40	64%	*	*	100%	41	26	63%	27	42	98%	-34%
Wabasha	Lincoln Secondary	33	low	98	64%	*	*	0%	86	56	65%	56	87	-1%	-34%
Yellow Medicine	Canby Secondary	33	low	51	65%	*	*	0%	50	33	66%	33	51	-2%	-32%
St. Louis	Central Senior High (Duluth)	32	low	444	65%	54	22	41%	333	229	69%	251	387	24%	-14%

County	SLEDS School Name	Type	SOC	Total Sr	% of grads in DE	# of GOC	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Todd	StaplesMotley Senior High	32	low	117	65%	*	*	67%	89	58	65%	60	92	62%	-31%
Pine	East Central Senior Secondary	32	low	53	67%	*	*	0%	48	34	71%	34	51	-6%	-24%
Mahnomen	Mahnomen Secondary	33	high	39	67%	18	*	50%	15	13	87%	22	33	-9%	46%
Freeborn	Albert Lea Senior High	32	low	250	67%	24	13	54%	163	112	69%	125	187	40%	-17%
Anoka	PACT Charter Secondary	33	low	49	67%	*	*	0%	42	29	69%	29	43	-4%	-27%
St. Louis	EvelethGilbert Senior High	32	low	83	68%	*	*	100%	77	52	68%	53	78	99%	-31%
St. Louis	Mountain IronBuhl Secondary	33	low	27	68%	*	*	0%	23	17	74%	17	25	-11%	-15%
Pope	Minnewaska Secondary	33	low	102	68%	*	*	100%	92	62	67%	64	94	96%	-29%
Polk	Fisher Secondary	33	low	21	68%	*	*	0%	18	13	72%	13	19	-14%	-13%
Carlton	Cloquet Senior	32	low	162	69%	11	*	55%	116	82	71%	88	127	37%	-11%
Cass	Pine RiverBackus High	33	low	58	70%	*	*	0%	50	37	74%	37	53	-5%	-21%
St. Louis	Floodwood Secondary	33	low	34	70%	*	*	0%	29	21	72%	21	30	-3%	-25%
Renville	Renville County West Senior	33	low	35	70%	*	*	60%	25	18	72%	21	30	40%	-8%
St. Louis	Tower-Soudan Secondary	33	low	22	70%	*	*	67%	17	12	71%	14	20	48%	-11%
Itasca	Nashwauk Secondary	33	low	31	71%	*	*	67%	32	23	72%	25	35	57%	-18%
Wright	Monticello Senior High	32	low	310	72%	22	16	73%	257	184	72%	200	279	65%	-20%
Morrison	Little Falls Senior High	32	low	174	72%	*	*	80%	145	104	72%	108	150	77%	-25%
Meeker	Litchfield Senior High	32	low	132	73%	*	*	33%	118	88	75%	90	124	27%	-19%
Stearns	Rocori Senior High	32	low	203	73%	*	*	43%	184	136	74%	139	191	39%	-22%
Carver	Watertown Mayer High	32	low	132	74%	11	*	82%	110	80	73%	89	121	73%	-18%
Stearns	Sauk Centre Secondary	32	low	103	74%	*	*	33%	93	70	75%	71	96	29%	-21%

County	SLEDS School Name	Type	SOC	Total Sr	% of grads in DE	# of GOC	# of GOC in DE	% GOC in DE	# of White grads	# of White grads in DE	% White grads in DE	Total grads	Total # of graduates in DE	White Rep in DE	GOC Rep in DE
Jackson	Jackson County Central Senior High	32	low	93	76%	*	*	0%	92	72	78%	72	95	-3%	-19%
Stearns	Albany Senior High	32	low	120	78%	*	*	100%	107	83	78%	84	108	98%	-20%
St. Louis	Cook Secondary	33	low	27	78%	*	*	50%	25	20	80%	21	27	43%	-13%
Todd	Long PrairieGrey Secondary School	32	low	97	79%	10	*	60%	71	58	82%	64	81	46%	-4%
St. Louis	Mesabi East Secondary	33	low	35	80%	*	*	100%	33	26	79%	28	35	94%	-15%
Stevens	Morris Area Secondary	33	low	85	80%	*	*	100%	80	64	80%	66	82	98%	-18%
Martin	Fairmont Jr_Sr High School	33	low	141	81%	*	*	75%	121	98	81%	104	129	65%	-9%
Crow Wing	Pequot Lakes Senior High	32	low	116	82%	*	*	100%	91	74	81%	75	92	97%	-16%
St. Louis	East High School	32	low	325	84%	22	15	68%	274	233	85%	248	296	59%	-6%
St. Louis	Virginia Secondary	33	low	131	84%	*	*	50%	111	95	86%	97	115	45%	-9%
Lake	Kelley Secondary	33	low	40	91%	*	*	100%	33	30	91%	32	35	95%	-4%
Washington	Math And Science Academy	33	low	30	100%	*	*	100%	26	26	100%	30	30	87%	13%

Appendix F.

Participation rates for students of color by high schools

School Name	% of grads in CE	% of grads in PSEO	% of grads in PSEO and CE	% of grads in Unknown	% of grads in CE and Unknown	% of grads in Unknown and PSEO	% of grads in all 3 programs	% of grads did not participate in DE	% of grads - 1 year	% of grads - 2 years	% of grads - 3 years	% of grads - 4 years
112 ALC After School & Summer Sch	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
270 Hopkins Alt Prg - Off Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
270 Hopkins Alternative	0%	0%	0%	6%	0%	0%	0%	94%	6%	0%	0%	0%
271 SHAPE ALC	7%	0%	0%	7%	0%	0%	0%	87%	13%	0%	0%	0%
271 SHAPE IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
279 Osseo IS ALC	0%	0%	0%	21%	0%	0%	0%	79%	17%	3%	0%	0%
279 Osseo Sr Hi ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
281 Highview Alternative Program	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
281 Highview HS - IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
286-BCALC-Brooklyn Center Academy	0%	0%	0%	14%	0%	0%	0%	86%	14%	0%	0%	0%
622 Alternative Middle High School	0%	0%	0%	43%	0%	0%	0%	57%	43%	0%	0%	0%
916 Mahtomedi Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
A G A P E Teen Parent	0%	0%	0%	28%	0%	0%	0%	72%	28%	0%	0%	0%
ABE DIPLOMA PROGRAM	0%	14%	0%	23%	0%	0%	0%	64%	36%	0%	0%	0%
Academic Arts High School	0%	50%	50%	0%	0%	0%	0%	0%	100%	0%	0%	0%
ACGC ALP	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
ACGC Secondary	17%	0%	0%	17%	0%	0%	0%	67%	33%	0%	0%	0%
AdaBorup Secondary	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Adrian Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Adult Diploma	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
AFSA High School	0%	13%	0%	13%	0%	0%	0%	75%	13%	13%	0%	0%
Aitkin Secondary School	33%	0%	0%	17%	0%	0%	0%	50%	17%	33%	0%	0%
Albany Senior High	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
Albert Lea Area Learning Center	0%	0%	0%	14%	0%	0%	0%	86%	0%	14%	0%	0%
Albert Lea Senior High	50%	4%	0%	0%	0%	0%	0%	46%	21%	33%	0%	0%
Albrook Secondary	20%	0%	10%	0%	0%	0%	0%	70%	10%	20%	0%	0%
ALC Eden Prairie HSIS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ALC Evening High School	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
AldenConger Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Alexandria Area High School	42%	0%	8%	8%	0%	0%	0%	42%	33%	25%	0%	0%
American Indian OIC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Andover High School	13%	13%	6%	6%	0%	0%	0%	63%	31%	6%	0%	0%
Annandale Senior High	17%	0%	0%	0%	0%	0%	0%	83%	0%	17%	0%	0%
Anoka High School	18%	4%	4%	5%	0%	0%	0%	69%	27%	4%	0%	0%
Apollo Senior High	19%	24%	5%	10%	0%	0%	0%	42%	46%	12%	0%	0%
Apple Valley Senior High	6%	6%	0%	7%	0%	0%	0%	82%	15%	3%	0%	0%
Area Adult Learning Cooperative	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Arona Academy of Sobriety High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Augsburg Fairview Academy	0%	0%	0%	7%	0%	0%	0%	93%	7%	0%	0%	0%
Austin Area Learning Center	0%	0%	0%	11%	0%	0%	0%	89%	11%	0%	0%	0%
Austin Senior High	28%	0%	0%	0%	0%	0%	0%	72%	18%	10%	0%	0%
Avalon School	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Badger Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Bagley Secondary	0%	0%	0%	29%	0%	0%	0%	71%	14%	14%	0%	0%
Barnesville Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Barnum Secondary	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Battle Lake Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Becker Senior High	29%	0%	29%	0%	0%	0%	0%	43%	43%	14%	0%	0%
Belle Plaine Senior High	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Bemidji Area Learning Center	0%	0%	0%	43%	0%	0%	0%	57%	43%	0%	0%	0%
Bemidji Senior High	0%	0%	0%	39%	0%	0%	0%	61%	35%	4%	0%	0%
Benson Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Big Lake Senior High	6%	0%	6%	0%	0%	0%	0%	88%	6%	6%	0%	0%
Bigfork Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Blackduck Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Blaine High School	15%	15%	1%	9%	0%	0%	0%	61%	34%	5%	0%	0%
Blooming Prairie Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Blue Earth Area Secondary	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
BlueSky Charter School	0%	17%	0%	0%	0%	0%	0%	83%	17%	0%	0%	0%
Bold Senior High	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Border Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Braham Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Braham Area Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Brainerd Senior High	47%	0%	0%	0%	0%	0%	0%	53%	40%	7%	0%	0%
Breckenridge Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Broadway Arts & Technology	0%	26%	4%	9%	0%	0%	0%	61%	35%	4%	0%	0%
Brooklyn Center Secondary	0%	2%	10%	33%	0%	0%	0%	55%	45%	0%	0%	0%
Browerville Secondary	50%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Buffalo LakeHector Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Buffalo Senior High	15%	12%	0%	0%	0%	0%	0%	73%	15%	12%	0%	0%
Burnsville Alternative High School	27%	0%	0%	4%	0%	0%	0%	69%	31%	0%	0%	0%
Burnsville Senior High	2%	7%	0%	5%	0%	0%	0%	86%	7%	7%	0%	0%
Burnsville Sr High Extended Day Yr	0%	0%	0%	40%	0%	0%	0%	60%	40%	0%	0%	0%
Butterfield Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Byron Senior High School	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Caledonia Senior High	60%	0%	0%	0%	0%	0%	0%	40%	60%	0%	0%	0%
Cambridgelsanti High School	9%	0%	17%	17%	0%	0%	0%	57%	30%	13%	0%	0%
Canby Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cannon Falls Alternative Learning	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cannon Falls Secondary	0%	50%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Carlton Secondary	50%	0%	17%	0%	0%	0%	0%	33%	0%	67%	0%	0%
Carver ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cass LakeBena Area Lrng Cntr	0%	0%	0%	30%	0%	0%	0%	70%	30%	0%	0%	0%
Cass LakeBena Secondary	0%	7%	0%	7%	0%	0%	0%	87%	7%	7%	0%	0%
Cedar Mountain Secondary	0%	0%	0%	40%	0%	0%	0%	60%	40%	0%	0%	0%
Centennial Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Centennial High School	15%	5%	2%	2%	0%	0%	0%	76%	24%	0%	0%	0%
Center School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Central High Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Central Senior High	0%	14%	0%	29%	0%	0%	0%	57%	43%	0%	0%	0%
Central Senior High (Duluth)	37%	0%	4%	0%	0%	0%	0%	59%	33%	7%	0%	0%
Central Senior High (St. Paul)	7%	2%	0%	3%	0%	0%	0%	87%	12%	1%	0%	0%
Century Senior High	7%	2%	0%	0%	0%	0%	0%	91%	9%	0%	0%	0%
Champlin Park High School	10%	8%	0%	7%	1%	0%	1%	74%	25%	1%	1%	0%
Chanhassen High School	11%	0%	0%	16%	0%	0%	0%	74%	26%	0%	0%	0%
Chaska High School	25%	15%	5%	0%	0%	0%	0%	55%	45%	0%	0%	0%
Chatfield Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cherry Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Chisago Lakes HS Alt Learning Prog	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Chisago Lakes Senior High	0%	0%	9%	9%	0%	0%	0%	82%	9%	9%	0%	0%
Chisholm Secondary	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
City Academy	2%	0%	0%	7%	0%	0%	0%	90%	10%	0%	0%	0%
City Inc North	0%	0%	0%	29%	0%	0%	0%	71%	29%	0%	0%	0%
ClearbrookGonvick Secondary	0%	11%	0%	11%	0%	0%	0%	78%	22%	0%	0%	0%
Cleveland Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Climax Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cloquet Area Alt Ed Programs	0%	0%	0%	14%	0%	0%	0%	86%	14%	0%	0%	0%
Cloquet Senior	18%	0%	0%	36%	0%	0%	0%	45%	27%	27%	0%	0%
Columbia Heights Senior High	12%	3%	1%	1%	0%	0%	0%	84%	16%	0%	0%	0%
Community Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Community of Peace Academy Sec	0%	9%	0%	0%	0%	0%	0%	91%	3%	6%	0%	0%
Como Park Senior High	4%	2%	1%	2%	0%	0%	0%	92%	8%	0%	0%	0%
Cook County Senior High	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
Cook Secondary	50%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Coon Rapids High School	21%	14%	1%	3%	0%	0%	0%	60%	35%	5%	0%	0%
Cotton Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
CromwellWright Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Crookston Secondary	0%	14%	0%	0%	0%	0%	0%	86%	7%	7%	0%	0%
CrosbyIronton Secondary	0%	0%	0%	43%	0%	0%	0%	57%	14%	29%	0%	0%
Crossroads Altn High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
CrossroadsNight	0%	0%	0%	9%	0%	0%	0%	91%	9%	0%	0%	0%
CrossroadsWest Campus	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
CSEC ALC C Ind	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
CSEC ALC C SB	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Dakota Cty ALC	8%	0%	0%	15%	0%	0%	0%	77%	23%	0%	0%	0%
Dakota Prairie Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
DasselCokato Alternative Ctr	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
DasselCokato Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Deer River Secondary	0%	13%	0%	38%	0%	0%	0%	50%	50%	0%	0%	0%
Delano Senior High	0%	0%	0%	50%	0%	0%	0%	50%	25%	25%	0%	0%
Detroit Lakes Alternative Prog	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Detroit Lakes Senior High	0%	5%	0%	19%	0%	0%	0%	76%	14%	10%	0%	0%
DilworthGlyndonFelton Senior High	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
DoverEyota High School	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Downtown Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Duluth Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Eagan Senior High	44%	4%	0%	19%	0%	0%	0%	33%	46%	21%	0%	0%
Eagle Ridge Academy Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Eagle Valley Secondary	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
East Central Senior Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
East Grand Forks Senior High	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
East High School	59%	0%	9%	0%	0%	0%	0%	32%	55%	14%	0%	0%
East Ridge High School	7%	20%	3%	2%	0%	0%	0%	68%	27%	5%	0%	0%
East View Academy	0%	0%	0%	7%	0%	0%	0%	93%	7%	0%	0%	0%
Eastview Senior High	21%	7%	1%	4%	0%	0%	0%	67%	31%	2%	0%	0%
Eden Prairie Senior High	26%	8%	3%	2%	0%	0%	0%	61%	36%	2%	0%	0%
Eden Valley Secondary	67%	0%	0%	0%	0%	0%	0%	33%	67%	0%	0%	0%
Edina Senior High	0%	6%	0%	1%	0%	0%	0%	92%	6%	1%	0%	0%
Edison Senior High	22%	8%	5%	3%	0%	0%	0%	63%	34%	3%	0%	0%
EDOP DCALS Extended Day	0%	25%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
El Colegio Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Elk River Senior High	4%	12%	0%	0%	0%	0%	0%	85%	12%	4%	0%	0%
Ellsworth Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ESC Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
EvelethGilbert Senior High	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Face To Face Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
FAIR School Downtown	0%	29%	0%	0%	0%	0%	0%	71%	14%	14%	0%	0%
Fairmont Jr_Sr High School	63%	0%	0%	13%	0%	0%	0%	25%	63%	13%	0%	0%
Fairview Alternative High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Falls Secondary	25%	15%	0%	20%	0%	0%	0%	40%	40%	20%	0%	0%
Faribault Area Learning Center	0%	0%	0%	9%	0%	0%	0%	91%	9%	0%	0%	0%
Faribault Senior High	10%	5%	0%	5%	0%	0%	0%	81%	10%	10%	0%	0%
Farmington High School	15%	3%	3%	3%	0%	0%	0%	76%	24%	0%	0%	0%
Fergus Falls Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
FertileBeltrami Secondary	33%	0%	0%	0%	0%	0%	0%	67%	0%	33%	0%	0%
Fillmore Central Senior High	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Fisher Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Floodwood Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Foley Senior High	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Forest Lake Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Forest Lake Senior High	12%	8%	0%	0%	0%	0%	0%	80%	20%	0%	0%	0%
Fosston Secondary	29%	0%	0%	0%	0%	0%	0%	71%	14%	14%	0%	0%
Four Directions Charter Schools	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Frazer Secondary	43%	0%	0%	0%	0%	0%	0%	57%	29%	14%	0%	0%
Freshwater Ed Dist ALC	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
Fridley Moore Lk Area Learning Ctr	10%	0%	0%	0%	0%	0%	0%	90%	10%	0%	0%	0%
Fridley Senior High	0%	4%	0%	2%	0%	0%	0%	94%	6%	0%	0%	0%
Fulda Secondary	50%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
General John Vessey Jr Leadership	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
GFW High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
GlencoeSilver Lake Senior High	21%	0%	0%	0%	0%	0%	0%	79%	14%	7%	0%	0%
GlenvilleEmmons Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Goodhue Secondary	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Gordon Parks High School	4%	1%	0%	13%	0%	0%	0%	82%	17%	2%	0%	0%
GranadaHuntley East Chain Sec	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Grand Meadow Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Grand Rapids Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Grand Rapids Senior High	27%	0%	8%	0%	0%	0%	0%	65%	15%	19%	0%	0%
Great River School	0%	0%	0%	20%	0%	0%	0%	80%	20%	0%	0%	0%
Greenway Senior High	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
Grygla Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Guadalupe Alternative Programs	0%	0%	0%	21%	0%	3%	0%	76%	24%	0%	0%	0%
Hancock Sec	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Harbor City International Charter	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Harding Senior High	0%	6%	0%	8%	0%	0%	0%	86%	11%	3%	0%	0%
Hastings Alternative Center	0%	50%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%
Hastings High School	0%	5%	0%	14%	0%	0%	0%	81%	19%	0%	0%	0%
Hawley Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hawthorne Diploma Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hayfield Sec	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Henry Senior High	22%	3%	2%	3%	1%	0%	0%	69%	30%	1%	0%	0%
Henry Sibley High School	25%	0%	3%	4%	0%	0%	0%	68%	31%	1%	0%	0%
Hermantown Senior High	0%	40%	0%	40%	0%	0%	0%	20%	40%	40%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Heron LakeOkabena Secondary	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Hibbing High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
High School For Recording Arts	1%	1%	0%	8%	0%	0%	0%	89%	11%	0%	0%	0%
Highland Park Senior High	1%	3%	2%	4%	0%	0%	0%	90%	7%	3%	0%	0%
Hill City Senior High	0%	0%	0%	50%	0%	0%	0%	50%	0%	50%	0%	0%
HillsBeaver Creek Secondary	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
HinckleyFinlayson Secondary	33%	17%	0%	0%	0%	0%	0%	50%	33%	17%	0%	0%
Hmong College Prep Academy HS	0%	0%	0%	2%	0%	0%	0%	98%	2%	0%	0%	0%
Holdingford Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hopkins Senior High	0%	3%	0%	3%	0%	0%	0%	95%	5%	0%	0%	0%
Howard LakeWaverlyWinsted Sec	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Humboldt Secondary School	29%	1%	1%	1%	0%	0%	0%	68%	32%	0%	0%	0%
Hutchinson Senior High	30%	0%	10%	0%	0%	0%	0%	60%	30%	10%	0%	0%
Insight School of Minnesota	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
iQ Academy Minnesota	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Irondale Senior High	27%	3%	0%	6%	0%	0%	0%	63%	35%	2%	0%	0%
IS The Alternative Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ISD 181 Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Isle Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community School IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community School Summer	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Jackson County Central Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Jefferson Senior High	0%	21%	0%	5%	0%	0%	0%	74%	18%	8%	0%	0%
Jennings Experiential High School	0%	0%	0%	14%	0%	0%	0%	86%	14%	0%	0%	0%
John Marshall Senior High	10%	3%	1%	0%	0%	0%	0%	85%	10%	4%	0%	0%
Johnson Senior High	36%	0%	3%	9%	0%	0%	0%	53%	46%	1%	0%	0%
Jordan Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
KassonMantorville Senior High	11%	0%	0%	0%	0%	0%	0%	89%	11%	0%	0%	0%
Kelley Secondary	50%	0%	0%	50%	0%	0%	0%	0%	50%	50%	0%	0%
Kelliher Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Kennedy Secondary School	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Kennedy Senior High	4%	9%	0%	8%	0%	0%	0%	80%	16%	4%	0%	0%
KenyonWanamingo Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Kerkhoven Secondary	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Kimball Secondary	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Kingsland Senior High	0%	0%	33%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Kittson Central Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Knights Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Kokesh Area Learning Center	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
La Crescent Senior High	33%	0%	33%	0%	0%	0%	0%	33%	33%	33%	0%	0%
Lac qui Parle Valley Secondary	17%	0%	0%	0%	0%	0%	0%	83%	0%	17%	0%	0%
Lafayette Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lake of The Woods Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lake Superior High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lakes Area Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lakeville Area Learning Center	13%	0%	0%	13%	0%	0%	0%	75%	25%	0%	0%	0%
Lakeville North High	17%	7%	0%	20%	0%	0%	0%	56%	29%	15%	0%	0%
Lakeville South High	9%	9%	0%	3%	0%	0%	0%	79%	15%	6%	0%	0%
Laporte Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Le Center Secondary	13%	0%	0%	0%	0%	0%	0%	88%	13%	0%	0%	0%
Le SueurHenderson High School	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
LEAP High School	0%	2%	0%	0%	0%	0%	0%	98%	2%	0%	0%	0%
Learning Alternatives Community Sch	0%	6%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%
Learning For Leadership Charter	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lester Prairie Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
LewistonAltura Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Life Lines Adult Connection	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lincoln International School	0%	0%	6%	0%	0%	0%	0%	94%	6%	0%	0%	0%
Lincoln Secondary (Esko)	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lincoln Secondary (Lake City)	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lincoln Senior High	0%	0%	0%	33%	0%	0%	0%	67%	22%	11%	0%	0%
Lionsgate Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Litchfield Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Litchfield Senior High	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Little Falls Continuing Education	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Little Falls Senior High	80%	0%	0%	0%	0%	0%	0%	20%	40%	40%	0%	0%
Lk CrystalWellcome Memorial Sec	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Long PrairieGrey Secondary School	40%	0%	10%	0%	10%	0%	0%	40%	40%	20%	0%	0%
Long Tieng Academy	0%	0%	8%	2%	0%	0%	0%	90%	8%	2%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
LoringNicollet High	0%	0%	0%	14%	0%	0%	0%	86%	14%	0%	0%	0%
Luverne Senior High	80%	0%	0%	0%	0%	0%	0%	20%	80%	0%	0%	0%
Lyle Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MACCRAY Area Learning Prog	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
Madelia Secondary	50%	0%	0%	17%	0%	0%	0%	33%	50%	17%	0%	0%
Mahnomen Area Learning Center	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Mahnomen Secondary	50%	0%	0%	0%	0%	0%	0%	50%	33%	17%	0%	0%
Mahtomedi Senior High	13%	20%	7%	0%	0%	0%	0%	60%	33%	7%	0%	0%
Main Street School Performing Arts	0%	0%	0%	6%	0%	0%	0%	94%	6%	0%	0%	0%
Mankato East Senior High	29%	0%	4%	4%	0%	0%	0%	64%	29%	7%	0%	0%
Mankato West Senior High	12%	0%	0%	0%	0%	0%	0%	88%	12%	0%	0%	0%
Maple Grove Senior High	0%	14%	0%	4%	0%	0%	0%	82%	12%	6%	0%	0%
Maple Lake Secondary	0%	33%	0%	0%	0%	0%	0%	67%	0%	33%	0%	0%
Maple River Senior High	0%	0%	0%	40%	0%	0%	0%	60%	20%	20%	0%	0%
Marshall County Central High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Marshall High School	28%	0%	0%	11%	0%	0%	0%	61%	33%	6%	0%	0%
Martin County West Senior High	20%	0%	20%	0%	0%	0%	0%	60%	40%	0%	0%	0%
MATEC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Math And Science Academy	50%	50%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%
Mayo Senior High	16%	0%	0%	0%	0%	0%	0%	84%	15%	2%	0%	0%
MCF Oak Park Heights	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MCF Oak Park Heights	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MCFMoose Lake Willow River	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MCFRedwing, Maginnis High School	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Medford Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Melrose Secondary	50%	0%	0%	0%	0%	0%	0%	50%	36%	14%	0%	0%
Memorial High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Menlo Park Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MERC	5%	0%	0%	9%	0%	0%	0%	86%	14%	0%	0%	0%
Mesabi East Secondary	50%	0%	0%	50%	0%	0%	0%	0%	50%	50%	0%	0%
Metro Heights Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Metro Schools Charter	0%	0%	0%	5%	0%	0%	0%	95%	2%	2%	0%	0%
Metro Tech Academy	0%	0%	0%	15%	0%	0%	0%	85%	15%	0%	0%	0%
Metropolitan Learning Alliance	0%	30%	4%	7%	0%	0%	0%	59%	30%	11%	0%	0%
Milaca Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Milaca Secondary High	33%	0%	0%	0%	33%	0%	0%	33%	33%	33%	0%	0%
Minneapolis On Line Learning	17%	0%	8%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Minneota Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Minnesota New Country School	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Minnesota Online High School	0%	0%	0%	29%	0%	0%	0%	71%	14%	14%	0%	0%
Minnesota Transitions ALP	1%	1%	1%	6%	0%	0%	0%	90%	10%	0%	0%	0%
Minnesota Virtual Academy	20%	0%	0%	0%	0%	0%	0%	80%	20%	0%	0%	0%
Minnetonka Senior High	0%	4%	0%	2%	0%	0%	0%	94%	4%	2%	0%	0%
Minnewaska Secondary	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%
MN Correctional FacilityFaribault	0%	0%	0%	66%	0%	0%	0%	33%	33%	33%	0%	0%
MN Correctional FacilityRush City	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilityShakopee	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilitySt Cloud	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
MN Correctional FacilityStillwater	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN River Valley ALC Ind Study	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN RIVER VALLEY ALCSEATBASED	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Security Hospital YAAP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Montevideo Senior High	0%	0%	0%	13%	0%	0%	0%	88%	13%	0%	0%	0%
Montgomery-Lonsdale Secondary	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Monticello Alternative Program	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Monticello Senior High	55%	5%	5%	9%	0%	0%	0%	27%	59%	14%	0%	0%
Moorhead High School	0%	0%	0%	7%	0%	0%	0%	93%	7%	0%	0%	0%
Moose Lake Secondary	75%	0%	25%	0%	0%	0%	0%	0%	75%	25%	0%	0%
Mora Secondary	67%	0%	0%	0%	0%	0%	0%	33%	33%	33%	0%	0%
Morris Area Secondary	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Mounds View Adult Education	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Mounds View ALC	0%	7%	0%	7%	0%	0%	0%	87%	13%	0%	0%	0%
Mounds View Senior High	9%	8%	6%	0%	0%	0%	0%	77%	18%	5%	0%	0%
MoundWestonka High School	0%	0%	33%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Mountain IronBuhl Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Mountain Lake Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Mpls HS Alternative Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MTCS Connections Academy	0%	60%	0%	0%	0%	0%	0%	40%	60%	0%	0%	0%
MTS High School	3%	3%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%
MTS Pease Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Murray County Central Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Nashwauk Secondary	0%	0%	0%	67%	0%	0%	0%	33%	33%	33%	0%	0%
NashwaukKeewatin ALP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
New LondonSpicer Sr	0%	67%	0%	33%	0%	0%	0%	0%	100%	0%	0%	0%
New Prague Senior High	43%	0%	43%	0%	0%	0%	0%	14%	71%	14%	0%	0%
New Ulm High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
New York Mills Secondary	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Norman County East Secondary	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Norman County West Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
North Branch Senior High	33%	0%	0%	8%	0%	0%	0%	58%	33%	8%	0%	0%
North Education Center Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
North Senior High	0%	5%	0%	7%	0%	0%	0%	88%	10%	2%	0%	0%
North Senior High (Mpls)	0%	4%	0%	4%	0%	0%	0%	92%	8%	0%	0%	0%
North Vista ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Northern Lights Community School	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
Northfield Area Learning Center	17%	0%	0%	17%	0%	0%	0%	67%	33%	0%	0%	0%
Northfield Senior High	0%	40%	0%	4%	0%	0%	0%	56%	36%	8%	0%	0%
Northland Learning Center 010	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Northland Secondary	0%	0%	0%	40%	0%	0%	0%	60%	30%	10%	0%	0%
Northwest Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Northwest Passage High School	0%	17%	0%	0%	0%	0%	0%	83%	17%	0%	0%	0%
NRHEG Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ogilvie Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Onamia Secondary	36%	0%	0%	0%	0%	0%	0%	64%	36%	0%	0%	0%
Open World Learning Community	0%	5%	0%	16%	0%	0%	0%	79%	16%	5%	0%	0%
Orono Senior High	9%	9%	0%	0%	0%	0%	0%	82%	18%	0%	0%	0%
Orr Secondary	17%	0%	0%	0%	0%	0%	0%	83%	17%	0%	0%	0%
Ortonville Secondary	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Osakis Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Osseo Senior High	0%	6%	0%	1%	0%	0%	0%	93%	7%	0%	0%	0%
Owatonna ALC 912	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Owatonna Senior High	7%	7%	2%	18%	0%	0%	0%	67%	33%	0%	0%	0%
PACT Charter Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Paladin Career and Technical High School	9%	0%	0%	9%	0%	0%	0%	82%	18%	0%	0%	0%
Park Center IB World School	0%	7%	0%	0%	0%	0%	0%	92%	6%	1%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Park Rapids Senior High	40%	0%	0%	0%	0%	0%	0%	60%	20%	20%	0%	0%
Park Senior High	0%	7%	0%	5%	0%	0%	0%	87%	7%	5%	0%	0%
Paynesville Area High School	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Pelican Rapids Secondary	0%	0%	0%	4%	0%	0%	0%	96%	4%	0%	0%	0%
Pequot Lakes Senior High	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Perham Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Perham Senior High	20%	0%	0%	0%	0%	0%	0%	80%	20%	0%	0%	0%
Perpich Center For Arts Education	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Phoenix Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pillager Area Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pine City Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pine City Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pine Island Secondary	100%	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%
Pine RiverBackus High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pipetstone Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
PlainviewElginMillville High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Plymouth Youth Center	0%	7%	0%	4%	0%	0%	0%	89%	11%	0%	0%	0%
Prairie Center Academy IS	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Prestige Academy Charter School	0%	5%	0%	0%	0%	0%	0%	95%	5%	0%	0%	0%
Princeton Senior High	38%	0%	0%	0%	0%	0%	0%	63%	25%	13%	0%	0%
Prior Lake High School	0%	16%	0%	0%	0%	0%	0%	84%	9%	7%	0%	0%
Prior LakeSavage Area ALC	0%	0%	0%	20%	0%	0%	0%	80%	20%	0%	0%	0%
Proctor Senior High	0%	0%	0%	40%	0%	0%	0%	60%	40%	0%	0%	0%
Quest Academy	0%	50%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Randolph Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Lake Alternative Learning	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Lake County Central High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Lake Secondary	55%	0%	0%	0%	0%	0%	0%	45%	55%	0%	0%	0%
RED RIVER AREA LEARNING CENTER	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Rock Central Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Wing Senior High	24%	6%	6%	0%	0%	0%	0%	65%	35%	0%	0%	0%
Redwood Valley Senior High	9%	0%	0%	18%	0%	0%	0%	73%	18%	9%	0%	0%
Renville County West Senior High	40%	0%	0%	20%	0%	0%	0%	40%	40%	20%	0%	0%
Richfield Career Education Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Richfield Senior High	33%	6%	3%	2%	0%	0%	0%	56%	38%	6%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
Rivers Edge Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Robbinsdale Armstrong Senior High	0%	4%	0%	1%	0%	0%	0%	95%	3%	2%	0%	0%
Robbinsdale Cooper Senior High	1%	9%	0%	4%	0%	0%	0%	86%	11%	2%	0%	0%
Rochester Alternative Learning Ctr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rochester Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rochester OffCampus Charter High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rock Bend HS ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rockford Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rocori Senior High	43%	0%	0%	0%	0%	0%	0%	57%	0%	43%	0%	0%
Rogers Senior High	0%	14%	7%	0%	0%	0%	0%	79%	14%	7%	0%	0%
Roosevelt Senior High	21%	10%	5%	2%	0%	0%	0%	63%	34%	3%	0%	0%
Roseau Secondary	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Rosemount Area Learning Center	0%	0%	0%	24%	0%	0%	0%	76%	24%	0%	0%	0%
Rosemount Senior High	37%	6%	0%	2%	0%	0%	0%	56%	44%	0%	0%	0%
Roseville Area Senior High	9%	2%	1%	2%	0%	0%	0%	87%	11%	2%	0%	0%
Rothsay Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Round Lake Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Royalton High School	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
RTR High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rush City Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
RushfordPeterson Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
S St Paul Community Lrng Cntr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Sabathani Campus	0%	13%	0%	0%	0%	0%	0%	87%	13%	0%	0%	0%
SAGE Academy Charter School	0%	22%	0%	0%	0%	0%	0%	78%	11%	11%	0%	0%
Sartell Senior High	25%	0%	0%	8%	0%	0%	0%	67%	33%	0%	0%	0%
Sauk Centre Secondary	33%	0%	0%	0%	0%	0%	0%	67%	0%	33%	0%	0%
Sauk RapidsRice Senior High	8%	17%	8%	8%	0%	0%	0%	58%	33%	8%	0%	0%
School of Environmental Studies	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Scott ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Sebeka Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Shakopee Senior High	26%	8%	0%	5%	0%	0%	0%	62%	32%	6%	0%	0%
Sibley EastArlington Senior High	27%	0%	0%	0%	0%	0%	0%	73%	27%	0%	0%	0%
Simley Alternative Program	0%	0%	0%	40%	0%	0%	0%	60%	40%	0%	0%	0%
Simley Senior High	0%	14%	0%	7%	0%	0%	0%	79%	21%	0%	0%	0%
Sleepy Eye Sec	14%	0%	0%	14%	0%	0%	0%	71%	29%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
So Wash High School Diploma Program	0%	0%	33%	0%	0%	0%	0%	67%	33%	0%	0%	0%
South Education Center Academy	5%	0%	0%	16%	0%	0%	0%	79%	21%	0%	0%	0%
South Senior High	25%	10%	4%	1%	0%	0%	0%	60%	38%	2%	0%	0%
South St Paul Secondary	0%	0%	0%	8%	0%	0%	0%	92%	0%	8%	0%	0%
South Washington Alternative High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Southwest Senior High	3%	12%	0%	2%	0%	0%	0%	83%	16%	1%	0%	0%
Spectrum High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Spring Grove Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Spring Lake Park Senior High	0%	16%	0%	1%	0%	1%	0%	81%	16%	3%	0%	0%
Springfield Secondary	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
St Anthony Village Senior High	0%	0%	13%	0%	0%	0%	0%	87%	10%	3%	0%	0%
St Charles Secondary	50%	0%	0%	0%	0%	0%	0%	50%	25%	25%	0%	0%
St Clair Secondary	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
St Cloud Area Learning Center	3%	5%	0%	10%	0%	0%	0%	82%	15%	3%	0%	0%
St Croix Preparatory Academy Upper	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
St Croix Valley Area Learning Cntr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
St Francis ALC IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
St Francis High	22%	6%	11%	0%	0%	0%	0%	61%	28%	11%	0%	0%
St James Secondary	10%	0%	0%	0%	0%	0%	0%	90%	10%	0%	0%	0%
St Louis Park Senior High	2%	3%	0%	3%	0%	0%	0%	92%	8%	0%	0%	0%
St MichaelAlberville Senior High	0%	22%	0%	0%	0%	4%	0%	74%	22%	4%	0%	0%
St Paul Conservatory Performing Art	0%	11%	0%	5%	0%	0%	0%	84%	11%	0%	5%	0%
St Peter Senior High	27%	0%	0%	0%	0%	0%	0%	73%	27%	0%	0%	0%
StaplesMotley Senior High	33%	33%	0%	0%	0%	0%	0%	33%	0%	67%	0%	0%
Step	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Stewartville Senior High	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%
Stillwater Area High School	3%	6%	0%	3%	0%	0%	0%	89%	11%	0%	0%	0%
Studio Academy Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Swanville Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Tartan Senior High	1%	13%	0%	3%	0%	0%	0%	83%	15%	2%	0%	0%
Technical Senior High	3%	18%	0%	9%	0%	0%	0%	70%	30%	0%	0%	0%
The Alternative Program TAP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Tower View Opportunity Program ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Tower-Soudan Secondary	33%	0%	0%	33%	0%	0%	0%	33%	67%	0%	0%	0%
Tracy Secondary	0%	0%	0%	64%	0%	0%	0%	36%	18%	45%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
TrekNorth High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Triton High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Twin Cities Academy High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Two Harbors Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ubah Medical Academy Charter School	0%	2%	0%	11%	0%	0%	0%	87%	4%	9%	0%	0%
UlenHitterdal Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
United South Central High School	25%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
Unity Campus	0%	15%	0%	8%	0%	0%	0%	77%	23%	0%	0%	0%
Urban League Academy High	0%	6%	0%	13%	0%	0%	0%	81%	19%	0%	0%	0%
Virginia Secondary	25%	0%	0%	25%	0%	0%	0%	50%	50%	0%	0%	0%
Virtual High School	4%	0%	0%	0%	0%	0%	0%	96%	4%	0%	0%	0%
VOA High School	5%	5%	0%	21%	0%	0%	0%	68%	32%	0%	0%	0%
VOA Opportunity HS	0%	7%	0%	0%	0%	0%	0%	93%	7%	0%	0%	0%
VOA SALT	5%	5%	5%	14%	0%	0%	0%	73%	27%	0%	0%	0%
VOYAGEURS EXPEDITIONARY SCHOOL	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Wabasso Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Waconia ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Waconia Senior High	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
WadenaDeer Creek Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
WalkerHackensackAkeley Sec	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
WarrenAlvaradoOslo Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Warroad High School	0%	0%	0%	33%	0%	0%	0%	67%	11%	22%	0%	0%
Waseca Alternative High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Waseca Senior High	43%	0%	0%	0%	0%	0%	0%	57%	43%	0%	0%	0%
Washburn Senior High	25%	4%	4%	1%	0%	0%	0%	66%	33%	1%	0%	0%
Watershed High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Watertown Mayer High	73%	0%	0%	9%	0%	0%	0%	18%	82%	0%	0%	0%
WatervilleElysianMorristown Sr	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Waubun Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Waubun Secondary	0%	0%	0%	30%	0%	0%	0%	70%	10%	20%	0%	0%
Wayzata High	5%	8%	1%	1%	0%	0%	0%	85%	14%	1%	0%	0%
Wellstone International High	0%	40%	0%	0%	0%	0%	0%	60%	40%	0%	0%	0%
West Central Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
West Central Area Sec	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
West Heights ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Name	CE	PSEO	PSEO/CE	Unknown	CE and unknown	PSEO and unk	all 3	no DE	1 yr	2 yr	3 yr	4 yr
WestbrookWalnut Grove Secondary	11%	0%	0%	5%	0%	0%	0%	84%	16%	0%	0%	0%
White Bear Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
White Bear South Campus Senior	29%	6%	0%	0%	0%	0%	0%	64%	36%	0%	0%	0%
Willmar Area Learning Center	0%	0%	0%	22%	0%	0%	0%	78%	22%	0%	0%	0%
Willmar Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Willow River Secondary	0%	50%	0%	50%	0%	0%	0%	0%	50%	50%	0%	0%
Windom Senior High	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
WinEMac Secondary	0%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%
Winona Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Winona Senior High	0%	9%	0%	9%	0%	0%	0%	83%	13%	4%	0%	0%
Woodbury Senior High	0%	9%	0%	2%	0%	0%	0%	89%	8%	3%	0%	0%
Worthington Area Learning Center	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Worthington Senior High	0%	2%	0%	2%	0%	0%	0%	96%	2%	2%	0%	0%
Wrenshall Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Wright Technical Center ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Yellow Medicine East High School	20%	0%	0%	13%	0%	0%	0%	67%	33%	0%	0%	0%
Ziebarth Alternative Learning Ctr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Zimmerman High School	9%	0%	0%	9%	0%	0%	0%	82%	18%	0%	0%	0%
Zumbro Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ZumbrotaMazeppa Senior High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

Appendix G.

Participation rates for White students by High School

School Name	% of grads in CE	% of grads in PSEO	% of grads in PSEO and CE	% of grads in Unknown	% of grads in CE and Unknown	% of grads in Unknown and PSEO	% of grads in all 3 programs	% of grads did not participate in DE	% of grads - 1 year	% of grads - 2 years	% of grads - 3 years	% of grads - 4 years
112 ALC After School & Summer Sch	0%	0%	0%	63%	0%	0%	0%	38%	63%	0%	0%	0%
270 Hopkins Alt Prg - Off Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
270 Hopkins Alternative	0%	0%	0%	10%	0%	0%	0%	90%	10%	0%	0%	0%
271 SHAPE ALC	6%	0%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%
271 SHAPE IS	0%	33%	0%	33%	0%	0%	0%	33%	33%	33%	0%	0%
277 Westonka Area Learning Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
279 Osseo IS ALC	0%	0%	0%	15%	0%	0%	0%	0%	15%	0%	0%	0%
279 Osseo Sr Hi ALC	0%	0%	0%	11%	0%	0%	0%	89%	11%	0%	0%	0%
281 Highview Alternative Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
281 Highview HS - IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
286-BCALC-Brooklyn Center Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
622 Alternative Middle High School	0%	0%	0%	19%	0%	0%	0%	81%	19%	0%	0%	0%
916 Mahtomedi Academy	0%	25%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%
A G A P E Teen Parent	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ABE DIPLOMA PROGRAM	0%	4%	0%	20%	0%	0%	0%	76%	20%	2%	2%	0%
Academic Arts High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ACGC ALP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ACGC Secondary	55%	0%	0%	4%	0%	0%	0%	41%	59%	0%	0%	0%
AdaBorup Secondary	65%	0%	0%	0%	0%	0%	0%	35%	65%	0%	0%	0%
Adrian Secondary	50%	0%	0%	2%	0%	0%	0%	48%	29%	24%	0%	0%
Adult Diploma	0%	0%	0%	13%	0%	0%	0%	88%	13%	0%	0%	0%
AFSA High School	0%	3%	0%	38%	0%	3%	0%	56%	25%	19%	0%	0%
Aitkin Alternative Learning Program	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Aitkin Secondary School	65%	0%	0%	0%	0%	0%	0%	35%	38%	27%	0%	0%
Albany Senior High	62%	4%	10%	1%	1%	0%	0%	22%	78%	0%	0%	0%
Albert Lea Area Learning Center	5%	0%	0%	21%	0%	0%	0%	74%	21%	5%	0%	0%
Albert Lea Senior High	64%	0%	1%	2%	1%	0%	0%	31%	20%	48%	0%	0%

School Name	CE	PSEO	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Albrook Secondary	32%	0%	7%	4%	0%	0%	0%	57%	4%	39%	0%	0%
ALC Armstrong HS - IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
AldenConger Secondary	32%	5%	16%	0%	0%	0%	0%	47%	21%	32%	0%	0%
Alexandria Area High School	51%	0%	3%	6%	0%	0%	0%	40%	36%	24%	0%	0%
Andover High School	16%	17%	3%	3%	0%	0%	0%	61%	33%	5%	0%	0%
Annandale Senior High	44%	8%	10%	0%	0%	0%	0%	38%	28%	34%	0%	0%
Anoka High School	18%	8%	4%	5%	0%	0%	0%	64%	31%	5%	0%	0%
Apollo Senior High	42%	7%	2%	11%	0%	0%	0%	38%	25%	36%	1%	0%
Apple Valley Senior High	6%	4%	1%	6%	0%	0%	0%	82%	15%	3%	0%	0%
Arcadia Charter School	0%	39%	0%	11%	0%	0%	0%	50%	39%	11%	0%	0%
Arona Academy of Sobriety High	6%	6%	0%	0%	0%	0%	0%	89%	11%	0%	0%	0%
Ashby Secondary	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Augsburg Fairview Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Austin Area Learning Center	5%	0%	0%	5%	0%	0%	0%	90%	5%	5%	0%	0%
Austin Senior High	54%	0%	2%	0%	0%	0%	0%	44%	34%	22%	0%	0%
Avalon School	0%	29%	0%	0%	0%	0%	0%	71%	24%	5%	0%	0%
Badger Secondary	40%	0%	0%	0%	0%	0%	0%	60%	20%	20%	0%	0%
Bagley Secondary	0%	0%	0%	56%	0%	0%	0%	44%	20%	37%	0%	0%
Barnesville Secondary	2%	0%	0%	2%	0%	0%	0%	97%	3%	0%	0%	0%
Barnum Secondary	53%	3%	0%	0%	0%	0%	0%	45%	50%	5%	0%	0%
Battle Lake Secondary	0%	5%	0%	33%	0%	0%	0%	62%	14%	24%	0%	0%
Becker Senior High	26%	3%	20%	2%	0%	0%	0%	49%	23%	28%	0%	0%
BelgradeBrootenElrosa Sec	0%	4%	0%	40%	0%	0%	0%	57%	25%	19%	0%	0%
Belle Plaine Senior High	45%	3%	0%	0%	0%	0%	0%	52%	47%	1%	0%	0%
Bemidji Area Learning Center	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Bemidji Senior High	1%	0%	0%	48%	0%	0%	0%	51%	35%	14%	0%	0%
Benson Area Learning Center	0%	0%	0%	13%	0%	0%	0%	88%	13%	0%	0%	0%
Benson Secondary	49%	0%	5%	0%	1%	0%	0%	45%	24%	32%	0%	0%
Bertha Secondary	0%	3%	0%	10%	0%	0%	0%	87%	13%	0%	0%	0%
Big Lake Senior High	32%	11%	9%	1%	1%	0%	0%	47%	37%	16%	0%	0%
Bigfork Secondary	37%	0%	11%	0%	0%	0%	0%	53%	37%	11%	0%	0%
Blackduck Secondary	2%	0%	0%	11%	0%	0%	0%	86%	5%	9%	0%	0%
Blaine High School	19%	9%	2%	8%	0%	0%	0%	62%	32%	6%	0%	0%
Blooming Prairie Secondary	46%	2%	4%	2%	0%	0%	0%	46%	31%	23%	0%	0%
Blue Earth Area Secondary	35%	6%	3%	0%	0%	0%	0%	56%	38%	6%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
BlueSky Charter School	2%	8%	0%	2%	0%	1%	0%	88%	11%	1%	0%	0%
Bluff Country Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Bold Senior High	37%	3%	2%	5%	2%	0%	0%	52%	47%	2%	0%	0%
Border Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Braham Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Braham Area Secondary	34%	13%	11%	4%	0%	0%	0%	39%	43%	18%	0%	0%
Brainerd Senior High	50%	1%	1%	2%	0%	0%	0%	46%	48%	6%	0%	0%
Brandon High School	19%	0%	0%	19%	0%	0%	0%	63%	31%	6%	0%	0%
Breckenridge Senior High	60%	4%	1%	1%	0%	0%	0%	33%	67%	0%	0%	0%
Broadway Arts & Technology	0%	50%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
Brooklyn Center Secondary	0%	4%	21%	4%	0%	0%	0%	71%	21%	8%	0%	0%
Browerville Secondary	23%	4%	28%	2%	0%	0%	0%	43%	17%	38%	2%	0%
Buffalo LakeHector Secondary	50%	0%	0%	7%	0%	0%	0%	43%	27%	30%	0%	0%
Buffalo Senior High	38%	7%	6%	1%	0%	0%	0%	48%	42%	10%	0%	0%
Burnsville Alternative High School	12%	4%	0%	4%	0%	0%	0%	81%	19%	0%	0%	0%
Burnsville Senior High	2%	3%	0%	2%	0%	0%	0%	93%	6%	1%	0%	0%
Burnsville Sr High Extended Day_Yr	3%	5%	0%	22%	0%	0%	0%	71%	27%	3%	0%	0%
Butterfield Secondary	6%	6%	6%	13%	0%	0%	0%	69%	25%	6%	0%	0%
Byron Senior High School	9%	1%	3%	16%	0%	0%	0%	71%	24%	5%	0%	0%
Caledonia Senior High	34%	6%	1%	1%	0%	0%	0%	58%	39%	3%	0%	0%
Cambridge ALC West	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cambridgelsanti High School	19%	0%	20%	16%	0%	0%	0%	45%	28%	26%	0%	0%
CampbellTintah Secondary	0%	0%	14%	0%	0%	0%	0%	86%	14%	0%	0%	0%
Canby Secondary	64%	0%	0%	2%	0%	0%	0%	34%	30%	34%	2%	0%
Cannon Falls Alternative Learning	0%	0%	0%	13%	0%	0%	0%	87%	13%	0%	0%	0%
Cannon Falls Secondary	5%	16%	0%	0%	0%	0%	0%	79%	12%	9%	0%	0%
Carlton Secondary	46%	0%	4%	0%	0%	0%	0%	50%	20%	30%	0%	0%
Carver ALC	4%	11%	0%	0%	0%	0%	0%	86%	14%	0%	0%	0%
Cass LakeBena Area Lrng Cntr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cass LakeBena Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cedar Mountain Secondary	0%	0%	0%	52%	0%	0%	0%	48%	52%	0%	0%	0%
Centennial Area Learning Center	6%	0%	0%	6%	0%	0%	0%	87%	10%	3%	0%	0%
Centennial High School	18%	5%	1%	1%	0%	0%	0%	74%	24%	1%	0%	0%
Central Freedom School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Central High Area Learning Center	0%	0%	0%	12%	0%	0%	0%	88%	12%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Central MN ALC Sartell	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Central Senior High	0%	5%	0%	32%	0%	0%	0%	63%	26%	11%	0%	0%
Central Senior High (Duluth)	64%	0%	2%	2%	0%	0%	0%	31%	46%	23%	0%	0%
Central Senior High (St. Paul)	23%	6%	6%	0%	0%	0%	0%	65%	32%	3%	0%	0%
Century Senior High	9%	1%	2%	0%	0%	0%	0%	88%	10%	2%	0%	0%
Champlin Park High School	12%	14%	0%	4%	0%	0%	0%	69%	26%	6%	0%	0%
Chanhassen High School	19%	7%	2%	5%	0%	0%	0%	67%	31%	2%	0%	0%
Chaska High School	28%	12%	2%	2%	0%	0%	0%	55%	44%	1%	0%	0%
Chatfield Secondary	5%	0%	0%	3%	0%	0%	0%	92%	3%	5%	0%	0%
Cherry Secondary	38%	0%	4%	0%	0%	0%	0%	58%	21%	21%	0%	0%
Chisago Lakes HS Alt Learning Prog	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Chisago Lakes Senior High	0%	5%	3%	42%	0%	0%	0%	49%	26%	25%	0%	0%
Chisholm Secondary	0%	0%	0%	7%	0%	0%	0%	93%	7%	0%	0%	0%
Chokio Alberta Secondary	75%	0%	0%	0%	0%	0%	0%	25%	75%	0%	0%	0%
City Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
City West Academy	0%	0%	0%	14%	0%	0%	0%	86%	14%	0%	0%	0%
ClearbrookGonvick Secondary	0%	0%	0%	63%	0%	0%	0%	37%	42%	21%	0%	0%
Cleveland Secondary	45%	9%	0%	3%	0%	0%	0%	42%	39%	18%	0%	0%
Climax Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
ClintonGracevilleBeardsley Sr	0%	6%	0%	53%	0%	0%	0%	41%	13%	47%	0%	0%
Cloquet Area Alt Ed Programs	17%	0%	0%	17%	0%	0%	0%	67%	33%	0%	0%	0%
Cloquet Senior	8%	8%	0%	55%	0%	0%	0%	29%	27%	44%	0%	0%
Columbia Heights Senior High	11%	2%	0%	2%	0%	0%	0%	84%	16%	0%	0%	0%
Comfrey Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Community of Peace Academy Sec	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Como Park Senior High	26%	2%	6%	4%	0%	0%	0%	62%	38%	0%	0%	0%
Compass OnLine	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Cook County Senior High	0%	19%	3%	31%	0%	0%	0%	47%	33%	19%	0%	0%
Cook Secondary	36%	8%	8%	28%	0%	0%	0%	20%	36%	44%	0%	0%
Coon Rapids High School	23%	16%	5%	4%	0%	1%	0%	52%	39%	8%	0%	0%
Cotton Secondary	50%	0%	14%	0%	0%	0%	0%	36%	7%	57%	0%	0%
CromwellWright Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Crookston Secondary	0%	18%	0%	0%	0%	0%	0%	82%	14%	4%	0%	0%
CrosbyIronton Secondary	0%	0%	0%	40%	0%	0%	0%	60%	15%	25%	0%	0%
Crossroads Altn High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Crossroads Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
CrossroadsNight	9%	0%	0%	9%	0%	5%	0%	77%	18%	0%	5%	0%
CrossroadsWest Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
CSEC ALC C Ind	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
CSEC ALC S Ind	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Dakota Cty ALC	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Dakota Prairie Area Learning Center	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
DasselCokato Alternative Ctr	13%	0%	13%	0%	0%	0%	0%	75%	25%	0%	0%	0%
DasselCokato Senior High	2%	8%	1%	34%	0%	0%	0%	56%	39%	6%	0%	0%
DawsonBoyd Secondary	24%	0%	0%	37%	0%	0%	0%	39%	56%	5%	0%	0%
Deer River Secondary	0%	9%	0%	48%	0%	0%	0%	43%	55%	2%	0%	0%
Delano Senior High	0%	3%	0%	39%	0%	0%	0%	58%	27%	15%	0%	0%
Detroit Lakes Alternative Prog	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Detroit Lakes Area Learning Center	0%	8%	0%	0%	0%	0%	0%	92%	8%	0%	0%	0%
Detroit Lakes Senior High	1%	20%	1%	38%	0%	0%	0%	40%	45%	15%	0%	0%
DilworthGlyndonFelton Senior High	48%	0%	3%	0%	0%	0%	0%	49%	51%	0%	0%	0%
Discovery Public School Faribault	0%	11%	0%	0%	0%	0%	0%	89%	11%	0%	0%	0%
Distance Learning Program	4%	0%	0%	11%	0%	0%	0%	85%	7%	7%	0%	0%
DoverEyota High School	0%	3%	0%	30%	0%	0%	0%	67%	28%	5%	0%	0%
Duluth Area Learning Center	26%	0%	0%	9%	0%	0%	0%	65%	32%	3%	0%	0%
Eagan Senior High	34%	3%	1%	15%	0%	0%	0%	47%	46%	7%	0%	0%
Eagle Ridge Academy Charter School	0%	18%	0%	4%	0%	0%	0%	79%	21%	0%	0%	0%
Eagle Valley Secondary	29%	0%	0%	0%	0%	0%	0%	71%	29%	0%	0%	0%
East Central Senior Secondary	38%	4%	4%	25%	0%	0%	0%	29%	60%	10%	0%	0%
East Grand Forks Senior High	0%	1%	0%	57%	0%	0%	0%	43%	17%	41%	0%	0%
East High School	79%	0%	5%	1%	0%	0%	0%	15%	63%	22%	0%	0%
East Range Academy of TechScience	2%	23%	0%	13%	0%	0%	0%	62%	30%	8%	0%	0%
East Ridge High School	15%	12%	1%	2%	0%	0%	0%	70%	27%	2%	0%	0%
East View Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Eastview Senior High	26%	8%	1%	1%	0%	0%	0%	64%	36%	1%	0%	0%
ECHO Charter School	7%	0%	7%	0%	0%	0%	0%	86%	7%	7%	0%	0%
Eden Prairie Senior High	21%	5%	0%	3%	0%	0%	0%	71%	29%	0%	0%	0%
Eden Valley Secondary	45%	1%	11%	1%	1%	0%	0%	40%	60%	0%	0%	0%
Edgerton Secondary	39%	0%	4%	4%	0%	0%	0%	54%	46%	0%	0%	0%
Edina Senior High	1%	5%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Edison Senior High	41%	0%	6%	0%	0%	0%	0%	53%	47%	0%	0%	0%
EDOP DCALS Extended Day	0%	0%	0%	13%	0%	0%	0%	87%	13%	0%	0%	0%
EdVisions Off Campus School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
El Colegio Charter School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Elk River Senior High	14%	5%	1%	2%	0%	0%	0%	78%	18%	4%	0%	0%
Ellsworth Secondary	0%	0%	0%	28%	0%	0%	0%	72%	28%	0%	0%	0%
ESC Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Evansville Middle School	7%	0%	0%	36%	0%	0%	0%	57%	43%	0%	0%	0%
EvelethGilbert Senior High	0%	23%	0%	44%	0%	0%	0%	32%	35%	32%	0%	0%
Face To Face Academy	20%	0%	0%	0%	0%	0%	0%	80%	20%	0%	0%	0%
FAIR School Downtown	0%	86%	0%	0%	0%	0%	0%	14%	57%	29%	0%	0%
Fairmont Jr Sr High School	72%	1%	5%	3%	0%	0%	0%	19%	58%	23%	0%	0%
Fairview Alternative High School	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Falls Secondary	20%	16%	4%	11%	0%	0%	0%	48%	30%	22%	0%	0%
Faribault Area Learning Center	5%	5%	0%	0%	0%	0%	0%	89%	11%	0%	0%	0%
Faribault Senior High	42%	3%	4%	2%	0%	0%	0%	49%	49%	2%	0%	0%
Farmington High School	23%	6%	2%	1%	0%	0%	0%	67%	31%	1%	0%	0%
Fergus Falls Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
FertileBeltrami Secondary	60%	3%	0%	0%	0%	0%	0%	37%	23%	40%	0%	0%
Fillmore Central Senior High	3%	10%	0%	0%	0%	0%	0%	88%	5%	8%	0%	0%
Fisher Secondary	67%	0%	6%	0%	0%	0%	0%	28%	72%	0%	0%	0%
Floodwood Secondary	0%	21%	0%	52%	0%	0%	0%	28%	59%	14%	0%	0%
Foley Senior High	50%	0%	5%	2%	1%	0%	0%	43%	19%	38%	0%	0%
Forest Lake Area Learning Center	4%	0%	0%	12%	0%	0%	0%	84%	16%	0%	0%	0%
Forest Lake Senior High	28%	6%	2%	2%	0%	0%	0%	63%	36%	1%	0%	0%
Fosston Secondary	58%	0%	0%	0%	0%	0%	0%	42%	27%	31%	0%	0%
Four Directions Charter Schools	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Frazee Secondary	46%	2%	0%	2%	0%	0%	0%	50%	38%	13%	0%	0%
Freshwater Ed Dist ALC	9%	4%	2%	6%	0%	0%	0%	79%	13%	8%	0%	0%
Fridley Moore Lk Area Learning Ctr	0%	0%	0%	10%	0%	0%	0%	90%	10%	0%	0%	0%
Fridley Senior High	0%	15%	0%	3%	0%	0%	0%	83%	14%	3%	0%	0%
Fulda Secondary	48%	0%	5%	5%	2%	0%	0%	41%	18%	36%	5%	0%
General John Vessey Jr Leadership	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
GFW High School	0%	3%	0%	0%	0%	0%	0%	97%	3%	0%	0%	0%
GlencoeSilver Lake Senior High	52%	0%	1%	2%	1%	0%	0%	44%	33%	23%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
GlenvilleEmmons Secondary	0%	7%	0%	21%	0%	0%	0%	71%	29%	0%	0%	0%
Goodhue Secondary	0%	4%	0%	16%	0%	0%	0%	80%	18%	2%	0%	0%
Goodridge Secondary	0%	8%	0%	50%	0%	0%	0%	42%	33%	25%	0%	0%
Gordon Parks High School	3%	0%	0%	13%	0%	0%	0%	84%	16%	0%	0%	0%
GranadaHuntley East Chain Sec	16%	40%	4%	0%	0%	0%	0%	40%	60%	0%	0%	0%
Grand Meadow Senior High	52%	0%	5%	0%	0%	0%	0%	43%	57%	0%	0%	0%
Grand Rapids Area Learning Center	5%	0%	0%	5%	0%	0%	0%	90%	10%	0%	0%	0%
Grand Rapids Senior High	59%	0%	3%	3%	0%	0%	0%	35%	40%	26%	0%	0%
Great River Education Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Great River School	0%	0%	0%	8%	0%	0%	0%	92%	4%	0%	4%	0%
GreenbushMiddle River Senior High	0%	0%	0%	42%	0%	0%	0%	58%	6%	36%	0%	0%
Greenway Senior High	2%	0%	0%	12%	0%	0%	0%	86%	7%	7%	0%	0%
Grygla Secondary	43%	0%	0%	0%	0%	0%	0%	57%	29%	14%	0%	0%
Guadalupe Alternative Programs	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hancock Sec	55%	0%	0%	0%	0%	0%	0%	45%	45%	9%	0%	0%
Harbor City International Charter	6%	17%	0%	9%	0%	0%	0%	69%	17%	14%	0%	0%
Harding Senior High	0%	9%	0%	3%	0%	0%	0%	88%	12%	0%	0%	0%
Hastings Alternative Center	0%	0%	0%	0%	0%	7%	0%	93%	7%	0%	0%	0%
Hastings High School	0%	8%	0%	17%	0%	0%	0%	75%	23%	2%	0%	0%
Hawley Secondary	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
Hawthorne Diploma Program	8%	0%	0%	8%	0%	0%	0%	83%	17%	0%	0%	0%
Hayfield Sec	5%	2%	2%	39%	0%	0%	0%	52%	43%	5%	0%	0%
Headwaters Educ Learning Program	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Healy Secondary	64%	0%	20%	1%	0%	0%	0%	15%	41%	44%	0%	0%
Henning Secondary	42%	0%	35%	0%	0%	0%	0%	23%	31%	46%	0%	0%
Henry Senior High	19%	0%	0%	0%	0%	0%	0%	81%	19%	0%	0%	0%
Henry Sibley High School	25%	6%	3%	3%	0%	0%	0%	64%	34%	2%	0%	0%
Herman Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hermantown Senior High	0%	7%	0%	38%	0%	0%	0%	55%	31%	14%	0%	0%
Heron LakeOkabena Secondary	30%	7%	0%	3%	0%	0%	0%	60%	37%	3%	0%	0%
Hibbing High	1%	0%	0%	41%	0%	0%	0%	59%	33%	8%	0%	0%
High School For Recording Arts	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Highland Park Senior High	10%	14%	2%	0%	0%	0%	0%	75%	23%	3%	0%	0%
Hill City Senior High	0%	0%	0%	16%	0%	0%	0%	84%	3%	13%	0%	0%
HillsBeaver Creek Secondary	0%	0%	0%	37%	0%	0%	0%	63%	17%	20%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
HinckleyFinlayson Secondary	53%	0%	3%	3%	0%	0%	0%	41%	56%	3%	0%	0%
HLWW Alternative Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hmong College Prep Academy HS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Holdingsford Secondary	43%	3%	4%	4%	0%	0%	0%	47%	13%	41%	0%	0%
Hopkins Senior High	0%	10%	0%	1%	0%	0%	0%	89%	9%	2%	0%	0%
Houston Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Howard LakeWaverlyWinsted Sec	0%	1%	0%	4%	0%	0%	0%	95%	5%	0%	0%	0%
Humboldt Secondary School	60%	0%	10%	0%	0%	0%	0%	30%	70%	0%	0%	0%
Hutchinson Night Alt Learning Ctr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Hutchinson Senior High	25%	2%	0%	13%	1%	0%	0%	59%	35%	6%	0%	1%
Indus Secondary	0%	0%	0%	33%	0%	0%	0%	67%	11%	22%	0%	0%
Insight School of Minnesota	5%	24%	0%	0%	0%	0%	0%	71%	22%	7%	0%	0%
iQ Academy Minnesota	0%	13%	0%	0%	0%	0%	0%	88%	13%	0%	0%	0%
Irondale Senior High	11%	5%	0%	15%	0%	0%	0%	68%	29%	3%	0%	0%
ISD 181 Learning Center	9%	0%	0%	12%	0%	0%	0%	79%	18%	3%	0%	0%
Isle Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Isle Secondary	30%	0%	0%	9%	0%	0%	0%	61%	22%	17%	0%	0%
Ivan Sand After School Credit Recov	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community School IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ivan Sand Community School Summer	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Jackson County Central Senior High	12%	11%	3%	52%	0%	0%	0%	22%	52%	26%	0%	0%
JanesvilleWaldorfPemberton Sec	0%	13%	0%	3%	0%	0%	0%	84%	13%	3%	0%	0%
Jefferson Senior High	1%	15%	0%	3%	0%	0%	0%	80%	15%	4%	0%	0%
Jennings Experiential High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
John Marshall Senior High	5%	0%	2%	4%	0%	0%	0%	89%	8%	3%	0%	0%
Johnson Senior High	32%	4%	2%	2%	0%	0%	0%	60%	34%	6%	0%	0%
Jordan Secondary	0%	17%	0%	10%	0%	0%	0%	73%	22%	5%	0%	0%
KassonMantorville Senior High	37%	0%	1%	18%	0%	0%	0%	44%	43%	13%	0%	0%
Kato Public Charter School	0%	10%	0%	0%	0%	0%	0%	90%	10%	0%	0%	0%
Kelley Secondary	79%	3%	0%	6%	3%	0%	0%	9%	73%	18%	0%	0%
Kelliher Secondary	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Kennedy Secondary School	18%	11%	17%	1%	0%	0%	0%	54%	46%	0%	0%	0%
Kennedy Senior High	0%	12%	0%	2%	0%	0%	0%	85%	11%	3%	0%	0%
KenyonWanamingo Senior High	0%	0%	0%	23%	0%	0%	0%	77%	23%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Kerkhoven Secondary	43%	2%	6%	10%	0%	0%	0%	39%	57%	4%	0%	0%
Kimball Secondary	41%	2%	0%	2%	0%	0%	0%	56%	20%	24%	0%	0%
Kingsland Senior High	10%	0%	3%	0%	0%	0%	0%	87%	10%	3%	0%	0%
Kittson Central Secondary	20%	10%	0%	10%	0%	0%	0%	60%	15%	25%	0%	0%
Knights Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Kokesh Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
La Crescent Senior High	22%	3%	3%	0%	0%	0%	0%	72%	24%	4%	0%	0%
Lac qui Parle Valley Secondary	49%	0%	5%	5%	0%	0%	0%	40%	42%	18%	0%	0%
Lafayette Secondary	0%	0%	3%	55%	0%	0%	0%	41%	41%	17%	0%	0%
Lake Benton Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lake of The Woods Secondary	0%	0%	0%	2%	0%	0%	0%	98%	2%	0%	0%	0%
Lake Superior High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lakes Area Charter School	0%	0%	0%	31%	0%	0%	0%	69%	31%	0%	0%	0%
Lakeview Secondary	44%	0%	4%	0%	0%	0%	0%	52%	28%	20%	0%	0%
Lakeville Area Learning Center	0%	4%	0%	7%	0%	0%	0%	89%	7%	4%	0%	0%
Lakeville North High	5%	6%	0%	1%	0%	0%	0%	88%	11%	1%	0%	0%
Lakeville South High	5%	7%	1%	2%	0%	0%	0%	86%	14%	1%	0%	0%
Lancaster Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lanesboro Secondary	0%	3%	0%	3%	0%	0%	0%	94%	6%	0%	0%	0%
Laporte Secondary	0%	0%	0%	22%	0%	0%	0%	78%	22%	0%	0%	0%
Le Center Secondary	71%	0%	0%	0%	0%	0%	0%	29%	71%	0%	0%	0%
Le SueurHenderson High School	51%	3%	2%	1%	0%	0%	0%	43%	29%	29%	0%	0%
Learn At My Pace Online High School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Learning Alternatives Community Sch	0%	12%	0%	0%	0%	0%	0%	88%	12%	0%	0%	0%
Learning For Leadership Charter	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
LeRoy Secondary	30%	0%	9%	17%	0%	0%	0%	43%	48%	9%	0%	0%
Lester Prairie Secondary	4%	4%	0%	36%	0%	0%	0%	56%	44%	0%	0%	0%
LewistonAltura Secondary	0%	2%	0%	0%	0%	0%	0%	98%	2%	0%	0%	0%
Life Lines Adult Connection	0%	0%	0%	8%	0%	0%	0%	92%	0%	8%	0%	0%
Lincoln Education Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lincoln Secondary (Esko)	40%	0%	5%	4%	0%	0%	0%	51%	37%	12%	0%	0%
Lincoln Secondary (Ivanhoe)	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lincoln Secondary (Lake City)	45%	0%	5%	14%	1%	0%	0%	35%	29%	36%	0%	0%
Lincoln Senior High	0%	0%	0%	49%	0%	0%	0%	51%	24%	25%	0%	0%
Lionsgate Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Litchfield Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Litchfield Senior High	71%	1%	2%	1%	0%	0%	0%	25%	63%	12%	0%	0%
Little Falls Continuing Education	13%	0%	0%	6%	0%	0%	0%	81%	13%	6%	0%	0%
Little Falls Senior High	70%	0%	0%	1%	1%	0%	0%	28%	41%	30%	0%	0%
LittleforkBig Falls Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Lk CrystalWellcome Memorial Sec	20%	0%	3%	10%	0%	0%	0%	67%	23%	10%	0%	0%
Long PrairieGrey Secondary School	77%	0%	4%	0%	0%	0%	0%	18%	25%	56%	0%	0%
LoringNicollet High	0%	17%	0%	0%	0%	0%	0%	83%	0%	17%	0%	0%
Luverne Senior High	61%	0%	0%	1%	0%	0%	0%	37%	59%	4%	0%	0%
Lyle Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MabelCanton Secondary	0%	0%	0%	36%	0%	0%	0%	64%	21%	14%	0%	0%
MACCRAY Area Learning Prog	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MACCRAY Senior High	46%	0%	0%	2%	0%	0%	0%	52%	37%	11%	0%	0%
Madelia Secondary	50%	4%	4%	0%	4%	0%	0%	38%	19%	42%	0%	0%
Mahnomen Area Learning Center	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	0%
Mahnomen Secondary	80%	0%	7%	0%	0%	0%	0%	13%	20%	67%	0%	0%
Mahtomedi Senior High	23%	10%	4%	0%	0%	0%	0%	63%	35%	2%	0%	0%
Main Street School Performing Arts	0%	13%	0%	3%	0%	0%	0%	83%	17%	0%	0%	0%
Mankato East Senior High	19%	1%	1%	8%	0%	0%	0%	70%	23%	7%	0%	0%
Mankato West Senior High	18%	0%	0%	3%	0%	0%	0%	79%	20%	1%	0%	0%
Maple Grove Senior High	0%	6%	0%	1%	0%	0%	0%	92%	7%	1%	0%	0%
Maple Lake Secondary	0%	9%	0%	30%	0%	0%	0%	61%	38%	1%	0%	0%
Maple River Senior High	1%	1%	0%	49%	0%	0%	0%	48%	16%	36%	0%	0%
Marshall County Central High	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Marshall High School	42%	0%	1%	2%	1%	0%	0%	54%	40%	6%	0%	0%
Martin County West Senior High	48%	0%	0%	2%	0%	0%	0%	51%	35%	14%	0%	0%
MATEC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Math And Science Academy	4%	96%	0%	0%	0%	0%	0%	0%	62%	38%	0%	0%
Mayo Senior High	15%	0%	2%	1%	0%	0%	0%	82%	15%	3%	0%	0%
MCFMoose Lake Willow River	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MCFRedwing, Maginnis High School	13%	0%	0%	50%	0%	0%	0%	38%	63%	0%	0%	0%
McGregor Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
McGregor Secondary	0%	0%	0%	38%	0%	0%	0%	63%	9%	28%	0%	0%
Medford Secondary	0%	18%	0%	3%	0%	0%	0%	80%	18%	3%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Melrose Secondary	60%	2%	0%	0%	1%	0%	0%	37%	27%	36%	0%	0%
Memorial High School	38%	9%	9%	0%	0%	0%	0%	45%	51%	4%	0%	0%
Menahga Secondary	34%	2%	5%	2%	0%	0%	0%	57%	18%	25%	0%	0%
Menlo Park Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MERC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Mesabi Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Mesabi East Secondary	61%	3%	9%	3%	3%	0%	0%	21%	58%	21%	0%	0%
Metro Heights Academy	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Metropolitan Learning Alliance	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Milaca Area Learning Center	10%	0%	0%	10%	0%	0%	0%	80%	20%	0%	0%	0%
Milaca Secondary High	44%	1%	6%	3%	0%	0%	0%	46%	23%	30%	0%	0%
Minneapolis On Line Learning	33%	0%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Minneota Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Minnesota New Country School	0%	40%	0%	0%	0%	0%	0%	60%	20%	20%	0%	0%
Minnesota Online High School	0%	14%	0%	17%	0%	0%	0%	69%	24%	7%	0%	0%
Minnesota Transitions ALP	0%	0%	0%	6%	0%	0%	0%	94%	6%	0%	0%	0%
Minnesota Virtual Academy	2%	6%	0%	4%	0%	0%	0%	88%	10%	2%	0%	0%
Minnetonka Senior High	0%	3%	0%	1%	0%	0%	0%	96%	3%	1%	0%	0%
Minnewaska Secondary	0%	0%	0%	67%	0%	0%	0%	33%	18%	49%	0%	0%
MN Correctional FacilityFaribault	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilityLino Lakes	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilityRush City	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilitySt Cloud	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN Correctional FacilityStillwater	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MN River Valley ALC Ind Study	4%	0%	0%	4%	0%	0%	0%	92%	4%	4%	0%	0%
MN RIVER VALLEY ALCSEATBASED	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
MN Security Hospital YAAP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Molly Creek Area Learning Center	0%	0%	0%	22%	0%	0%	0%	78%	22%	0%	0%	0%
Montevideo Senior High	0%	1%	1%	2%	0%	0%	0%	95%	5%	0%	0%	0%
Montgomery-Lonsdale Secondary	25%	0%	6%	6%	0%	0%	0%	63%	26%	11%	0%	0%
Monticello Alternative Program	7%	0%	0%	7%	0%	0%	0%	87%	13%	0%	0%	0%
Monticello Senior High	51%	3%	5%	12%	0%	0%	0%	28%	53%	18%	0%	0%
Moorhead High School	0%	0%	0%	4%	0%	0%	0%	96%	4%	1%	0%	0%
Moose Lake Secondary	32%	0%	13%	2%	3%	0%	0%	50%	32%	18%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Mora Alternative Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Mora Secondary	47%	6%	2%	8%	0%	0%	0%	37%	52%	11%	0%	0%
Morris Area Secondary	55%	3%	20%	3%	0%	0%	0%	20%	49%	31%	0%	0%
Mounds View Adult Education	7%	0%	0%	13%	0%	0%	0%	80%	20%	0%	0%	0%
Mounds View ALC	3%	3%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%
Mounds View Senior High	13%	5%	1%	2%	0%	0%	0%	79%	20%	1%	0%	0%
MoundWestonka High School	19%	4%	5%	1%	0%	0%	0%	72%	28%	1%	0%	0%
Mountain IronBuhl Secondary	0%	26%	0%	48%	0%	0%	0%	26%	43%	30%	0%	0%
Mountain Lake Secondary	50%	0%	13%	0%	0%	0%	0%	38%	38%	25%	0%	0%
Mpls HS Alternative Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
MTCS Connections Academy	0%	26%	6%	3%	0%	0%	0%	65%	28%	8%	0%	0%
MTS High School	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
MTS Pease Academy	0%	31%	0%	0%	0%	0%	0%	69%	23%	8%	0%	0%
Murray County Central Secondary	39%	0%	0%	2%	0%	0%	0%	59%	24%	18%	0%	0%
Nashwauk Secondary	0%	0%	0%	72%	0%	0%	0%	28%	56%	16%	0%	0%
NashwaukKeewatin ALP	0%	0%	0%	67%	0%	0%	0%	33%	67%	0%	0%	0%
Nevis Secondary	49%	0%	0%	0%	0%	0%	0%	51%	49%	0%	0%	0%
New Century Academy	0%	0%	6%	17%	0%	0%	0%	78%	17%	6%	0%	0%
New Heights School, Inc	0%	14%	0%	0%	0%	0%	0%	86%	7%	7%	0%	0%
New London Alternative School	0%	20%	0%	20%	0%	0%	0%	60%	40%	0%	0%	0%
New LondonSpicer Sr	14%	15%	0%	3%	0%	0%	0%	69%	29%	3%	0%	0%
New Paths Area Learning Center	0%	17%	0%	17%	0%	0%	0%	67%	0%	33%	0%	0%
New Prague Senior High	24%	9%	5%	1%	0%	0%	0%	61%	36%	3%	0%	0%
New Ulm High School	17%	7%	15%	1%	0%	0%	0%	59%	34%	6%	0%	0%
New York Mills Secondary	57%	0%	0%	0%	0%	0%	0%	43%	54%	2%	0%	0%
Nicollet Senior High School	21%	0%	0%	17%	0%	0%	0%	63%	17%	21%	0%	0%
Norman County East Secondary	39%	0%	0%	4%	0%	0%	0%	57%	43%	0%	0%	0%
Norman County West Secondary	0%	0%	0%	54%	0%	0%	0%	46%	54%	0%	0%	0%
North Branch Lab School ALC	0%	0%	0%	7%	0%	0%	0%	93%	7%	0%	0%	0%
North Branch Senior High	43%	2%	6%	1%	0%	0%	0%	48%	26%	26%	0%	0%
North Lakes Academy 56	0%	21%	0%	0%	0%	0%	0%	79%	11%	11%	0%	0%
North Senior High	0%	4%	0%	3%	0%	0%	0%	93%	5%	1%	0%	0%
North Senior High (Mpls)	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
North Vista ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Northeast Range Secondary	52%	6%	21%	18%	0%	0%	0%	3%	30%	67%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Northern Lights Community School	22%	7%	0%	11%	0%	0%	0%	59%	37%	4%	0%	0%
Northfield Area Learning Center	5%	9%	0%	0%	0%	5%	0%	82%	18%	0%	0%	0%
Northfield Senior High	0%	8%	0%	7%	0%	0%	0%	85%	13%	2%	0%	0%
Northland Learning Center 010	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Northland Learning Center 050	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%
Northland Secondary	0%	6%	0%	64%	0%	0%	0%	30%	61%	9%	0%	0%
Northome Secondary	0%	0%	0%	40%	0%	0%	0%	60%	20%	20%	0%	0%
Northwest Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Northwest Passage High School	0%	20%	0%	0%	0%	0%	0%	80%	20%	0%	0%	0%
NRHEG Secondary	6%	0%	2%	28%	0%	0%	0%	65%	23%	12%	0%	0%
NSO Independent Study	0%	0%	0%	25%	0%	0%	0%	75%	25%	0%	0%	0%
Oak Land ALC West	0%	0%	0%	10%	0%	0%	0%	90%	10%	0%	0%	0%
Oak Land Learning Center Princeton	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Ogilvie Secondary	0%	12%	0%	5%	0%	0%	0%	83%	17%	0%	0%	0%
Onamia Secondary	38%	0%	3%	9%	0%	0%	0%	50%	38%	12%	0%	0%
Open World Learning Community	0%	31%	0%	8%	0%	0%	0%	62%	15%	23%	0%	0%
Orono Senior High	10%	6%	0%	1%	0%	0%	0%	83%	15%	2%	0%	0%
Orr Secondary	22%	0%	11%	0%	0%	0%	0%	67%	0%	33%	0%	0%
Ortonville Secondary	0%	4%	0%	47%	0%	0%	0%	49%	47%	4%	0%	0%
Osakis Secondary	0%	0%	0%	54%	0%	0%	0%	46%	19%	35%	0%	0%
Osseo Senior High	0%	7%	0%	1%	0%	0%	0%	91%	6%	2%	0%	0%
Owatonna ALC 912	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Owatonna Senior High	4%	3%	2%	25%	0%	0%	0%	65%	32%	3%	0%	0%
PACT Charter Secondary	0%	64%	0%	2%	0%	2%	0%	31%	26%	43%	0%	0%
Paladin Career and Technical High School	9%	0%	9%	5%	0%	0%	0%	77%	23%	0%	0%	0%
Park Center IB World School	0%	11%	0%	0%	0%	0%	0%	89%	8%	3%	0%	0%
Park Rapids Senior High	51%	0%	0%	1%	0%	0%	0%	47%	32%	21%	0%	0%
Park Senior High	0%	6%	0%	3%	0%	0%	0%	90%	7%	2%	0%	0%
Parkers Prairie Secondary	51%	0%	0%	4%	0%	0%	0%	45%	53%	2%	0%	0%
Paynesville Area High School	39%	1%	7%	8%	0%	0%	0%	44%	44%	11%	0%	0%
Pelican Rapids Secondary	0%	7%	0%	33%	0%	0%	0%	60%	29%	11%	0%	0%
Pequot Lakes Senior High	51%	13%	18%	0%	0%	0%	0%	19%	41%	41%	0%	0%
Perham Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Perham Senior High	54%	0%	0%	1%	0%	0%	0%	45%	55%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Perpich Center For Arts Education	3%	2%	3%	1%	0%	0%	0%	91%	8%	1%	0%	0%
Phoenix Learning Center	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Pillager Area Charter School	0%	0%	0%	33%	0%	0%	0%	67%	33%	0%	0%	0%
Pillager Senior High School	22%	24%	6%	4%	0%	0%	0%	44%	11%	43%	0%	2%
Pine City Area Learning Center	0%	0%	8%	8%	0%	0%	0%	83%	8%	8%	0%	0%
Pine City Secondary	26%	0%	2%	3%	1%	0%	0%	68%	29%	3%	1%	0%
Pine Island Secondary	38%	1%	1%	13%	0%	0%	0%	48%	24%	29%	0%	0%
Pine RiverBackus Area Learning Ctr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Pine RiverBackus High School	50%	8%	4%	12%	0%	0%	0%	26%	28%	46%	0%	0%
Pipestone Senior High	29%	0%	1%	1%	0%	0%	0%	69%	28%	3%	0%	0%
PlainviewElginMillville High	39%	1%	2%	4%	2%	0%	0%	52%	34%	14%	0%	0%
Plymouth Youth Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Prairie Center Academy IS	0%	0%	0%	43%	0%	0%	0%	57%	43%	0%	0%	0%
Prairie Lakes School	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Princeton Senior High	29%	5%	9%	2%	0%	0%	0%	56%	28%	16%	0%	0%
Prior Lake High School	0%	14%	0%	1%	0%	0%	0%	85%	11%	4%	0%	0%
Prior LakeSavage Area ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Proctor Senior High	0%	3%	0%	48%	0%	0%	0%	49%	42%	9%	0%	0%
Quest Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Randolph Secondary	0%	3%	0%	3%	0%	0%	0%	95%	5%	0%	0%	0%
Red Lake County Central High School	52%	0%	0%	5%	0%	0%	0%	43%	57%	0%	0%	0%
RED RIVER AREA LEARNING CENTER	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Red Rock Central Secondary	53%	0%	3%	0%	0%	0%	0%	44%	53%	3%	0%	0%
Red Wing Area Learning Center	0%	33%	0%	0%	0%	0%	0%	67%	33%	0%	0%	0%
Red Wing Senior High	29%	10%	9%	3%	0%	0%	0%	49%	50%	1%	0%	0%
Redwood Valley Senior High	3%	0%	0%	35%	0%	0%	0%	62%	37%	1%	0%	0%
Renville County West Senior High	56%	0%	16%	0%	0%	0%	0%	28%	20%	52%	0%	0%
Richfield Senior High	49%	5%	10%	1%	0%	0%	0%	35%	56%	9%	0%	0%
River Bend Area Learning Center	8%	0%	0%	8%	0%	0%	0%	85%	15%	0%	0%	0%
Rivers Edge Academy	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Riverway Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Robbinsdale Armstrong Senior High	0%	10%	0%	1%	0%	0%	0%	89%	9%	1%	0%	0%
Robbinsdale Cooper Senior High	0%	13%	0%	1%	0%	0%	0%	86%	8%	6%	0%	0%
Rochester Alternative Learning Ctr	0%	14%	0%	0%	0%	0%	0%	86%	14%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Rochester Area Learning Center	0%	0%	0%	3%	0%	0%	0%	97%	3%	0%	0%	0%
Rochester OffCampus Charter High	0%	5%	0%	5%	0%	0%	0%	90%	10%	0%	0%	0%
Rock Bend HS ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Rockford Secondary	0%	15%	0%	25%	0%	0%	0%	59%	34%	7%	0%	0%
Rocori Senior High	61%	1%	2%	10%	1%	0%	0%	26%	24%	50%	0%	0%
Rogers Senior High	20%	9%	1%	0%	0%	0%	0%	70%	27%	2%	0%	0%
Roosevelt Senior High	13%	0%	0%	13%	0%	0%	0%	73%	27%	0%	0%	0%
Roseau Secondary	35%	0%	5%	0%	0%	0%	0%	60%	10%	31%	0%	0%
Rosemount Area Learning Center	0%	2%	0%	35%	0%	0%	0%	63%	35%	2%	0%	0%
Rosemount Senior High	32%	6%	1%	1%	0%	0%	0%	60%	39%	2%	0%	0%
Roseville Area Senior High	14%	5%	5%	2%	0%	0%	0%	74%	24%	2%	0%	0%
Rothsay Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Round Lake Secondary	39%	6%	0%	0%	0%	0%	0%	56%	39%	6%	0%	0%
Royalton High School	0%	19%	0%	37%	0%	0%	0%	44%	42%	13%	0%	0%
RTR High School	0%	3%	0%	59%	0%	0%	0%	38%	59%	3%	0%	0%
Runestone Regional Learning Center	0%	0%	13%	13%	0%	0%	0%	73%	27%	0%	0%	0%
Rush City Secondary	0%	7%	2%	26%	0%	0%	0%	66%	21%	14%	0%	0%
RushfordPeterson Senior High	28%	9%	3%	0%	0%	0%	0%	59%	16%	25%	0%	0%
S St Paul Community Lrng Cntr	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
Sabathani Campus	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
SAGE Academy Charter School	0%	22%	0%	22%	0%	0%	0%	56%	44%	0%	0%	0%
Sartell Senior High	35%	6%	1%	20%	0%	0%	0%	37%	41%	21%	0%	0%
Sauk Centre Secondary	68%	0%	5%	2%	0%	0%	0%	25%	27%	48%	0%	0%
Sauk RapidsRice Senior High	39%	3%	3%	2%	0%	0%	0%	52%	31%	17%	0%	0%
School of Environmental Studies	7%	4%	1%	1%	0%	0%	0%	86%	14%	0%	0%	0%
Scott ALC	0%	10%	0%	0%	0%	0%	0%	90%	10%	0%	0%	0%
Sebeka Secondary	0%	0%	0%	14%	0%	0%	0%	86%	8%	5%	0%	0%
SECA IS	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Shakopee Senior High	42%	10%	3%	5%	0%	0%	0%	40%	52%	8%	0%	0%
Sibley EastArlington Senior High	44%	1%	4%	0%	0%	0%	0%	51%	19%	30%	0%	0%
Simley Alternative Program	0%	0%	0%	30%	0%	0%	0%	70%	30%	0%	0%	0%
Simley Senior High	0%	13%	0%	4%	0%	0%	0%	83%	13%	4%	0%	0%
Sleepy Eye Sec	32%	2%	0%	12%	0%	0%	0%	54%	44%	2%	0%	0%
So Wash High School Diploma Program	0%	0%	0%	9%	0%	0%	0%	91%	9%	0%	0%	0%
Sobriety High South	0%	9%	9%	0%	0%	0%	0%	82%	18%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
South Education Center Academy	0%	0%	0%	17%	0%	0%	0%	83%	17%	0%	0%	0%
South Senior High	27%	17%	14%	1%	1%	0%	0%	41%	56%	3%	0%	0%
South St Paul Secondary	0%	3%	0%	6%	0%	1%	0%	90%	10%	0%	0%	0%
South Washington Alternative High School	0%	0%	0%	8%	0%	0%	0%	92%	8%	0%	0%	0%
Southland Senior High	25%	8%	17%	8%	0%	0%	0%	42%	23%	33%	2%	0%
Southwest Senior High	1%	10%	0%	3%	0%	0%	0%	85%	12%	4%	0%	0%
Spectrum High School	39%	8%	14%	0%	0%	0%	0%	39%	34%	27%	0%	0%
Spring Grove Secondary	0%	0%	0%	4%	0%	0%	0%	96%	4%	0%	0%	0%
Spring Lake Park Senior High	6%	19%	1%	1%	0%	0%	0%	75%	22%	4%	0%	0%
Springfield Secondary	29%	2%	0%	22%	0%	0%	0%	47%	20%	33%	0%	0%
St Anthony Village Senior High	0%	7%	1%	2%	0%	0%	0%	91%	5%	4%	0%	0%
St Charles Secondary	36%	0%	3%	2%	0%	0%	0%	59%	36%	5%	0%	0%
St Clair Secondary	17%	0%	0%	46%	0%	0%	0%	37%	37%	24%	0%	2%
St Cloud Area Learning Center	4%	7%	1%	13%	0%	0%	0%	76%	18%	4%	2%	0%
St Croix Preparatory Academy Upper	0%	18%	0%	9%	0%	0%	0%	73%	18%	9%	0%	0%
St Croix Valley Area Learning Cntr	0%	0%	0%	9%	0%	0%	0%	91%	9%	0%	0%	0%
St Francis ALC	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
St Francis ALC IS	20%	10%	0%	0%	0%	0%	0%	70%	20%	10%	0%	0%
St Francis High	39%	2%	4%	2%	0%	0%	0%	52%	27%	21%	0%	0%
St James Secondary	50%	2%	2%	3%	2%	0%	0%	42%	44%	14%	0%	0%
St Louis Park Senior High	0%	5%	0%	0%	0%	0%	0%	95%	3%	2%	0%	0%
St MichaelAlbertville Senior High	0%	16%	0%	17%	0%	0%	0%	66%	27%	7%	0%	0%
St Paul Conservatory Performing Art	0%	12%	0%	3%	0%	0%	0%	85%	10%	4%	0%	0%
St Peter Senior High	59%	0%	0%	2%	0%	0%	0%	39%	59%	2%	0%	0%
StaplesMotley Senior High	44%	2%	0%	19%	0%	0%	0%	35%	29%	36%	0%	0%
Step	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Stephen Senior High	90%	0%	0%	0%	0%	0%	0%	10%	20%	70%	0%	0%
Stewartville Senior High	9%	1%	2%	49%	0%	0%	0%	39%	10%	50%	0%	0%
Stillwater Area High School	3%	4%	0%	1%	0%	0%	0%	91%	8%	1%	0%	0%
Studio Academy Charter School	0%	15%	0%	4%	0%	0%	0%	81%	15%	4%	0%	0%
Summit Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Swanville Secondary	0%	5%	43%	0%	0%	0%	0%	52%	24%	24%	0%	0%
Tartan Senior High	0%	12%	0%	2%	0%	0%	0%	86%	13%	2%	0%	0%
Technical Senior High	25%	8%	4%	11%	0%	0%	0%	53%	27%	20%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
The Alternative Program TAP	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Tower View Opportunity Program ALC	0%	8%	0%	4%	0%	0%	0%	88%	12%	0%	0%	0%
Tower-Soudan Secondary	47%	6%	12%	6%	0%	0%	0%	29%	47%	24%	0%	0%
Tracy Secondary	0%	0%	0%	46%	0%	0%	0%	54%	28%	18%	0%	0%
Transition 2 Success	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
TrekNorth High School	0%	0%	0%	5%	0%	0%	0%	95%	5%	0%	0%	0%
TriCounty Secondary	0%	0%	13%	53%	0%	0%	0%	33%	13%	53%	0%	0%
TRIO Wolf Creek Distance Learning	3%	8%	0%	8%	0%	0%	0%	83%	15%	3%	0%	0%
Triton High School	28%	1%	2%	1%	0%	0%	0%	67%	30%	2%	0%	0%
Truman Secondary	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Two Cities Academy High School	0%	36%	0%	0%	0%	0%	0%	64%	9%	27%	0%	0%
Two Harbors Secondary	41%	1%	0%	10%	0%	0%	0%	47%	49%	4%	0%	0%
UlenHitterdal Secondary	0%	6%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%
Underwood Secondary	24%	0%	0%	0%	0%	0%	0%	76%	24%	0%	0%	0%
United South Central High School	47%	0%	2%	2%	0%	0%	0%	50%	27%	23%	0%	0%
Upsala Secondary	13%	5%	45%	0%	0%	0%	0%	37%	11%	53%	0%	0%
Verndale Secondary	0%	20%	0%	30%	0%	0%	0%	50%	15%	35%	0%	0%
Virginia Secondary	65%	2%	0%	19%	0%	0%	0%	14%	43%	42%	0%	0%
Virtual High School	3%	2%	0%	5%	0%	0%	0%	90%	10%	0%	0%	0%
VOA High School	50%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%
VOA SALT	0%	25%	0%	25%	0%	0%	0%	50%	50%	0%	0%	0%
VOYAGEURS EXPEDITIONARY SCHOOL	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
W H A Alternative Program	17%	0%	0%	33%	0%	0%	0%	50%	50%	0%	0%	0%
WabashaKellogg Secondary	17%	8%	0%	2%	2%	0%	0%	71%	29%	0%	0%	0%
Wabasso Secondary	0%	0%	0%	7%	0%	0%	0%	93%	3%	3%	0%	0%
Waconia ALC	0%	10%	0%	10%	0%	0%	0%	80%	20%	0%	0%	0%
Waconia Senior High	6%	10%	2%	4%	0%	0%	0%	77%	19%	4%	0%	0%
WadenaDeer Creek Senior High	45%	1%	4%	0%	0%	0%	0%	49%	51%	0%	0%	0%
WalkerHackensackAkeley Sec	62%	0%	4%	2%	0%	0%	0%	31%	51%	18%	0%	0%
WarrenAlvaradoOslo Secondary	64%	0%	3%	0%	0%	0%	0%	33%	18%	48%	0%	0%
Warroad High School	0%	5%	0%	44%	0%	0%	0%	51%	8%	42%	0%	0%
Waseca Alternative High	0%	0%	0%	13%	0%	0%	0%	88%	13%	0%	0%	0%
Waseca Senior High	18%	8%	1%	1%	0%	0%	0%	73%	25%	2%	0%	0%
Washburn Senior High	48%	0%	5%	5%	0%	0%	0%	43%	57%	0%	0%	0%

School Name	CE	PSE O	PSEO and CE	Unknn	CE and Unknown	Unknown and PSEO	all 3 programs	No DE	1 year	2 years	3 years	4 years
Watershed High School	0%	12%	12%	0%	0%	0%	0%	76%	6%	18%	0%	0%
Watertown Mayer High	67%	2%	3%	1%	0%	0%	0%	27%	70%	3%	0%	0%
WatervilleElysianMorristown Sr	40%	1%	4%	4%	0%	0%	0%	50%	46%	3%	1%	0%
Waubun Area Learning Program	0%	0%	0%	50%	0%	0%	0%	50%	50%	0%	0%	0%
Waubun Secondary	7%	0%	0%	50%	0%	0%	0%	43%	29%	29%	0%	0%
Wayzata High	7%	4%	0%	1%	0%	0%	0%	88%	11%	1%	0%	0%
West Central Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
West Central Area Sec	52%	0%	4%	4%	0%	0%	0%	41%	48%	11%	0%	0%
West Heights ALC	11%	0%	0%	0%	0%	0%	0%	89%	11%	0%	0%	0%
WestbrookWalnut Grove Secondary	15%	7%	0%	0%	0%	0%	0%	78%	22%	0%	0%	0%
Wheaton Secondary	53%	0%	3%	0%	0%	0%	0%	43%	57%	0%	0%	0%
White Bear Area Learning Center	2%	1%	0%	2%	0%	0%	0%	94%	6%	0%	0%	0%
White Bear South Campus Senior	31%	5%	1%	1%	0%	0%	0%	62%	38%	1%	0%	0%
Willmar Area Learning Center	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Willmar Senior High	0%	11%	0%	4%	0%	0%	0%	85%	11%	4%	0%	0%
Willow River Area Learning Program	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Willow River Secondary	0%	9%	0%	48%	0%	0%	0%	43%	48%	9%	0%	0%
Windom Senior High	0%	3%	0%	48%	0%	0%	0%	49%	22%	29%	0%	0%
WinEMac Secondary	0%	7%	0%	53%	0%	0%	0%	40%	13%	47%	0%	0%
Winona Area Learning Center	0%	0%	0%	3%	0%	0%	0%	97%	3%	0%	0%	0%
Winona Senior High	0%	13%	0%	4%	0%	0%	0%	83%	13%	3%	0%	0%
Woodbury Senior High	0%	6%	0%	3%	0%	0%	0%	92%	7%	2%	0%	0%
Worthington Area Learning Center	0%	0%	0%	60%	0%	0%	0%	40%	60%	0%	0%	0%
Worthington Senior High	0%	19%	0%	1%	0%	0%	0%	80%	12%	9%	0%	0%
Wrenshall Secondary	6%	0%	0%	25%	0%	0%	0%	69%	25%	6%	0%	0%
Wright Technical Center ALC	3%	3%	0%	0%	0%	0%	0%	93%	7%	0%	0%	0%
Yellow Medicine East High School	55%	0%	0%	5%	0%	0%	0%	40%	60%	0%	0%	0%
Ziebarth Alternative Learning Ctr	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
Zimmerman High School	2%	6%	1%	0%	0%	0%	0%	91%	6%	3%	0%	0%
Zumbro Area Learning Center	0%	0%	0%	13%	0%	0%	0%	88%	13%	0%	0%	0%
ZumbrotMazeppa Senior High	8%	1%	0%	29%	0%	0%	0%	62%	35%	3%	0%	0%

Appendix H.

Courses students took for PSEO or Concurrent Enrollment at Russell and Arthur High Schools

Course titles	Designator	Program	# of credits
Essentials of Human Anatomy and Physiology	PSTL 1135	CIS	4
Global America: US History since 1865	HIST 1308	CIS	3
College Algebra through Modeling	PSTL 1006	CIS	3
American Democracy in a Changing World	POL 1001	CIS	4
Introduction to Literature: Poetry, Drama, Narrative	ENGL		
	1001W	CIS	4
University Writing	WRIT 1301	CIS	4
	PHYS		
Introductory College Physics	1101W	CIS	4
Intermediate French 1	FREN 1003	CIS	5
Basic and Applied Statistics	EPSY 3264	CIS	3
Introduction to African American Studies	AFRO 1011	CIS	3
Beginning Modern Chinese	CHN 1011	CIS	6

Course titles	Designator	Program	# of credits
Composition 1	ENGL 1711	PSEO	4
Reading and Writing Text	ENG 1110	PSEO	4
Microeconomics	ECON 1730	PSEO	3
Introduction to American Government	POLS 1720	PSEO	3
US History since 1865	HIST 1746	PSEO	4
Composition 2	ENGL 1712	PSEO	2

Russell College in the School offerings (historical look)

Year	# of courses	Subject areas
FY 2011	0	
FY 2012	0	
FY 2013	0	
FY 2014	2	Algebra, Anatomy
FY 2015	4	Algebra, Anatomy, Physics, Writing
FY 2016	10	Algebra, Anatomy, Physics, Writing, English, US History, Government, Chinese, African American Studies, and Statistics

Arthur College in the School offerings (historical look)

Year	# of courses	Subject areas
FY 2011	4	English, French, Physics
FY 2012	4	English, French, Physics
FY 2013	4	English, French, Physics
FY 2014	4	English, French, Physics
FY 2015	5	Anatomy, English, French, Physics
FY 2016	4	English, French, Physics

Appendix I.

University Writing

- Must be in 20% of class, or have instructor approval, to participate

Literature

One of the following must be true, as well as senior status.

- Have a cumulative GPA in previously-taken English courses that exceeds a 3.25, OR
- Demonstrate to the CIS instructor the reading and writing skills necessary for success in the course, OR
- Have a demonstrated passion for reading and writing about literature, OR
- Are in the top 20% of their high school class.

Physics

Students enrolling in PHYS 1101W must be juniors or seniors in high school, This course is primarily for students interested in technical areas.

- be in the top 20% of their class,
- have earned a B or better in a rigorous algebra 2/trig (or equivalent) course,
- AND have completed prerequisite courses in high school algebra, plane geometry, and trigonometry.

French

Students enrolling in FREN 1003 must be juniors or seniors in high school and have already completed at least three, and ideally four, years of high school French OR have equivalent proficiency, OR instructor approval.

Qualified ninth and tenth graders may apply to enroll with instructor approval if their enrollment is needed to fill the class.

Global America

HIST 1308 is an intensive course that requires substantial reading, writing, and critical thinking. Students enrolling in HIST 1308 must be juniors or seniors and meet at least ONE of the following additional qualifications:

- Have a cumulative GPA in recent social science courses that exceeds a 3.25, OR
- Are in the top 30% of their high school class, OR
- Demonstrate sufficient strength in the necessary reading and writing skills to the CIS instructor.

Exceptional tenth graders may be allowed to register if they have the approval of both the CIS instructor and the faculty coordinator.

College Algebra through Modeling

PSTL 1006 Will most often be juniors or seniors in high school (qualified ninth and tenth grade students are able to apply if they are necessary to fill the class).

Earned C+ or better in H.S. Algebra I and II classes, OR

Successfully completed three years high school math, OR

Satisfactory placement test score, OR

Have instructor permission

Appendix J.

Participant profiles

Name	High School	Years at school	Race	Position
Tina	Russell	6	did not identify	Administrator
Lucy	Arthur	2	White	Counselor
Ivan	Arthur	5	White	Administrator
Rachel	Russell	3	White	Counselor
Adrienne	Russell	7	White	Counselor
Patty	Arthur	8	White	Counselor
Quinn	Arthur	7	did not identify	Counselor
Sandy	Arthur	22	did not identify	Counselor

Name	High School	Year in school	Race	
Gigi	Russell	Junior	did not identify	Student
Calvin	Russell	Junior	Asian	Student
Sheldon	Russell	Senior	Black	Student
Nancy	Russell	Senior	Asian	Student
Elizabeth	Russell	Senior	Asian	Student
Fiona	Russell	Senior	did not identify	Student
DeDe	Russell	Senior	Asian	Student
Henry	Russell	Senior	did not identify	Student
Jenny	Arthur	Junior	did not identify	Student
Kristen	Arthur	Junior	Asian	Student
Laura	Arthur	Senior	Multi/Bi-racial	Student
Olivia	Arthur	Junior	Black	Student
Makayla	Arthur	Junior	Black	Student
Bree	Arthur	Senior	Multi/Bi-racial	Student

Name	High School	Year in school	Race	
One	Arthur	6	did not identify	Teacher
Two	Arthur	4	did not identify	Teacher
Three	Arthur	19	did not identify	Teacher

One	Russell	3	did not identify	Teacher
Two	Russell	7	did not identify	Teacher
Three	Russell	6	did not identify	Teacher
Four	Russell	17	did not identify	Teacher
Five	Russell	19	did not identify	Teacher
Six	Russell	4	did not identify	Teacher
Seven	Russell	6	did not identify	Teacher
Eight	Russell	5	did not identify	Teacher

Appendix K.

Enrollment numbers (duplicated) in PSEO/Concurrent Enrollment at AHS and RHS

Russell High School: 2015-2016										
	Gov't	U.S. Hist	Write	Af. Am.	Lit	Math	Stats	Physics	Anat	Total
African American	4	10	7	15	5	12	6	1	5	65
Asian	7	30	24	3	11	44	24	15	17	175
White	0	4	3	0	4	3	5	6	1	26
Hispanic/Latino	3	9	8	1	2	6	14	1	5	49
	14	53	42	19	22	65	49	23	28	

Arthur High School: 2015-2016				
	French	Literature	Physics	Total
African American	4	2	3	9
Asian	0	2	0	2
White	4	18	5	27
Hispanic/ Latino	0	1	0	1
	8	25	8	

Enrollment numbers (unduplicated) in PSEO at Arthur and Russell

	Arthur		Russell	
	Juniors	Seniors	Juniors	Seniors
14-15 School year	~10/year	~10/year	22/300	8/200
15-16 School year	~10/year	~10/year	5/267	24/290

Appendix L.

Sample college-going culture rubric

Muskegon Opportunity College-Going Culture Rubric *Please evaluate your school for each element of a college-going culture by checking the appropriate box (1 through 4), using these values: 1) Our school hasn't started work on this area; 2) Plans are in place to implement; 3) There is evidence of this occurring; 4) This is our routine, and we model it for others. Baseline scores are calculated by adding each indicator score then dividing by 9. Please note that this rubric is a draft and is currently in development.*

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Indicator	1	2	3	4	Evidence	Strategies and Activities
College Talk					<ul style="list-style-type: none"> ○ Students are engaged in conversations about college as an option for them ○ School staff and school partners share their college journey ○ Messages about college as an attainable pathway for students are communicated visually (posters, pennants) and orally ○ Staff connect their subject matter with its relevance to college majors and careers ○ Clear, visible statements in the school speak to the value and importance of college for students 	<ul style="list-style-type: none"> ○ On designated days, especially during College Awareness Month, all staff wear college memorabilia such as t-shirts, sweatshirts, etc., of their alma mater ○ Staff post the name of their alma mater in or outside their classroom especially during College Awareness Month ○ The teaching staff regularly speak to students about their educational journey ○ Students have opportunities to interview staff members about their educational journey ○ Teachers guide students in creating individual or group displays such as posters, books or bulletin boards on their college and career aspirations ○ Teachers create visuals or bulletin board displays of their educational journeys and post them around the school where students can read them ○ School posts a banner at the entrance of school that communicates your commitment to a college-going culture

