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## Marketization without marginalization? Approaches to integration in a dual enrollment magnet school

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Pepperdine University  
Graduate School of Education and Psychology

MARKETIZATION WITHOUT MARGINALIZATION? APPROACHES TO  
INTEGRATION IN A DUAL ENROLLMENT MAGNET SCHOOL

A dissertation submitted in partial satisfaction  
of the requirements for the degree of  
Doctor of Education in Organizational Leadership

by

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April, 2023

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This dissertation, written by

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DOCTOR OF EDUCATION

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Mumolo, S., Trapp, J., Malone, S., Scheckel, B., & Major, R. (2019). Turnaround toolkit [Conference Session]. Magnet Schools of America National Conference, Baltimore, MD, United States.

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## ABSTRACT

Despite the well-documented benefits of integration and Southern California's racial, socioeconomic, and linguistic diversity, California and U.S. efforts to promote integrated magnet schools have been minimal and primarily driven by local districts. Attempts to evaluate magnet programs primarily focus on student outcomes, yet surprisingly few studies examine approaches used by school leaders to establish and achieve program outcomes. This study contributes to the knowledge and practice of magnet implementation by exploring one California high school's efforts to establish a dual enrollment magnet program. An explanatory mixed methods case study design was used to understand how school leaders promoted student integration and academic excellence, challenged systemic inequities, and committed resources to close opportunity gaps. Data comprised archival records, in-depth interviews with ten administrative, teacher, and parent leaders from the high school, and school documents. Findings indicated that a combination of factors contributed to increased and increasingly diverse enrollment, equity, and academic excellence in a dual enrollment magnet. These factors included visibly committed school leaders, bringing the college campus to the high school, open and free access to college courses, embedded supports (dedicated program staff and introductory courses to build students' confidence), anti-bias teacher training, and open-door communication. Study results indicated a need for transparent, open, and comprehensible communication and increased collaboration between the college partner and school administrators, teachers, and parents to address and overcome equity barriers.

## Chapter 1: Introduction

Los Angeles County, California, is considered one of the most racially, ethnically, and economically diverse regions in the world (Mordechay, 2014). However, despite the diversity of the cities it serves, Southern California public schools, including those in Los Angeles County, are largely and increasingly segregated by race and socioeconomic status (Kucsera et al., 2015). According to Orfield et al. (2011), California school demographics have shifted since the 1970s to increasingly high levels of racial segregation between White and Asian students and Black and Latino students. In California, more than half of Black (50.8%) and Latino students (57.7%) attend schools that are 90%-100% students of color, the fourth and first highest rates in the nation, respectively (Frankenberg et al., 2019). As is consistent with national trends, Black and Latino students in California are also nearly twice as likely as White and Asian students to attend high-poverty schools that are doubly segregated by race and socioeconomic status (Orfield et al., 2012, p. 7; Orfield & Ee, 2014; U.S. Commission on Civil Rights, 2018). In California and across the nation, racial and socioeconomic segregation has persisted and, in some districts, increased regardless of the irrefutable benefits of integration (U.S. Government Accountability Office, 2022).

Attending diverse, integrated schools has demonstrated improved long-term benefits for students, including educational, economic, and health benefits (Johnson, 2011; Johnson & Nazaryan, 2019; Mickelson, 2001) and improved intergroup relations, critical thinking, and civic engagement (George & Darling-Hammond, 2021; Pettigrew & Tropp, 2006). However, despite integration's well-documented benefits, California's initiatives to address racial and socioeconomic segregation have been minimal (Kucsera et al., 2015; Orfield et al., 2011). California does not incentivize magnet programs (California Department of Education, 2021a),

and federal incentives are competitive and primarily voluntary, relying upon local school board actions (Mickelson et al., 2021). Southern California school districts with voluntary desegregation plans include San Diego, Los Angeles, Palmdale, and Pasadena, CA. These districts recently participated in the federally-funded Magnet Schools Assistance Program (MSAP), which provides grants for districts to reduce or eliminate racial segregation by establishing innovative magnet programs (Office of Elementary and Secondary Education, 2022a).

Magnet programs are public schools intentionally designed to promote racial diversity by attracting students within and across districts through a focus on a particular instructional approach or curricular theme, such as arts, dual language immersion, and early college (California Department of Education, 2021a). Since the 1970s, magnet schools and programs across the nation have used engaging, attractive curricula and a choice system to increase and diversify enrollment and improve school quality through increased resource investment, curricular diversity, and increased cross-cultural friendships (Ayscue et al., 2017; Caruthers et al., 2022; Goldring & Smrekar, 2000; Siegel-Hawley & Frankenberg, 2012). More recently, an emphasis on socioeconomic integration in magnet schools has also been encouraged through MSAP grant program priorities. To further school integration efforts, multiple researchers contend that districts should promote magnet programs to expand access to high-quality, integrated schools (Gándara & Aldana, 2014; George & Darling-Hammond, 2021; Orfield et al., 2011; Siegel-Hawley et al., 2012).

Core elements of effectively integrated schools include strong principals who promote culturally relevant, responsive, and sustaining pedagogies (Gay, 2018; Ladson-Billings, 1995; Paris & Alim, 2017); classes taught by diverse teaching staff; and school environments that



promote cross-cultural friendships, critical thinking, and cross-cultural awareness (Siegel-Hawley, 2020). These elements distinguish integrated school communities from desegregated schools, with an intentional focus on asset-based approaches to instruction and relationships within the school building, in addition to a demographically diverse student body. Benefits can include friendships among students from diverse racial, ethnic, cultural, and linguistic backgrounds, which may also reduce racism and other prejudices and prepare students to “succeed in an increasingly multicultural world” (Harris, 2022, p. 266). Well-integrated magnet schools can additionally promote social cohesion, improve school quality, and increase the positive perceptions of schools as magnets attract substantial economic and political reinvestment (Cucchiara, 2013; Mordechay et al., 2019).

### **Statement of the Problem**

As evidenced by decades of social science research regarding discriminatory practices and educational inequities, segregation harms all students, regardless of race or family income. Segregated, higher-poverty schools generally predict worse academic outcomes for students than lower-poverty schools due to disparities in access to opportunities and resources (Kucsera et al., 2015; Reardon et al., 2021; Riel et al., 2022; U.S. Government Accountability Office, 2022). Resource disparities include differences in class size and access to highly-qualified teachers and modernized facilities (Howard & Noguera, 2020). Additionally, segregated schools deprive students of daily opportunities for intercultural interactions, perspective-taking, and experiences that would otherwise prepare them to engage in diverse local and increasingly global communities. Amidst growing political polarization, new waves of immigration, and a reckoning of historical and systemic racism in the United States, intergroup relations and civic engagement

are benefits of integrated magnet schools that are necessary, now more than ever, for our U.S. democracy to thrive (Siegel-Hawley, 2020).

One promising model for magnet schools to achieve diverse enrollment while directly addressing equitable access to well-resourced schools with abundant opportunities and improved student outcomes is the dual enrollment magnet high school. According to Vargas and Hoffman (2021), “Students at early college high schools have the opportunity to earn up to two years of free college credits...are graduating at higher rates, completing college prep and college courses by graduation..., and entering and persisting in college” (p. 195). Early college high schools that offer dual enrollment, enrollment in college courses eligible for simultaneous high school and college credit, aim to improve college attendance and persistence rates for students, including students historically underrepresented in college (economically disadvantaged students; Black, Latino, and indigenous students; first-generation college students) by introducing college and a college-going environment in high school and ensuring access to advanced courses and post-secondary opportunities (Duncheon & DeMatthews, 2018; Martinez et al., 2022).

However, there are also tensions in establishing new magnet programs (Cucchiara, 2013; Mordechay, 2021; Roda, 2020). Concerns include the potential for tracking students into different classes within schools, thereby contributing to secondary segregation (Howard & Noguera, 2020); creating a two-tiered system between magnet schools and traditional public schools (Caruthers et al., 2022; Harris, 2022); and contributing to gentrification by marketing schools in predominantly low-income neighborhoods to socioeconomically advantaged families (Cucchiara, 2013; Mickelson, 2001; Roda, 2020). In light of these concerns, it is crucial to examine how school leaders establish and promote integration in magnet programs and the impact on students and communities.

Much of the existing research on effectively promoting integration and supporting students in integrating magnet schools focuses on desegregation or integration between Black and White students (Harris, 2022). Understanding this history and the impacts of Black/White segregation and desegregation efforts in the United States is important. There is further a need to understand how school leaders promote student integration in multiracial and multilingual settings, such as those in Los Angeles County (L.A. County). As shown in Table 1, population estimates compared to public school enrollment in L.A. County reveal the greatest enrollment discrepancies among socioeconomically disadvantaged, Latino, White, and Asian groups.

**Table 1**

*2021 L.A. County Population Estimates Compared to Public School Enrollment*

Ethnicity	Children Ages 5-17 <sup>a</sup> (%)	Public (Non-Charter) School Enrollment <sup>b</sup> (%)	Difference (%)
Hispanic or Latino	45.6	66.1	20.5
White	28.2	12.5	15.7
Asian	15.8	8.6	7.2
Black or African American	8.3	6.5	1.8
Two or More Races	1.8	2.9	1.1
Socioeconomically Disadvantaged	16.9 <sup>c</sup>	68.4 <sup>d</sup>	51.1

*Note.* This table illustrates the estimated difference between public school enrollment and the school-aged population in L.A. County for 2021. Differences for Native Hawaiian or Pacific Islander and American Indian or Alaska Native were 0.1%. <sup>a</sup> From: *Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2020 to July 1, 2021 (CC-EST2021-ALLDATA)*, by United States Census Bureau, 2021, (<https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-detail.html>). In the public domain.

<sup>b</sup> From: *2021-2022 Enrollment by ethnicity* [Data set by column percents, non-charter schools total for L.A. County], by DataQuest, 2022, (<https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthLevels.aspx?cds=19&aggllevel=county&year=2021-22>). In the public domain. <sup>c</sup> From: *SAIPE state and county estimates for 2020: Los Angeles County, California, poverty percent, Age 5-17 in families* [Data set], by United States Census Bureau, 2021, (<https://www.census.gov/data/datasets/2020/demo/saipe/2020-state-and-county.html>). In the public domain.

<sup>d</sup> From: *2021-22 Enrollment by subgroup for charter and non-charter schools: Los Angeles County report* [Data set by column percents], by DataQuest, 2022 (<https://dq.cde.ca.gov/dataquest/dqcensus/EnrCharterSub.aspx?cds=19&aggllevel=county&year=2021-22&ro=y>). In the public domain.

In L.A. County public schools, Hispanic or Latino students and socioeconomically disadvantaged students are overrepresented, and White and Asian students are underrepresented

in public, non-charter schools. Further study of integration efforts within local contexts in consideration of demographic shifts and students' intersectional identities may reveal important insights.

Additionally, research on the ways school leaders implement magnet programs is needed (Straubhaar & Wang, 2022). Straubhaar & Wang (2022) note insufficient research on the role of principals in magnet schools. According to Wang et al. (2021), "there has been relatively little focus on how magnet programs are implemented and what implementation factors are essential for and associated with positive outcomes," including how school leaders establish systems that challenge inequities and commit financial and other resources to close opportunity gaps between Black and Latino students and White and Asian students (p. 28; Gándara & Mordechay, 2017).

A similar research gap pertains to dual enrollment programs (Duncheon & DeMatthews, 2018). Duncheon and DeMatthews (2018) note that "little is known about the role of the principal [and it would be] beneficial to understand leaders' roles in facilitating the design and implementation of early college high schools and preparing historically underrepresented students for college success" (pp. 269-270). Further study is needed to consider how school leaders implement dual enrollment programs as these models continue to expand in California and across the nation. Wang et al. (2017) further assert the need to consider the implementation process alongside outcomes in assessing magnet programs. This study attempted to address this research gap by explaining how school leaders fostered equitable access to a high-quality dual enrollment program, including how they implemented effective integration practices amidst shifting demographics and addressed perceived barriers to meeting differing staff and student needs.

## Purpose

This single, mixed methods case study aimed to understand how school leaders implemented a new dual enrollment magnet program at a highly-segregated neighborhood school, West Cal High School<sup>1</sup>, in Southern California. West Cal High School presents an opportunity to understand how school leaders balanced the responsibilities of program promotion and student support as they facilitated progress toward the magnet's integration and academic achievement goals and how school leaders promoted an inclusive, equitable, and identity-affirming school culture as student demographics shifted, particularly amidst the tensions of implementing a new integration program in a neighborhood school. Therefore, the following research questions (RQ) and subquestions (SQ) were addressed:

- RQ1: What has changed at the school since the dual enrollment magnet program was implemented?
- RQ2: How did school leaders foster successful outcomes of the dual enrollment magnet program?
  - SQ2: How did school leaders facilitate:
    - SQ2a: ethnic, racial, and socioeconomic school diversity;
    - SQ2b: innovative curriculum and professional development;
    - SQ2c: academic excellence; and
    - SQ2d: family and community partnerships?
- RQ3: How did school leaders experience and address challenges to program implementation?

---

<sup>1</sup> Pseudonyms will be used for all names, places, and identifiable events to protect the district's and participants' privacy and confidentiality. Where public domain data may reveal the school name, the general source is cited.

- SQ3: How did school leaders experience and address challenges to fostering:
  - SQ3a: ethnic, racial, and socioeconomic school diversity;
  - SQ3b: innovative curriculum and professional development;
  - SQ3c: academic excellence; and
  - SQ3d: family and community partnerships?

### **Conceptual Focus**

Program implementation was explored through the lens of the five pillars of magnet schools (Magnet Schools of America, 2021). The pillars define key components of successful magnet schools: Leadership, Diversity, Innovative Curriculum and Professional Development, Academic Excellence, and Family and Community Partnerships. While these pillars framed what school leaders did to establish effective magnet programs, other theories informed why and how school leaders approached and managed change. The integration theory of choice was used to understand and explain the rationale for magnet programs and the academic benefits of attending well-resourced, integrated schools (Ayscue & Siegel-Hawley, 2019). Meanwhile, the idea of school leaders as cultural workers (Giroux, 2007; Roda, 2020) informed data analysis, emphasizing how leaders challenged and changed problematic systems and narratives to improve academic opportunities and outcomes for students.

### **Setting**

West Cal High School in Mesa Verde, CA, was an ideal setting for this study, serving as a microcosm for the tensions of school desegregation in the Western United States. The residential neighborhoods in and around the school are primarily segregated due to historical discriminatory mortgage lending and real estate practices, such as restrictive covenants,

blockbusting, and redlining that prevented people from particular racial groups (Black, Latino, Asian-American, and sometimes Jewish, Armenian, Italian, and Russian) from purchasing homes in predominantly "Caucasian" neighborhoods while encouraging White residents to sell their property as increasing numbers of people of color moved into a neighborhood (Caruthers et al., 2022; Rothstein, 2017). Additionally, resistance to court-ordered busing to integrate Mesa Verde schools in the 1970s prompted large numbers of White, middle-class families to flee the public school district to more than 50 private and charter schools and neighboring public districts to the East, West, and South (James, 2005). This exodus, termed White flight, had lasting impacts on school enrollment. For decades since, thousands of middle-class parents of school-age children residing in Mesa Verde Unified's boundaries have continued to opt out of the district's public school system, resulting in persistent socioeconomic and ethnic/racial segregation and, accordingly, decreased school budgets, which are state-allocated on a per-pupil basis.

While representatively diverse in its early years, White and middle-class flight ensued at West Cal High School between the 1950s and 1970s following a series of court challenges to de jure segregation, including the infamous *Brown v. Board of Education* decision in 1954. Additional local politics also impacted school demographics in West Cal and the Mesa Verde School District. For example, in 1958, a new high school, East Cal, was built in the predominantly White eastside region of Mesa Verde, a siting decision that drew students and resources away from West Cal (James, 2005). Then in 1960, residents of the predominantly White, middle and upper-class neighborhood of La Colina, a region zoned for attendance at West Cal High School, voted to form their own new public school district, drawing away enrollment of 800-900 students.

The secession of La Colina from the Mesa Verde school district necessitated redistricting of West Cal and East Cal boundaries. A local newspaper from the period captured the Board's declared value for integrated schools as the boundary committee considered how to reassign students to West Cal and East Cal high schools:

The [redistricting] committee has been keenly aware also of the policy adopted by the Mesa Verde Board of Education in June 1961, which recognizes that, within the best utilization of school plants and equipment, it is a desirable and educational objective to have the widest possible distribution of the various racial, ethnic, and cultural groups in each school. ('Ethnic distribution' of students recommended, 1963)

The demographics under consideration by the committee are noted in Figure 1. However, despite such deliberations, policies, declarations, and proposed plans at district, state, and federal levels to eliminate racial segregation among children, West Cal High School became increasingly segregated following La Colina's secession from the district and in the decades following.



**Figure 1**

*April 1963 Newspaper Clipping of Potential Redistricting Impacts*

*** <b>'Ethnic distribution' of students recommended</b> ***				
ETHNIC DISTRIBUTION AT TWO SENIOR HIGH SCHOOLS				
	Caucasian	Negro	Others*	Total Ethnic Minority
<b>1. Present Distribution</b>				
West Cal .....	72.3%	21.5%	6.2%	27.7%
East Cal .....	92.6%	2.7%	4.7%	7.4%
<b>2. After withdrawal of La Colina Students &amp; with Present Boundary</b>				
West Cal .....	61.9%	29.5%	8.6%	38.1%
East Cal .....	92.6%	2.7%	4.7%	7.4%
<b>3. After withdrawal of La Colina Students if Plan B is Adopted</b>				
West Cal .....	71.3%	20.3%	8.4%	28.7%
East Cal .....	89.5%	6.3%	4.2%	10.5%
* Including students with Spanish surnames				

*Note.* This figure illustrates the discrepancies in ethnic distribution between Mesa Verde's two high schools, West Cal and East Cal, prior to La Colina's split from the school district and the anticipated impacts on school demographics for each of the two proposed redistricting options following the split. From: *'Ethnic distribution' of students recommended*, by an unknown Mesa Verde newspaper, 1963. In the public domain.

Following La Colina's secession from MVSD, White student enrollment rapidly declined. By 1964, West Cal was 63.3% White, and by 1967 that percentage dropped to 55%. That same year the school board rescinded its proposed high school integration plan, prompting a legal suit and investigations by the Office for Civil Rights that would lead to Mesa Verde becoming the first city outside of the United States South to be ordered by the federal courts to desegregate its public school system. The ruling prompted the Mesa Verde Unified School District to integrate its schools via busing to achieve racial balance at each campus. Oppositional responses to the court order included anti-busing campaigns and increased White and middle-class flight to private schools and surrounding public school districts (Wicker, 1973).

Between 1970 and 1973, districtwide White enrollment further declined from 49.6% to 43.6% in elementary schools and 58.2% to 50.1% in secondary schools (Wicker, 1973). By the

time Mesa Verde's desegregation order ended in 1980, the total percentage of White students enrolled in Mesa Verde School District was 29% (Trombley, 1986). While some shifts were attributable to migration and declining birth rates, White flight remained a driving factor.

After Mesa Verde's court order ended in 1980, de facto segregation continued (James, 2005). Since then, West Cal High School has undergone several large-scale changes to address student achievement and segregation, including a reconstitution in 2008 and a school-wide dual enrollment magnet program in 2017. Today, West Cal High School's demographics are representative of many public schools in the United States, serving a large number of students from historically marginalized groups, including a disproportionately high percentage of Black and Latino students and socioeconomically disadvantaged students.

### **Role of the Researcher**

Researchers cannot be purely objective since social structures shape people's experiences (Duffy & Chenail, 2008). Thus, the researcher's perspectives as a White, cisgender, middle-class female who attended suburban, public, integrated schools may have impacted this study's data collection approach and analysis. The researcher's professional positionality was also relevant, having served as a person responsible for district-level magnet programs and as a public school teacher for more than ten years. The nature of the researcher's employment provided beneficial access to data that might otherwise be burdensome. However, this professional relationship also presented additional challenges to limiting bias. Therefore, additional measures to mitigate bias were necessary, including identifying this positionality and participating in reflective journaling to challenge personal perspectives and assumptions (Creswell & Creswell, 2017).

The researcher's role was fully disclosed to prospective participants to protect human subjects and eliminate any possible or perceived risks. Participation was strictly voluntary, and

only participants who were not professionally associated in any supervisory or evaluative capacity were invited to participate. Participation in this study and the data collected had no impact on the dual enrollment magnet program evaluation or district staff evaluations. Further, the study took place outside of students' instructional time to prevent any impact on students' learning.

### **Significance of the Study**

This study sought to contribute to a growing body of research on the role of school leaders in implementing magnet programs as they aim to promote student integration and foster equally high academic outcomes for all students. Findings from this study may help practitioners understand how leaders promoted, planned, and implemented a dual enrollment magnet program in Southern California and aid researchers in the development and design of future studies to investigate the effectiveness of equitable access and student support strategies in dual enrollment magnet high schools. The focus on a magnet school with a dual enrollment theme was also particularly significant and timely as California's recent legislation expanded student access to dual enrollment, promoted partnerships between community colleges and high schools, and authorized local educational agencies to apply for funding to promote outreach and expand early college high school programs (AB-288 College and Career Access Pathways Partnership Agreement, 2015; AB-30 Community colleges: College and Career Access Pathways partnerships, 2019; AB-2617 Pupil instruction: dual enrollment programs: competitive grants: College and Career Access Pathways partnerships: best practices: communication and marketing strategy, 2022). Congressional spending for the Magnet Schools Assistance Program also recently increased (Office of Elementary and Secondary Education, 2022a), offering more

districts the opportunity to promote and establish thematic programs, such as early college magnets, that intend to increase student integration and academic achievement.

### **Definition of Terms**

The following terms were used throughout this study:

**Achievement Gap.** Achievement gaps are the predictable disparities in measures of academic achievement caused by structural inequities (Blatt & Votruba-Drzal, 2021; Reardon et al., 2021). These gaps are also frequently referred to as “opportunity gaps” to emphasize the role of systems in contributing to disparities in student achievement by perpetuating disparate access to resources and opportunities (Milner, 2012, p. 693).

**De Jure Segregation.** State-mandated segregation, as ordered by laws requiring separate facilities for different racial groups (Wells & Frankenberg, 2007).

**De Facto Segregation.** Segregation by personal choices or practices (Wells & Frankenberg, 2007).

**Desegregation.** “The elimination, reduction, and prevention of minority group isolation in elementary and secondary schools with substantial numbers of minority group students” (Office of Elementary and Secondary Education, 2022b). Minority group isolation is further defined as “a condition in which minority group children constitute more than 50 percent of the enrollment of the school” (U.S. Department of Education, n.d., p. 2). Social scientists developed the term “minority group” during the 19th and 20th centuries to encompass groups who face collective discrimination. This term is notably insufficient to recognize people’s intersectional identities or address systemic factors contributing to inequalities (Meyers, 1984).

**Early College.** “Early colleges partner with colleges and universities with the expectation that all students attending will earn an associate’s degree or up to two years of college credit during high school at low or no cost to their families” (Song et al., 2021, p. 117). When these programs are located on a college campus, they may be termed middle college high schools (California Department of Education, 2021b). Early colleges have historically been small and have used selective entry requirements (Jett & Rinn, 2020, p. 81).

More recently, the thousands of early college high schools in the United States have varied in entrance criteria, size, location, and structure (Berger et al., 2010). Commonalities of today’s early colleges include a partnership with a local college and an environment that fosters college preparation and “unique college opportunities” (Jett & Rinn, 2020, p. 81).

**Dual Enrollment.** The dual enrollment model is a type of early college program. According to Song et al. (2021), “Dual enrollment is generally defined as students’ participation in college-level courses that count for credits at both the secondary and postsecondary levels” (pp. 116-117). Dual enrollment is intended to increase postsecondary educational opportunities for disadvantaged students, so these programs generally include robust student supports in a rigorous environment (Edmunds et al., 2012; Song et al., 2021). The early college program at West Cal High School exemplifies a dual enrollment model; therefore, this manuscript uses the terms dual enrollment and early college interchangeably. As a whole-school dual enrollment model, students at West Cal are encouraged and supported to successfully earn significant college credits, which may or may not result in an associate’s degree.

**Educational Leaders as Cultural Workers.** A critical theory that views school leaders as potential advocates who have the power to critique and change systems to impact societal change (Giroux, 2007; Roda, 2020).

**Equity.** Equity in education means ensuring all students can access the opportunities and resources they need to reach equal academic outcomes (American Institutes for Research, 2021). As described by Elena Aguilar (2020), equity means:

Every child gets what they need in our schools- regardless of where they come from, what they look like, who their parents are, what their temperament is, or what they show up knowing or not knowing. Every child gets what he, she, or they needs every day in order to have all the skills and tools to pursue whatever they want after leaving our schools, to live a fulfilling life. Equity is about outcomes and experiences- for *every child, every day*. (p. 373)

**Ethnicity.** “A group of people who share a common or distinct ancestry and cultural practices, generally according to a geographic region and often with psychological attachment” (Aguilar, 2020, p. 373).

**Latino.** Hispanic or Latino includes individuals who identify with nationalities or ethnicities “originating in Mexico, Puerto Rico, Cuba, Central and South America, and other Spanish culture, [including but not limited to] Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, and Colombian [and] Guatemalan, Honduran, Spaniard, Ecuadorian, Peruvian, [and] Venezuelan” (United States Census Bureau, 2022b, para. 9).

Latino, rather than Hispanic, was used throughout this study due to its greater inclusivity of mixed-race and indigenous people. Latinx was also preferred to Hispanic as a term

more inclusive of non-binary people. However, Latino was ultimately used due to criticisms that Latinx is not widely used or accepted among working-class Spanish speakers (García, 2020).

**Gentrification.** The process whereby an influx of middle-class residents (often White) move into traditionally working-class communities of color (Mordechay & Ayscue, 2020).

**Implementation.** The design, application, or operation of program activities. According to Fullan (2001), school leaders implementing a change program would ideally plan for and support practical needs, provide feedback and ongoing professional development opportunities, set consistent and clear expectations, and assess implementation through frequent and accurate monitoring with follow-up support. Fixen et al. (2005) purport that implementation activities must be clearly defined in such detail that observers can detect and measure their strength or effectiveness. These definitions as applied to magnet schools are corroborated by Walton et al. (2018), who agree that implementation is an “operational stage [in which] theme-based magnet strategies, activities, and practices become completely integrated into the school’s organizational structures and services” (p. 19). Implementation fidelity can be measured to support improvement goals (Walton et al., 2018).

**Integration.** The process of becoming more heterogeneous (Moody, 2001). While *desegregation* may address reduced ethnic, racial, and socioeconomic isolation within a school building, *integration* connotes interaction among students from diverse backgrounds.

**Integration Theory of Choice.** Desegregation through regulated school choice to achieve societal benefits (Ayscue et al., 2018; Johnson & Nazaryan, 2019).

**Magnet Schools.** Schools that use an attractive program to increase and diversify enrollment and improve school quality (Ayscue et al., 2017; Goldring & Smrekar, 2000; Siegel-Hawley & Frankenberg, 2012).

**Marketization.** Promoting “market principles as the solution” to educational problems (Cucchiara, 2013, p. 53).

**Neighborhood School.** A school to which a child is assigned based on designated attendance boundaries or zones.

**Race.** As defined by Ray (2019), race is “constructed relationally via the distribution of social, psychosocial, and material resources” (p. 29). Aguilar (2020) further elaborates on the construction of race as it relates to false assumptions that aim to legitimize racism and its harms.

Race- A socially constructed phenomenon based on the erroneous assumption that physical differences such as skin color, hair color and texture, and facial (or other physical) features are related to intellectual, moral, and cultural superiority.

Although race is a socially constructed concept, it has a significant impact on the lives of people of color. (pp. 374-375)

According to the U.S. Census Bureau (2022a), the collection of racial data is:

required for many Federal programs and is critical in making policy decisions, particularly for civil rights. States use these data to meet legislative redistricting principles. Race data also are used to promote equal employment opportunities and to assess racial disparities in health and environmental risks. (para. 2)



***American Indian or Alaska Native.*** “A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment” (United States Census Bureau, 2022a, para. 4).

***Asian.*** “A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam” (United States Census Bureau, 2022a, para. 5).

***Black.*** A “person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as ‘Black or African American,’ or report entries such as African American, Kenyan, Nigerian, or Haitian” (United States Census Bureau, 2022a, para. 3). The term Black was used throughout this paper, as opposed to African American, since some individuals prefer the term Black as they do not self-identify as either African or American.

***Hawaiian or Other Pacific Islander.*** “A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands” (United States Census Bureau, 2022a, para. 6).

***Two or More Races.*** “For the first time in Census 2000, individuals were presented with the option to self-identify with more than one race, and this continued with the 2010” (United States Census Bureau, 2022a, para. 8).

***White.*** “A person having origins in any of the original peoples of Europe, the

Middle East, or North Africa. It includes people who indicate their race as ‘White’ or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian” (United States Census Bureau, 2022a, para. 3).

**Racism.** “A system of structuring opportunity and assigning value based on phenotype (‘race’) that: unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, undermines realization of the full potential of the whole society through the waste of human resources” (Jones, 2002, p. 10). As perpetuated by schools and other institutions, racism is systemic or institutionalized, expressed in White dominant culture centered around White norms, and rooted in White supremacy, “the mindset and belief system of white superiority that has become institutionalized in policy” (Aguilar, 2020, p. 7).

**Segregation.** According to Ray (2019), “segregation is a schema limiting (or granting) access to material and social resources” (p. 32).

**School Leaders.** The phrase “school leaders,” as used throughout this study, is intended to be inclusive of the principal, teacher leaders, assistant principals, counselors, and parent leaders who are regarded as decision-makers, policy-makers, or key influencers of school culture. At times, there is a need to emphasize the activities or perceptions of a particular role or group, in which case intentional specificity is used to articulate the type of leader (principal, administrators, teachers, parents, counselors).

**Secondary Segregation.** Segregation within schools via classroom assignments (Lucas & Berends, 2002).

**Social Capital.** The benefit of economic resources resulting from social relationships (Coleman, 1988).

**Socioeconomically Disadvantaged.** Students in this subgroup are those identified as eligible for free or reduced-price meals; or foster, homeless, or migrant youth; or whose parents have not received a high school diploma (California Department of Education, 2022a).

**White Flight.** A phenomenon “wherein white families relocate to suburban districts or send their children to private schools in order to avoid desegregation” (Zhang, 2011, p. 1208).

With changes in history, politics, and societal norms, terms and their meaning evolve. While the intended use of terms was noted here, they are limited, imperfect, and context-dependent. Other variations of these terms may also appear where other authors were directly quoted.

### **Chapter Summary**

This chapter introduced the study, including its purpose and significance. Chapter 2 outlines the historical context of U.S. school desegregation, discusses the study’s conceptual framework, and reviews the current literature on elements of effective magnet schools and common practices in early college programs. Chapter 3 describes the rationale and approach to the study’s methodology, research design, and procedures. Chapter 4 summarizes the study findings, and Chapter 5 presents an analysis of results as interpreted through the lens of the study’s conceptual framework.

## Chapter 2: Literature Review

As various school choices (private, charter, magnet, and other public schools) continue to be prevalent in the educational landscape, dual enrollment magnet schools provide a promising educational model that promotes increased school diversity and challenging academic instruction. Thus, it is critical to understand how school leaders develop and implement such early college magnet programs while focusing on equity goals.

This literature review provides the historical context of school desegregation as shaped by major U.S. court cases leading up to the establishment of magnet schools, the federal Magnet Schools Assistance Program, and early college programs. Next, the review discusses the conceptual framework for this study, as organized by the five pillars of magnet schools (Magnet Schools of America, 2021), which define elements of successful magnet implementation. The conceptual framework was also informed by the idea of school leaders as cultural workers (Giroux, 2007; Roda, 2020), the integration theory of choice, and other related theories. These frameworks and theories represent how school leaders may implement structures and practices to build more equitable student programs. Finally, this review delves deeper into the existing literature on the successes and challenges of promoting integration and academic achievement in magnet schools, including research on the early college magnet theme and factors contributing to student success in dual enrollment programs.

The literature surveyed for this review included current books that presented research on school integration, magnet schools, and the marketization of schools. Recurring themes and frequently cited authors across texts were noted. Next, peer-reviewed articles based on frequently occurring themes and frequently cited authors were collected from educational and social science databases, including Academic Search Complete, JSTOR, EBSCOhost databases, ERIC, Taylor

& Francis Social Science & Humanities Library, and Sage Journals Online. Search terms included: *school integration, desegregation, racial integration, socioeconomic integration, magnet schools, social capital, early college, and dual enrollment*. The term *school choice* was also used in combination with other terms, including *magnet schools, criticism, marginalization, trends, gentrification, geography, leadership, parents, policy, and resource allocation*. Following are the results of this comprehensive survey of the literature, starting with the historical context of desegregation efforts in the U.S.

### **Historical Context**

The policy tools that school districts can use to promote racial and socioeconomic integration are supported or limited by historic court findings. For example, the judicial ruling in *Brown v. Board of Education of Topeka* (1954), followed by the Civil Rights Act of 1964, led to the end of de jure segregation in the U.S. Decades later, the decision in *Parents Involved in Community Schools v. Seattle* (2007) limited the use of race-based school assignment policies to desegregate schools (Smrekar, 2009). The following is a review of significant federal and state court cases that have impacted school desegregation efforts in California and across the U.S.

### ***Influential Court Rulings***

**Pre-Brown.** During Reconstruction, Black Codes and Jim Crow laws legalized separate facilities by race. These legal restrictions “restricted African Americans’ access to economic, social, and political autonomy” (Kafka & Matheny, 2022, pp. 35-36; Webster & Quinton, 2010). One example was Louisiana’s Separate Car Act (1890), which required separate train cars for Black and White patrons. Homer Plessy, a man of mixed descent with one African-American great-grandmother, was arrested for refusing to vacate a White train car. Despite the passage of the 14th Amendment (U.S. Const. amend. XIV), which granted citizenship and equal protection

of the laws to formerly enslaved people, the Court upheld state-sanctioned segregation in their 7-1 *Plessy v. Ferguson* (1896) decision. Under the “separate but equal” doctrine, separate facilities by race, if equal, were deemed constitutional. As a result, the *Plessy* verdict further legitimized Jim Crow laws and segregated public spaces, including segregated schools, which continued to be commonplace (Bourdier & Parker, 2021; Caruthers et al., 2022; George & Darling Hammond, 2021; Kafka & Matheny, 2022).

From San Francisco to San Diego, some of the first successful challenges to *Plessy* ideology and de jure school segregation took place in California. Seventy years before the historic *Brown v. Board* (1954) ruling that ended legalized segregation in the United States, Asian, Black, Latino, and Indigenous parents of California schoolchildren were fighting for equal rights to send their children to nearby, well-resourced public schools instead of the underfunded public schools to which their children were customarily assigned based on race, ethnicity, or ancestry.

One of California’s earliest desegregation cases was *Tape v. Hurley* (1885). Mary Tape, a Chinese-American immigrant, defended her daughter Mamie’s right to attend her local neighborhood school in San Francisco, CA, rather than attend a separate school designated for children of Chinese descent. The *Tape* ruling determined that children could not be denied public school enrollment under 14th Amendment protections. However, the Court’s decision fell short of prohibiting separate schools based on race. Nevertheless, this critical decision recognizing students’ rights to attend public schools laid the foundation for later court cases that would expand on the *Tape* decision and eventually find school segregation unconstitutional.

Further south in Central California, Alice Piper and six other students were denied enrollment in their neighborhood public school based on their Native American heritage. The

children's families similarly resisted this exclusion through successful legislative action (Blalock-Moore, 2012; *Piper v. Big Pine School District of Inyo County*, 1924). The Court's unanimous decision in the *Piper* case cited the unequal quality of the underfunded "Indian" school as one compelling reason that further challenged separate but equal ideology.

Exclusionary practices that relegated students of color to underfunded, segregated schools were also pervasive throughout Southern California through the establishment of "Mexican schools." In cities from Pasadena to Los Angeles and San Diego from the 1930s through the 1950s, students of Mexican-American descent were frequently assigned to attend schools in inadequate buildings with inferior instructional programs aimed at assimilation.

In one such case of exclusion and marginalization in San Diego County, deemed *The Lemon Grove Incident*, a local school board built a separate school for Mexican-American elementary students as a solution to the overcrowding of the Lemon Grove Grammar School. Parents dubbed this new school "La Caballeriza" (The Barnyard), signifying the new facility's deplorable conditions. Academic programs in California's Mexican schools were equally inadequate. For example, Pasadena, California's two Mexican schools ended instruction after eighth grade, and the city's secondary schools typically funneled Mexican-American as well as Japanese and African American students into vocational programs that aimed to prepare students for lower-paying domestic service jobs. In contrast, wealthier White male students were encouraged to attend college, and working-class White male students were typically tracked into vocational programs with carpentry, masonry, and plumbing trades (James, 2005).

Parents of excluded children used subtle forms of resistance and more explicit collective action through neighborhood meetings, media reach, and legislative means to resist discriminatory school segregation (James, 2005; Madrid, 2008). In the case of Lemon Grove,

legal resistance succeeded, and the Court demanded that the students be reinstated to their neighborhood elementary school (Madrid, 2008).

The *Mendez v. Westminster* (1946) case also legally and successfully challenged school segregation (Fennimore, 2017; Kucsera et al., 2015). Sylvia Mendez was denied enrollment in her local California public school, which was designated for "Whites only." Her father pursued a successful class action suit in which federal justices deemed it a violation of California's state constitution to exclude Mexican-American students from attending schools in their neighborhood zones. In addition to successfully challenging the constitutionality of segregation, these and other such cases exemplified the resistance capital (Yosso, 2005) of students, families, and community members in marginalized groups to defy educational inequalities.

The *Mendez* case was also historic as it led to the end of de jure school segregation in California and reflected the power of collective action to repeal segregation laws among citizens and organizations. The Attorney General, the NAACP, the Japanese Americans Citizens League, the American Jewish Congress, the ACLU, and the National Lawyers Guild all filed amicus curiae briefs in the case (Sadler, 2014). The NAACP, for example, leveraged its growing political power to launch its antiracist school campaign and filed suits to end practices that perpetuated segregation, such as race-based school transfer policies that permitted White families to avoid multiracial schools (James, 2005).

***Brown v. Board of Education of Topeka (1954)***. Legal resistance to unjust school conditions continued to gain momentum through court decisions. The most infamous ruling challenging racial segregation in schools is *Brown v. Board of Education of Topeka* (1954). The court's unanimous ruling in *Brown* was a culmination of five cases from states across the U.S.: *Belton v. Gebhart* (1952), *Briggs v. Elliott* (1952), *Davis v. County School Board of Prince*



*Edward County* (1951), *Bulah v. Gebhart* (1952), and *Bolling v. Sharpe* (1954; Caruthers et al., 2022; Ladson Billings, 2004). The *Brown* Court determined that separate facilities for students were inherently unequal and violated the Fourteenth Amendment's Equal Protection Clause, overturning the longstanding 1896 *Plessy* decision. A year later, the *Brown II* (1955) ruling decreed that school desegregation should begin "with all deliberate speed," a conscious and careful pace (*Brown v. Board of Education of Topeka II*, 1955).

While this ruling ended de jure segregation nationwide, enforcement was deliberately slow and minimal (Bourdier & Parker, 2021; Honey & Smrekar, 2022; James-Gallaway, 2022; Peters, 2019). In California and across the country, segregated schools persisted long after the *Brown* ruling. For example, in 1963, federal courts found that the Pasadena City School Board intentionally gerrymandered school boundaries to segregate White and Black students in the face of opposition to rezoning by certain White neighborhood associations, who argued that multiracial schools would decrease their property values (*Jackson v. Pasadena*, 1963; James, 2005). Amidst this kind of resistance and backlash, enforcement of the *Brown* ruling "would require passage of the Civil Rights Act of 1964, prohibiting discrimination in any school district receiving federal funds" (Honey & Smrekar, 2022, p. 602). By leveraging federal funding, the Civil Rights Act of 1964 effectively accelerated the integration of public spaces, including public schools. The Act provided local and national civil rights leaders with the necessary authority to seek enforcement of desegregation.

However, even with increased enforcement, segregation took on other forms. According to Ray (2019),

Following *Brown*, segregation did not disappear; rather, the schema of segregation was expressed via organizational resources in new ways, such as tracking programs that

internally segregated students and the development of “segregation academies” as White parents enrolled their children in private schools. (p. 34)

As described by Ray (2019), de jure segregation made way for de facto segregation, which produced the same results (Wells & Frankenberg, 2007).

Additionally, harm was inflicted by the manner in which *Brown* was implemented (Ladson-Billings, 2004). During the desegregation era, many Black schools, for example, were deemed inferior and closed, and many Black teachers and principals were fired or demoted to other roles (Peters, 2019). In addition to personal and economic losses to Black educators, “One unintended outcome from [the *Brown*] ruling is the subtext that Black teachers and leaders are dispensable, rather than invaluable, to the education of Black children” (Peters, 2019, p. 524). Caruthers et al. (2022) documented interviewees’ memories of attending desegregating schools in Kansas City, echoing these concerns of secondary segregation and experiences of anti-Blackness.

Desegregation post-*Brown*, while often attributed to remedying school segregation, in some ways failed to ensure sustained integration or accessible, high-quality public education. According to participants in the Caruthers et al. (2022) study, parents became disenchanted with integration as Black and White students were assigned to different teachers and recess times, Black students were provided longer recess times to displace them from classrooms, and Black students were more frequently referred to special education programs or for disciplinary actions due to educators’ cultural biases and differing expectations for cultural communication (Caruthers et al., 2022). Interviewees in Caruthers et al.’s (2022) study also expressed a “sense of loss in the African American community,” including the loss of Black principals and teachers, the loss of time students experienced as they often had to travel farther to attend integrated

schools, and the loss of “teachers’ communication of care” (Caruthers, 2022, pp. 40-41; Peters, 2019). These and other such consequences reveal important considerations in designing integration programs, including opportunities for meaningful student interaction, staff training in culturally responsive classroom and administrative policies and practices, hiring and retention practices that promote diverse teaching and administrative staff, and siting decisions that examine and equitably address the burden of transportation.

**Post-Brown.** Despite its shortcomings, *Brown v. Board* and the passage of the Civil Rights Act of 1964 paved the way for desegregation orders across the nation. Southern California was no exception. One such California mandate was the 1970 *Spangler v. Pasadena City Board of Education* ruling, which ordered the Pasadena school district to take measures to achieve racial balance at each campus after years of gerrymandering school boundaries and failed open enrollment policies (James, 2005). Nearby, the second largest school district in the U.S., Los Angeles Unified (LAUSD), also had a mandatory court order to desegregate its schools (*Crawford v. Board of Education*, 1976). Further, the state passed the Bagley Act (1971), requiring school officials to pursue integration (Koenig, 2018).

However, as busing and intentional integration efforts garnered support, so did resistance to integration. California’s Bagley Act was quickly repealed. Desegregation plans were weakened and ultimately abandoned as court orders became outdated. Courts did not hold districts accountable for adjusting plans into perpetuity as school demographics shifted (*Crawford v. Los Angeles Board of Education*, 1982; *Pasadena City Board of Education v. Spangler*, 1976). As court orders were lifted, many schools previously under mandatory desegregation orders continued to have demographics reflective of and attributed to White flight and de facto segregation.

Push-pull patterns of court desegregation orders and resistant responses continued throughout the decades following *Brown*, making way for later court decisions that increasingly encouraged voluntary integration via magnet schools. For example, in 1971, *Swann v. Charlotte-Mecklenburg Board of Education* affirmed the role of the Courts in remedying segregation. According to Godwin et al. (2006), “The historic 1971 *Swann v. Charlotte-Mecklenburg [CMS] Board of Education* decision ordered that every school’s ethnic makeup should closely mirror the proportions of African American and non-African American students in the district. CMS used mandatory busing to achieve that outcome” (p. 984). Unfortunately, new restrictions subverted *Swann* by prohibiting the use of federal grant funds for busing to achieve integration (George & Darling-Hammond, 2021; Mickelson, 2001).

In response, Charlotte-Mecklenburg Schools created choice-based magnet school programs with race-conscious admissions. As explained by Godwin et al. (2006), “After 1992, one-third of CMS schools became either full or partial magnets, and each magnet had a quota of Anglo and African American students” (p. 984). Race-conscious assignment plans were intended to achieve diversity reflective of the district community through regulated choice.

Other court decisions would also inadvertently or directly influence the growth of magnet schools. One such example is the verdict in *Milliken v. Bradley* (1974). The Court’s ruling in this Detroit case limited desegregation plans that crossed district boundaries. This decision prevented districts from using plans to bus students across district lines, even when White flight to neighboring districts was a contributing factor to segregation (Blatt & Votruba-Drzal, 2021). According to Blatt and Votruba-Drzal (2021), the outcome of *Milliken v. Bradley* (1974) made magnet schools a critical voluntary desegregation tool since magnet schools could encourage

desegregation by choice. Magnet schools could continue to permit intradistrict and interdistrict attendance, even in regions where mandatory busing was unpopular or illegal.

The Courts also recognized magnet schools as a viable method for desegregation in response to the ruling in *Morgan v. Kerrigan* (1976; Scott, 2021) and *Sheff v. O'Neill* (1996).

*Morgan v. Kerrigan* (1976) recognized the ability of magnet schools to attract diverse enrollment via voluntary transportation (Brooks, 2021; Brown & Hunter, 2006). Twenty years later, magnets were also the remedy to the verdict in *Sheff v. O'Neill* (1996). This Connecticut case demonstrated the importance of interdistrict desegregation plans, such as voluntary programs that enabled students among multiple different districts to attend magnet schools via a choice system to reduce racial and socioeconomic isolation (Schneider et al., 2022).

In response, Connecticut created a system of interdistrict magnet schools. Interdistrict magnets are one consideration for segregated districts that need to foster broader geographic collaboration to achieve desegregation (Eaton, 2008). While interdistrict magnets can effectively increase student integration within those schools, impacts on surrounding neighborhood schools are not widely researched, and interdistrict agreements between districts may also be difficult to achieve politically and financially.

***Parents Involved in Community Schools v. Seattle (2007)***. While magnet schools gained momentum as a voluntary integration strategy, legal challenges to school choice assignment policies impacted how magnet schools could enroll and assign students. Before 2007, districts, including those in Louisville and Seattle, had been using race-conscious student assignment policies to ensure diverse enrollment, such as allocating a certain percentage of seats for students representative of different racial groups to prevent or reduce racial segregation (Frankenberg et al., 2008; Scott, 2021). However, the Court ruling in *Parents Involved in Community Schools v.*

*Seattle* (2007; *PICS*) determined that race-based assignment policies violated the Equal Protection Clause of the Fourteenth Amendment, effectively limiting most districts from using race as a factor in school enrollment assignments going forward. Justice Kennedy, the deciding vote between a divided court, concluded,

This nation has a moral and ethical obligation to fulfill its historic commitment to creating an integrated society that ensures equal opportunity for all its children. A compelling interest exists in avoiding racial isolation, an interest that a school district, in its discretion and expertise, may choose to pursue. Likewise, a district may consider it a compelling interest to achieve a diverse student population. Race may be a component of that diversity, but other demographic factors, plus special talents and needs, should also be considered. What the government is not permitted to do, absent a showing of necessity not made here, is to classify every student on the basis of race and to assign each of them to schools based on that classification. (*Parents Involved in Community Schools v. Seattle, 2007, Part C. p. 1*)

In his dissent, Justice Breyer countered that the courts had a compelling interest in supporting race-conscious assignment policies, given the historical complexity of school integration and increasing resegregation when desegregation policy, “does not burden one race but benefits all... and does not separate but brings people together” (B. E. Butler, 2017, p. 166). According to B. E. Butler (2017), the *PICS* decision demonstrated a reverse shift in the Court’s support for integration policy, with new guidance more reflective of *Plessy* than *Brown* ideology. This ruling limited how districts could legally promote racially diverse enrollment in schools.

The remaining tools available to districts to achieve racial integration post-*PICS* were dubbed “Kennedy’s Remedies,” as Justice Kennedy opined that districts were “free to devise

race--conscious measures to address the problem in a general way and without treating each student in a different fashion solely on the basis of a systematic, individual typing by race”

(*Parents Involved in Community Schools v. Seattle Public School District No. 1*, 2007, p. 7).

Such general remedies include targeted outreach and recruitment strategies, redrawn attendance boundaries, additional funding for special programming, and strategic placement of new schools and programs (Honey & Smrekar, 2022). Today’s magnet leaders continue to use one or more of these strategies.

As summarized in Table 2, the courts have had a strong and shifting influence on school desegregation throughout the past century.

**Table 2**

*Influential State and Federal Court Rulings*

	Impacts
Pre-Brown	<ul style="list-style-type: none"> <li>● Right to public education (<i>Tape v. Hurley</i>, 1885)</li> <li>● Legalized separate facilities by race (<i>Plessy v. Ferguson</i>, 1896)</li> <li>● Resistance &amp; successful legal challenges to segregated schools in CA (<i>Piper v. Big Pine School District of Inyo County</i>, 1924; <i>Mendez v. Westminster</i>, 1946)</li> </ul>
Brown	<ul style="list-style-type: none"> <li>● Legalized segregation across the nation overturned (<i>Brown v. Board of Education of Topeka</i>, 1954)</li> <li>● Desegregation with “deliberate speed” (<i>Brown II</i>, 1955)</li> </ul>
Post-Brown	<ul style="list-style-type: none"> <li>● Desegregation orders across the nation, mandatory busing (<i>Spangler v. Pasadena City Board of Education</i>, 1970; <i>Swann v. Charlotte-Mecklenberg Board of Education</i>, 1971; <i>Crawford v. Board of Education</i>, 1976)</li> <li>● Limits to interdistrict efforts (<i>Millikan v. Bradley</i>, 1974); easing criteria to end mandatory plans (<i>Oklahoma City v. Dowell</i>, 1991)</li> <li>● Shifts to voluntary resolutions (<i>Sheff v. O’Neill</i>, 1996)</li> <li>● Limits to race-conscious controlled choice (<i>Parents Involved in Community Schools v. Seattle</i>, 2007)</li> </ul>

While legal remedies continue to exist, mandatory desegregation orders have largely declined. For example, in 1979, California voters passed Proposition 1, effectively ending desegregation busing and mandatory student assignments unless the courts found intentional segregation (*Crawford v. Board of Education*, 1980). The federal ruling in the *Board of Education of Oklahoma City v. Dowell* (1991) also resulted in unitary status for many districts previously operating under mandatory desegregation orders by easing criteria for districts to demonstrate their good faith attempts to eliminate de jure segregation. Together these cases left the issue of integration in California and most of the U.S. as a largely voluntary endeavor.

However, other more recent California cases serve as a reminder that courts may still consider the implications or new imposition of judicial orders. For example, in LAUSD, the precedence of a mandatory desegregation order supported the court's ruling that the district's magnet schools could consider race in magnet admissions (*American Civil Rights Foundation v. Los Angeles Unified School Dist.*, 2008). More recently, in 2019, the Sausalito Marin City School District in Northern California was assigned a mandatory order to desegregate its two K-8 schools, the first order of its kind in 50 years (Rainey, 2019). These cases demonstrate the possibility of ongoing court intervention to support eliminating or reducing minority group isolation. Regardless of whether a desegregation plan is voluntary or mandatory, legislators and school leaders must reflect on best practices and anticipate challenges to achieving the vision of equitable, integrated schools that promote academic excellence for all students.

### ***History of Magnet Schools***

The first magnet schools designed to achieve desegregation were McCarver (1968) in Washington state and Trotter (1969) in Massachusetts (George & Darling-Hammond, 2021; Waldrip, 2021). Other schools of choice that drew diverse enrollment through a thematic focus



were piloted across the U.S. in the late 1960s and early 1970s. By 1975, the word “magnet” was used intentionally to describe the power of a thematic focus to attract students and the possibility of federal funding to support magnet schools (Waldrip, 2021). Soon after, federal funding became available to develop and implement magnet programs.

The Magnet Schools Assistance Program (MSAP), established in the 1980s to address de facto segregation, provides multimillion-dollar federal grants to school districts and local educational agencies to create magnet schools. To qualify for MSAP funding, schools must operate under a mandatory or voluntary desegregation plan, as the primary purpose of the grant is to eliminate, reduce, or prevent “minority group isolation in elementary and secondary schools with substantial numbers of minority group students” (Office of Elementary and Secondary Education, 2022b, para. 1). The number of districts that applied for federal funding to establish magnet schools grew dramatically in the program's first years, and by the early 1980s, districts offered more than 100 magnet programs across the U.S. (Steel & Levine, 1994; Straubhaar & Wang, 2022). To date, the program has awarded approximately \$3 billion to support the establishment of desegregative magnet schools (Brooks & Pack, 2021). This significant financial incentive for districts promoted the increased development of magnet schools that encouraged integration through choice and innovation.

Today, magnet schools have increased in popularity and number amidst the growing importance of choice in the U.S. political landscape (Riel et al., 2022); although many magnets have more recently been created without a desegregation focus (Siegel-Hawley & Frankenberg, 2013). With approximately 4,430 magnet schools, U.S. magnets make up the largest form of public school options in a choice-based system (Scott, 2021; Siegel-Hawley & Frankenberg, 2012). According to Scott (2021), California has more magnet schools than any other state in the

U.S., totaling 473. Given the regulatory climate and the long-term benefits of integration on student outcomes, magnet schools remain a viable and prominent desegregation strategy in California schools.

### ***History of Early College Programs***

Early college emerged as a magnet school theme in the 2000s. However, the theme is rooted in a long tradition of educational models that enabled teens to take higher education courses. For example, 2-year junior colleges that bridged secondary and postsecondary educational programs began in the early 1900s (Walk, 2020). Then in the late 1960s, a Massachusetts-based college, Simon’s Rock, experimented with the idea of early admittance to college, establishing itself as a private, “residential college for 16-year-olds” (Walk, 2020, p. 126). These models influenced the recognition of early college models as an alternative to existing organizational structures that bridged high school and college.

The first dual enrollment early college models, wherein high school students took college classes for simultaneous high school and college credits, began in New York in 1972 as the Syracuse University Project Advance program and 1974 as the Middle College High School at LaGuardia Community College (Walk, 2020). In 2001, Bard College, which acquired Simon’s Rock in 1979, later established the first schoolwide tuition-free dual enrollment program, Bard High School Early College. Bard High School Early College distinguished itself from other dual enrollment programs by (a) combining the 4-year high school and 2-year college into a traditional 4-year high school timeline, (b) serving as a branch campus of the college, and (c) systematically offering courses for college credits to all of its high school students (Walk, 2020). Components of Bard’s program model, including free tuition and dual-credit college classes during the traditional high school day, provided opportunities for more equitable access to early

college as used in some of today’s dual enrollment programs.

From their inception, early college high schools tended to be “small, selective” programs with special entry requirements (Berger et al., 2010, p. 81). However, programs have expanded and shifted aims to more equity-minded outcomes in recent years. In the early 2000s, the Bill and Melinda Gates Foundation funded the Early College High School Initiative (ECHS) as part of national education reform efforts. This financial support spurred the rapid expansion of the early college high school model to more than 80,000 students in more than 280 U.S. magnet, charter, and traditional public schools (Walk, 2020). This expansion resulted in a greater variety of operational structures for early college high schools and a greater emphasis on equity and access for students traditionally underrepresented in college: first-generation college students, economically disadvantaged students, and Black, Latino, and Indigenous students (Berger et al., 2010). Still, early college high school programs remained largely choice-based since students typically needed to opt into college-credit-bearing courses (Walk, 2020).

With support from political leaders and wealthy education reformers, the early college high school became a large-scale model for school improvement in a choice-based system. As illustrated in Table 3, early college programs' rise and expansion followed a timeline similar to that of magnet programs.

**Table 3**

*Expansion of Magnet and Early College Programs Over Time*

	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
<b>Magnet Schools</b>	1st magnet schools	“Magnet” term used	MSAP, 100+ magnets	Many magnets created without desegregation focus		4,430 magnets, 473 in CA

	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
<b>Early Colleges</b>	1st early college	1st dual - credit programs			Tuition-free, 4-year ECHS	> 280 ECHS

*Note.* Specialized magnet and early college programs launched in the late 1960s and grew in popularity and variability over time.

The recent emphasis on equity in early college programs aligns with magnets that serve to prioritize student integration and equitable outcomes. Today, various frameworks and structures can support the development and continued expansion of dual enrollment magnets.

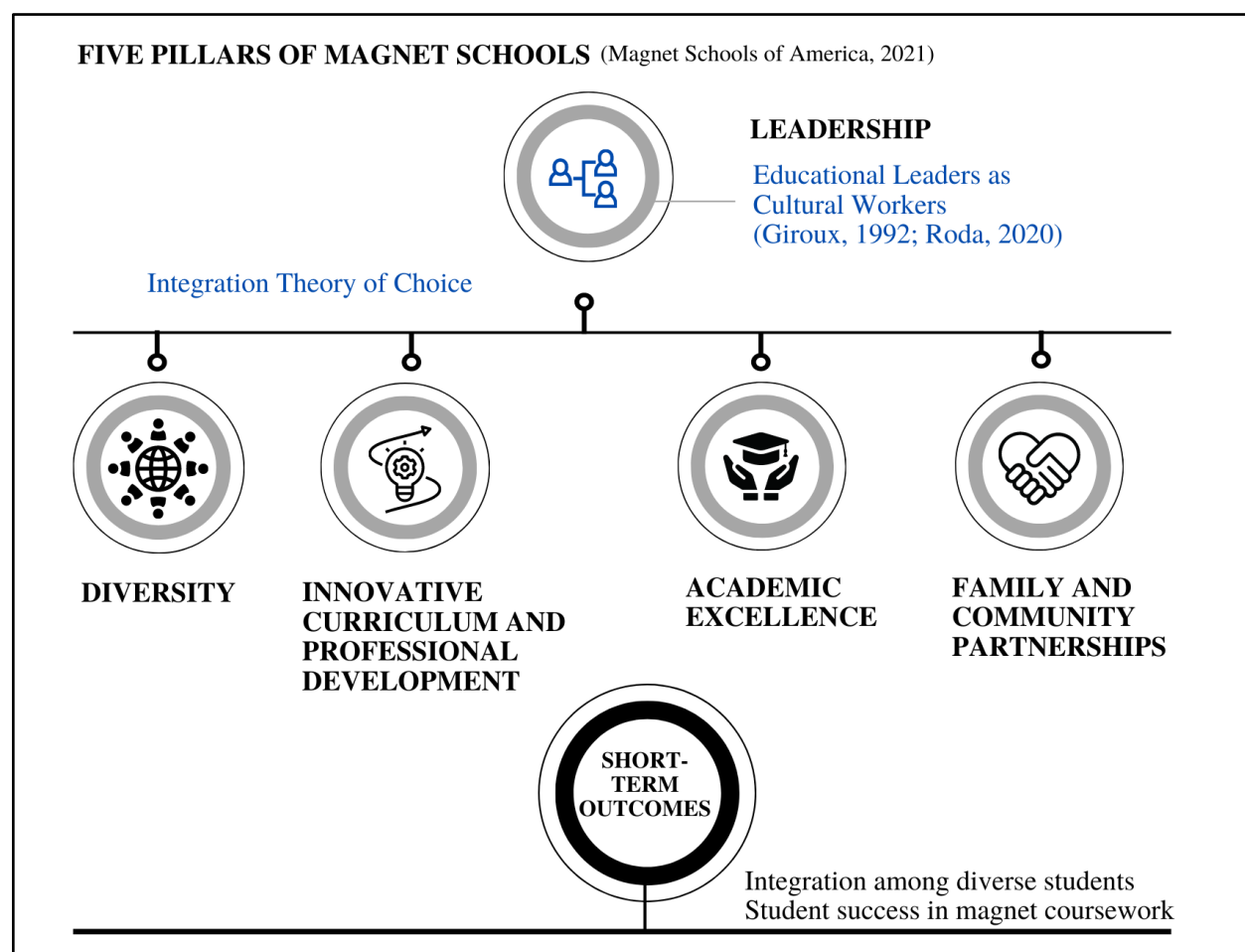
### **Conceptual Framework: Five Pillars of Magnet Schools**

As discussed in Chapter 1, it is essential to understand how school leaders promote and implement schoolwide magnet programs and which factors contribute to positive outcomes for students and school communities. This section of the literature review discusses the study's conceptual framework, including the ideas and theories related to implementing magnet schools, as organized according to the five pillars of magnet schools (Magnet Schools of America, 2021), a framework that defines critical elements of successful magnet schools. The first pillar, Leadership, includes a discussion on educational leaders as cultural workers, as this idea relates to the role of leaders in challenging and changing established systems (Giroux, 2007; Roda, 2020; West, 1990). The second pillar, Diversity, includes relevant literature on school choice and the role of leaders in marketing schools, including the integration theory of choice, to discuss the benefits and complexities of attracting diverse enrollment and the often unintended consequences of school marketization. Intergroup contact theory (Pettigrew & Tropp, 2006) is also referenced in support of the social benefits of integrated schools. In addressing the third pillar, Innovative Curriculum and Professional Development, this review includes information on the thematic

curriculum in early college high schools and general research on effective elements of teacher professional development. Finally, this section of the literature review discusses the pillars of Academic Excellence and Family and Community Partnerships to understand how school leaders may leverage peer, family, and community strengths to promote student success in dual enrollment magnet schools. Together these concepts illustrate a comprehensive approach to understanding how school leaders might establish schoolwide magnet programs that create the conditions necessary for equally successful and equitable student outcomes (see Figure 2).

**Figure 2**

*Conceptual Framework*



The framework and theories illustrated in Figure 2 are organized by the five pillars of magnet schools: leadership, diversity, innovative curriculum and professional development, academic excellence, and family and community partnerships. While magnet schools often have unique themes and configurations, the five pillars, developed over the course of a year by a Magnet Schools of America work group, define common successful elements of all types of magnet schools (Brooks & Pack, 2021). The five pillars of magnet schools are described as synergistic principles of equal importance intended to guide magnet implementation (Magnet Schools of America, 2021). Corroborated by practitioners and researchers (Nelson, 2021; Wang et al., 2021) and aligned with the Magnet School Development Framework (Walton et al., 2018), the elements of these magnet pillars provide a general frame for magnet implementation. In this study's conceptual framework, leadership is applied as an overarching pillar to illustrate the importance of school leaders in transforming and sustaining comprehensive cultural change (Fullan, 2002) throughout each of the other pillars.

### ***Pillar 1: Leadership***

The conceptual framework for this study emphasizes the leader's role in implementing school transformation, as school leaders influence magnet implementation within and across each of the magnet pillars. The first pillar, Leadership, as defined by Magnet Schools of America (2021), illustrates school leaders' responsibilities in designing and improving systems:

Leadership at the school and district level is demonstrated by a commitment to continuous collaboration and monitoring by administrators for effective magnet school organization and systemic improvements. Leadership is rooted in well-educated professional educators. Decisions about hiring, budgets, training, and pathways are collaborative and focus on sustainability of high-quality instructional systems.

One might argue that these leadership principles apply to magnet and non-magnet schools alike. For example, in his 2000 study, Hausman found that the role of the administrative leader, the school principal, was similar between magnet and non-magnet schools. Regardless, the role of the principal and their magnet leadership team appears to be particularly critical to successful magnet program implementation (Straubhaar & Wang, 2022).

Magnet leadership also extends well beyond the role of the principal. Straubhaar and Wang (2022) found that magnet schools were most functional when principals demonstrated collaborative leadership, inclusive of trust and respect, coordination among the leadership team and faculty, investment in the magnet theme, and delegation of authority to entrusted classroom teachers. Therefore, the phrase “school leaders,” as used throughout this study, is intended to be inclusive of the principal, teacher leaders, assistant principals, parent leaders, and counselors who may be regarded as decision-makers or influencers of school culture.

**Educational Leaders as Cultural Workers.** Educators can play a unique role in reimagining academic systems to serve students better. While the magnet pillars describe what leaders must do to create a thriving magnet school, it is equally important to understand *how* leaders approach change and implement effective practices. The idea of educational leaders as cultural workers brings a critical perspective to this study to examine how school leaders may effectively challenge and change systems that have not traditionally served students well.

In his book *Border Crossings: Cultural Workers and the Politics of Education*, Giroux (2007) discusses his theory of border pedagogy, an educational approach that emphasizes revealing and challenging systemic inequities. In a study of school leaders in gentrifying schools in New York City, Roda (2020) expanded on Giroux’s idea of educators as cultural workers to understand how school leaders navigated the “tensions, successes, and challenges inherent in

school gentrification and the integration process [and] challenge problematic practices of [White] privilege” (pp. 1, 6). As described by Roda (2020), “cultural workers in schools are advocates that simultaneously critique and transform the taken-for-granted educational practices and policies, like student assignment procedures and marketing strategies, that most public schools subscribe to” (p. 6). As schools become neighborhood amenities, principals become increasingly responsible for navigating the complexities of student assignment, marketing, and community relations (Cucchiara, 2013; McGhee & Anderson, 2019). From a cultural worker perspective, then, one might ask how educational leaders address systems-level change within the larger social and political context and how school leaders eliminate or alter program elements that might otherwise perpetuate opportunity and achievement gaps.

This cultural worker lens informed the approach to this study’s literature review and study design. This lens was selected to understand how magnet leaders challenged (or inadvertently perpetuated) systemic norms as they promoted and implemented a dual enrollment magnet school in hopes of understanding potential best practices and pitfalls that might warrant further study. For example, school promotion to attract diverse enrollment is one feature of magnet schools that must be viewed critically. Research on school promotion and parental reasons for school selection is emphasized in the next section to consider how existing school enrollment systems might support or undermine integration and equitable student outcomes.

### ***Pillar 2: Diversity***

Magnet Schools of America’s Diversity pillar represents the original intent of magnet schools to achieve diverse enrollment and the benefits of integration. The diversity pillar established by Magnet Schools of America (2021) states:



Diversity is a cornerstone that offers students a global educational experience, which includes equity and access for every child creating a foundation for successful magnet schools. Through marketing, recruitment strategies, and a balanced selection process, schools strive to generate student populations that reflect their communities. School choice provides educational environments that model empathy, respect, collaboration, and inclusion of all cultures. (Magnet Schools of America, 2021)

Diversity encompasses what George and Darling-Hammond (2021) coined as “first door” and “second door” elements of student integration (p. vii). First door desegregation strategies draw students from various backgrounds into magnet schools to achieve diverse enrollment and may include the intentional mention of integration into the school’s vision, family outreach and inclusive enrollment practices, and transportation provisions. Meanwhile, second door integration strategies foster an inclusive environment, such as a diverse teaching staff, an inclusive curriculum, culturally responsive teaching and professional development, and non-discriminatory discipline practices (George & Darling-Hammond, 2021). First door strategies, beginning with family outreach and marketing, are discussed in the following section, while second door components are embedded throughout each of the other magnet pillars.

**Market Theory.** Relevant literature on school choice illustrates the context of school marketization, including how and why families choose particular schools and the successes and challenges of marketing and recruitment strategies. The integration theory of choice supports the rationale for magnet schools as informed by the shortcomings of market theory and the benefits of intergroup contact.

The marketization of schools, based on market theory, reflects the idea that society looks to the market (deregulation, privatization, and competition) for solutions. As applied to schools,

market theory presumes that parents and families have increased freedom to select the public, charter, or private schools that best meet their needs, and increased competition promotes innovation and improved school quality (Hausman, 2000).

While market theorists would argue that the freedom to select a particular school promotes educational improvements, critics argue that the freedom to choose in education is sometimes a misnomer. The choice to attend any school aside from one's local neighborhood school requires a particular financial, social, and navigational capital (Bourdieu, 1986; Coleman, 1988; Yosso, 2005). For example, access to public school choice might be impacted by knowledge of the school enrollment system and how to navigate it, access to transportation or time to drive to another school, or the ability to relocate geographically to another school or district (Smrekar & Honey, 2015).

Meanwhile, linguistic and technological barriers may prevent some families from accessing information (Mavrogordato & Harris, 2017). Parents may encounter “monolingual English-speaking school staff” when visiting a school, and formal sources of data, such as School Accountability Report Cards, may be difficult to comprehend regardless of one’s primary language (Mavrogordato & Harris, 2017, p. 804). Details regarding available options are necessary for a market to thrive, yet families generally have limited access to current, reliable, and comprehensible guides regarding school quality (Buckley & Schneider, 2003). Equitable access to schools and, thereby, school information, is critical to ethical school choice.

Academic indicators of school quality can also make it challenging for students and caregivers to select the school that best meets their preferences and priorities. Information sources on public schools primarily include websites, which are often minimal or outdated in underfunded public schools (Cucchiara, 2013). Even when information is up-to-date, assessing

school quality ratings can be confusing and misleading. Plank and Davis (2020) explain, "parents face great difficulties in accurately assessing the quality of the education services provided by the various schools available to their children" (p. 349). For school ratings and reviews, families may turn to school rating websites, such as GreatSchools.org (<https://www.greatschools.org/>). Websites like this rank schools based on publicly available data, such as student achievement on statewide assessments. The correlation between state test scores and socioeconomic status leads to an oversimplified perception of school quality that may further contribute to a stratified system (Figlio & Lucas, 2004). In schools with historically low test scores, it may be helpful to understand how school leaders have overcome challenges regarding information on school quality to promote counter-narratives, as negative perceptions of school quality can perpetuate school segregation and patterns of disparate economic investment (Vey & Morales, 2022). In light of these concerns, school leaders may also benefit from understanding how and why families choose schools to effectively transform program promotion and enrollment systems to increase inclusivity and accessibility.

While not traditional roles of school principals, marketing and recruitment have become an increasingly important responsibility of public school leaders whose schools face growing competition (Anast-May et al., 2012; Cucchiara, 2013; Dâmaso & Lima, 2020; McGhee & Anderson, 2019; Oplatka, 2007). Magnet school leaders must increasingly engage in marketing and recruitment practices to attract diverse enrollment to promote voluntary school integration. In districts with declining enrollment, the threat of school closure may further increase the perceived need for school leaders to engage in promotional activities.

**Reasons Families Choose Schools.** Thus far, much of the existing research on school choice focuses on the role of parents as consumers and the reasons why families select a school

(Ball, 1993; Chubb & Moe, 1990). Reasons families choose a particular school may depend on access and prioritization of particular values (Smrekar & Honey, 2015). Parents (and sometimes students) commonly choose schools by comparing alternatives and whether the education provided at these schools meets their values (Gleasure, 2020). Common values among parents include academics (Smrekar & Goldring, 1999; Teske & Schneider, 2001); safety (A. Butler, 2022; Harris, 2022); geographic proximity (Kleitz et al., 2000); and the student population's racial and socioeconomic composition (Hailey, 2022; Reardon et al., 2021; Roda & Wells, 2013; Saporito & Lareau, 1999; Smrekar & Honey, 2015; Torres & Weissbourd, 2020). The meaning and relative importance of these values vary by family. As stated by Freidus (2019), "Parental decisions involving school choice and improvement efforts are complex and highly contextual" (p. 1124). Therefore, practitioners could benefit from further research that explores the successes, challenges, and complexities of school promotion in their school's unique context.

In their 2000 study, Schneider et al. found that academics was the most critical factor in parents' school selections. This finding is consistent with other studies and across socioeconomic groups (Schneider et al., 2000; Smrekar & Honey, 2015) and may reflect why robust academic programs like dual enrollment generally attract families. Schneider et al. (2000) further analyzed parental preferences based on educational attainment and racial background and found minor variations. In their study, Hispanic, Black, and Asian parents tended to place a greater emphasis on test scores, while White parents more often prioritized teacher quality, which can be ambiguous and difficult to define. College-educated parents generally preferred teacher quality, while their counterparts without college degrees felt that test scores were more important (Schneider et al., 2000). These generalizations do not reflect internal variations within groups, represent intersectional identities, or consider varying contexts. Therefore, differences in parental

preferences, as noted herein, might better serve to remind school leaders to seek to understand the unique and shared values of families and consider how these particular values might be reflected (or neglected) in program implementation and promotional outreach and how addressing these values might impact students and school communities.

Proximity also features prominently among factors influencing school choice (André-Bechely, 2007; Ayscue et al., 2017; Carlson et al., 2020; Kleitz et al., 2000). This preference varies based on parents' work schedules, access to transportation, and the number of children that a parent may need to transport to other schools (C. Bell, 2009). Additionally, proximity-based school choice policies and parental decisions can reinforce school segregation patterns due to housing segregation (Frankenberg, 2017). Therefore, school districts in segregated cities must consider factors such as program placement, transportation, and school boundaries, to ensure equitable access to magnet schools with minimal burdens on families' time and resources.

School safety, including indicators of school discipline or perceptions of safety, is also a school choice factor highly purported by parents (Schneider et al., 2000). However, perceptions of school safety, like school quality, can be difficult to define and steeped in bias. C. A. Bell (2007) found that historical perceptions of safety influenced whether parents would select a particular school. In a more recent study, Billingham et al. (2020) used a survey experiment to examine parents' perceptions of school safety. They found that more robust security measures, such as metal detectors and armed guards, signaled to parents that schools were unsafe. Billingham et al. (2020) also found an association between safety perceptions and the student body's racial composition, as some parents drew stigmatizing associations between students of color and unsafe learning environments.

To arrive at this conclusion, Billingham et al. (2020) gave respondents information about a hypothetical school's racial composition, facility's physical condition, ranking based on test scores, and security apparatuses. The participants then rated their perceived safety of the school and their likelihood of enrolling in such a school. The authors noted:

Perceptions of school safety are not merely about the security apparatus in place within a school but instead reflect the persistent racialization of ideas about crime, violence, and safety. Parents in our survey were significantly less likely to perceive a hypothetical school as safe when its student body was heavily nonwhite. This racialized perception of safety seems to have affected their willingness to enroll their children in that hypothetical school. These parents' resistance to racially integrated schools is rooted not just in avoidance of school characteristics that often stand as proxies for school racial composition, but in large part reflects a race-based avoidance of black students ... that is bound up with their feelings about safety. (Billingham et al., 2020, p. 493)

These findings represent how school characteristics such as safety, as expressed in parental preferences, might serve as proxies for race and how implicit or unstated biases might pose additional challenges and tensions to school leaders establishing magnet programs that aim to promote diverse enrollment and meaningful student integration.

Other experimental studies and analyses of enrollment patterns also confirmed that parents tend to prioritize racial and socioeconomic composition as a factor in school selection, more often choosing schools that provide "cultural familiarity and racial consistency" (Smrekar & Honey, 2015, p. 133). Multiple researchers have found that parents more often select schools with enrollment demographics similar to their personal racial or ethnic backgrounds (Henig, 1990; Saporito, 2003; Smrekar & Goldring, 1999) or similar cultural values (Weihner &

Teiden, 2002). Within a segregated system, family decisions about where children attend school can replicate and exacerbate existing residential and school segregation patterns (Schneider & Buckley, 2002; Wilson & Bridge, 2019). Therefore, parental preferences and examples that counter these trends may have important implications for desegregation efforts and reflect broader societal challenges to promoting integrated schools.

**Magnet Schools.** Since unregulated choice may maintain or increase segregation and school stratification, the “task facing advocates of choice is to design a system that can produce a socially acceptable tradeoff between a more efficient school system and one that mixes children of different races and classes” (Schneider & Buckley, 2002, p. 133). Magnet schools designed explicitly to reduce segregation address these complexities by promoting voluntary integration, leveraging market approaches (typically at increased financial cost to districts) alongside other legal strategies to achieve school diversity representative of local and surrounding communities.

In this regard, magnet schools that use regulated choice tend to make the greatest impact on school integration, although impacts vary by region and context (Cobb & Glass, 2009). Christianson et al. (2003) compared student demographics of 57 magnet schools funded under MSAP grants to their districtwide enrollment averages and found that 57% of MSAP-funded schools decreased minority group isolation. Desegregation was more likely in elementary schools than in secondary schools, whole-school magnet programs versus programs within a school, and schools with voluntary rather than mandated desegregation plans. In a study of San Diego schools, Koedel et al. (2009) found positive impacts of magnet schools on integration. Similarly, Saporito (2003) found that Philadelphia schools would increase racial integration if families attended their first-choice magnets. However, Bifulco (2009) found that district-wide choice in Durham, North Carolina, inclusive of magnet schools, led to segregation levels higher

than if students were to attend their assigned neighborhood schools. These studies show that magnets can successfully increase racial integration within a school and district; however, more research is needed to understand the contextual and implementation factors contributing to effective integration outcomes. An intentional design to achieve integration seems to be one compelling factor.

**Integration Theory of Choice.** A market-based system is insufficient to provide all students with access to diverse, high-quality schools. However, the benefits of a well-educated, culturally competent society provide a compelling interest for the government to pursue integration as a public good. As evidenced by the work of Johnson and Nazaryan (2019), longitudinal data analysis of students who participated in integration programs dating back to the 1960s found long-term educational, economic, and health benefits for students of all races and socioeconomic backgrounds who attended well-resourced, integrated schools. Other researchers found that students who attended integrated schools were more likely to graduate high school (Balfanz & Legters, 2004), continue on to college (Palardy, 2013), and outperform their peers who attended segregated schools with increased per-pupil funding (The Century Foundation, 2019; Schwartz, 2010). These educational benefits and the secondary economic advantages they may provide can extend beyond the personal to positively impact the families and communities students live and work in, thus producing greater societal benefits. The integration theory of choice supports the strategy of desegregation through regulated choice to achieve such societal benefits (Ayscue et al., 2018). According to Ayscue et al. (2018), “Magnet schools, originally designed in the 1970s as the first policy option to combine school choice with the goal of achieving desegregation, were created based on the integration theory of choice” (p. 11). Thus,



magnet schools represent one way the government can and has intervened in school choice to address inequality.

Integrated public schools are additionally foundational to civic engagement and a thriving democratic society. Learning in ethnically, racially, and socioeconomically integrated schools promotes improved intergroup relations, critical thinking, and citizenship (Pettigrew & Tropp, 2006). Further, cross-cultural friendships and meaningful engagement in discourse representative of diverse and critical perspectives are foundational to students' educational preparation in an increasingly globalized society (Ladson-Billings, 2004). Access to high-quality schools also provides such societal benefits as creativity and innovation, “a literate society that functions more smoothly with reduced communications costs, stronger democratic institutions, and higher social cohesion” (Plank & Davis, 2020, p. 348). Therefore, the expansion of high-quality integrated schools, such as magnet schools, benefits the general public and contributes to the prosperity of our democratic system.

The integration theory of choice aligns with the foundational ideas of intergroup contact theory (Pettigrew & Tropp, 2006). Initially hypothesized by Allport (1954), this theory proposes that greater contact between people from diverse backgrounds under favorable conditions reduces intergroup prejudice. Multiple meta-analyses have substantiated this theory, including a meta-analysis of children and adolescents that showed positive intergroup attitudes among students with increased intergroup contact (Beelmann & Heineman, 2014; Pettigrew, 2021). Factors that facilitate reduced prejudice amidst intergroup contact include shared goals and equal or similar status between groups within the context of the interaction (Pettigrew, 2021). While some researchers report negative responses to intergroup contact, including avoidance, stress, and anxiety (Stephan & Stephan, 1985; Trawalter et al., 2009), others point out that such

responses are typical upon initial contact but subside over time (MacInnis & Page-Gould, 2015; Pettigrew, 2021). Despite the potential for initial discomfort, intergroup contact is critical to social cohesion and reduced prejudice and polarization.

Greater cross-class contact is also associated with increased economic mobility and financial well-being, which expands access to opportunities. Researchers have previously noted the predictive power of the socioeconomic status of a student's family (Coleman, 1968) and classmates (Kahlenberg, 2012) on student achievement. Chetty et al. (2022) more recently found strong associations between social networks and economic mobility. The researchers found that increased connectedness across lines of socioeconomic difference increased economic mobility more than any other factor (income, segregation, inequality). The findings from Chetty et al. (2022) suggest that policy and program interventions to address socioeconomic integration must go beyond integrating spaces to prompting cross-class friendships. Otherwise, friending bias, the tendency to form class-based friendships, and the systems and structures that perpetuate friending bias may inhibit cross-class interactions and feelings of connectedness.

Based on their findings, Chetty et al. (2022) suggest additional studies of interventions that reduce friending bias, including research on ways to reduce secondary segregation within schools and ways to increase interactions. Suggested interventions include eliminating tracking structures and restructuring physical spaces or encouraging the expansion of extracurricular programs such as athletics to promote cross-class social connections. Extracurricular participation and similar experiences that promote positive psychosocial experiences can support positive interactions among students from diverse economic backgrounds (Gleasure, 2020). These findings reveal ways school leaders may encourage positive cross-class and cross-cultural experiences among students in integrating settings.

**Tensions in Promoting Student Integration.** Despite the long-term public benefits of integration, policy mandates and reassignment plans to prevent or reduce segregation, such as busing or boundary changes, can be challenging to implement. For example, busing following the implementation of the Civil Rights Act was expensive and unpopular (Honey & Smrekar, 2022). Additionally, families may opt out of a regulated school choice system by moving or selecting private school options in response to desegregation mandates. Politicians aware of these challenges may avoid proposing sweeping changes. As described by Riel et al. (2022), “if policymakers believe too ambitious a school reassignment plan will trigger white, Asian, and middle-class flight to charters, they are likely to scale back their efforts to expand equity through drawing boundaries that create more diverse schools” (p. 737). Actual and perceived resistance to integration efforts can make voluntary (as opposed to mandatory) integration strategies, including magnets, more attractive and viable for policymakers and school leaders.

While issues of school choice can elicit political differences of opinion, a majority of Americans (57%) agree that school segregation is a problem, and 79% of Americans support magnet schools as a desegregation strategy, according to recent Gallup polls (McCarthy, 2019). This overwhelming constituent support for magnets may explain why magnets typically garner bipartisan support (Riel et al., 2022). Conservative Republicans, while generally more supportive of charter schools, may support the expansion of magnet schools as they generally support school choice. On the opposite end of the political spectrum, liberal Democrats may support the pro-diversity aspect of magnet education (Riel et al., 2022). Broad support from members of otherwise frequently oppositional political parties is critical to garner the resources needed to launch new magnet programs and sustain existing ones.

However, other conflicts may arise as magnet schools are implemented. Magnet school implementation is ripe with tensions, particularly the school promotion component. Critics question the impact of magnet school promotion on the broader public school system and students from historically marginalized groups. One concern is the impact magnet school promotion has on traditional public schools, as magnet schools might draw enrollment or resources away from non-magnet schools (Caruthers et al., 2022). Meanwhile, students with less access to opportunities to participate in school choice may be “‘left behind’ in poorer performing, hyper-segregated neighborhood public schools” (Miretzky et al., 2016, p. 50) or experience displacement as school choice may influence the closure of schools that predominantly serve students of color (Kafka & Matheny, 2022). Another concern is that school choice may contribute to neighborhood gentrification as magnet schools increase housing prices in some areas (Bonilla-Mejía et al., 2020).

Researchers also express concern about the gentrification of schools themselves. School gentrification may occur when increasing numbers of middle-class families move into working-class neighborhoods and attend predominantly low-income public schools. Indeed, a growing number of schools in gentrifying neighborhoods are increasingly diverse (Diem et al., 2019; Mordechay & Ayscue, 2022; Stillman, 2012). However, school gentrification is characterized by more than demographic changes. Posey-Maddox et al. (2014) characterize school gentrification as the confluence of “(i) increased numbers of middle-class families; (ii) material and physical upgrades (new programs, educational resources, and infrastructural improvements); (iii) forms of exclusion or the marginalization of low-income students and families (in both enrollment and social relations); and (iv) changes in school culture and climate (traditions, expectations, and social dynamics)” (p. 454). While increased middle-class enrollment and improvements are not

inherently problematic, behaviors that undermine or undervalue an existing school community are a cause for concern.

Similar to Posey-Maddox et al. (2014), Freidus (2019) found examples of within-school gentrification when increasing numbers of “middle-class, professional, and White families” enrolled in a New York school (p. 1121). In the schools studied by Friedus, as advantaged families supported improvements in their local public schools through material and physical contributions, they also “defined themselves as the source of the school’s potential value and marginalized low-income families and families of color” (p. 1121). Such beliefs or expressions ignore families’ social and cultural capital and undermine the intent of integrated schools (Martinez et al., 2022). These tensions demonstrate the complexity of efforts to promote school integration and the need for culturally responsive school leadership (Caruthers et al., 2022).

In light of concerns that school gentrification undermines equity aims, some parents and community leaders have called for increasing resources and standards rather than advocating for integration (Miretzky, 2016, p. 49). Magnet schools provide a potential model from which to advocate for additional resources and high academic standards; however, attention to policies and practices is key to challenging school gentrification and realizing the benefits of integration. Critical to effectively integrating schools is understanding how schools “counter class and race-based advantages and exclusionist practices [and] promote integration dynamics” within the school (Hernandez, 2019, p. 287). Such practices may include the *5 R’s of Real Integration* identified by student advocates from IntegrateNYC (2018): Race & Enrollment, Resource Allocation, Real Relationships, Representative Staff and Faculty, and Restorative Justice. In these ways, school leaders can effectively prevent or mitigate exclusive or marginalizing behaviors amidst increasing diversity (Posey-Maddox et al., 2014).

As asserted by Riel et al. (2022), school choice “is likely here to stay and is inextricably tied to the future of public education in America” (p. 738), so how might magnet leaders participate in marketization to promote their schools without further contributing to marginalization? Can school leaders assume the role of cultural workers to challenge problematic systems? From prior studies and historical inequities, it is clear that school leaders must reflect on policies and structures, from marketing to curriculum and staff training, and work intentionally to ensure equitable access and equally high academic outcomes for students.

### ***Pillar 3: Innovative Curriculum and Professional Development***

Magnet leadership and innovative curriculum and professional development are inextricably linked to the other magnet pillars of diversity, academic excellence, and family and community partnerships. The specialized curriculum at a magnet school supports diversity efforts by attracting students and families through an innovative thematic focus that appeals to the talents and interests of students and their families (Brooks & Pack, 2021). Meanwhile, curriculum and professional development are also foundational to academic excellence through equitable access to high-quality instruction, supported by family and community partnerships and strong instructional leadership. At exemplary magnet schools,

Innovative Curriculum and Professional Development is developed to assure theme-based relevant instruction to students. Effective teaching strategies, emulating from best practices, are implemented through the inclusion of the school’s theme. Curriculum is based on high-quality, rigorous standards that prepare students for higher education and career success. (Magnet Schools of America, 2021)

In dual enrollment magnets specifically, the early college curriculum is college preparatory, rigorous by nature, and rooted in innovative approaches to serving adolescent students. By

providing students with relevant learning experiences and appropriate scaffolds, early college magnets can promote more equitable academic outcomes.

**Early College.** Early college magnets enable high school students to take college-level courses. In dual enrollment early college programs, students earn simultaneous high school and college credits for taking college classes offered at no cost to the student (Vargas & Hoffman, 2021). In addition to college coursework, early college magnets typically implement a schoolwide curriculum aligned with the early college theme (Vargas & Hoffman, 2021). Common design elements of early colleges include the “use of a highly effective framework of instructional strategies that build college readiness, including collaborative group work, writing to learn, questioning, classroom talk, scaffolding, and literacy groups” (Vargas & Hoffman, 2021, p. 196). Therefore, school leaders in dual enrollment programs must serve as instructional leaders, providing training and follow-up support to implement schoolwide instructional strategies.

Duncheon and DeMatthews (2018) studied early college principals to understand their role as instructional leaders in supporting students’ college preparation. In their study, principals cited the importance of their teaching staff and using a common instructional framework or standard pedagogical practices to promote instructional rigor. Principals supported the implementation of these strategies through professional development training and professional learning communities.

While challenging curricula is a common theme among studies of dual enrollment programs (Jett & Rinn, 2020), research on curriculum and professional development related to teaching early college or dual enrollment courses or integrating the early college theme across the curriculum is relatively absent from the literature. Most existing studies focus on quantitative

student outcomes (Duncheon & DeMatthews, 2018). This research gap influenced the development of this study's research questions with an emphasis on implementation and how school leaders designed and carried out a dual enrollment program.

While little is known about effective professional development for dual enrollment teachers specifically, there is abundant literature on teacher professional development more generally. According to Darling-Hammond et al. (2017), teacher buy-in and expert information are critical elements of effective professional development. Additionally, effective training is sustained, collaborative, subject-specific, and practice-based (Darling-Hammond et al., 2017; Desimone, 2009; Timperley et al., 2007). However, Sims' and Fletcher-Wood's (2020) critical review of these features suggests that more research is needed to substantiate findings and to study the alignment between professional development and skill acquisition and application of new learning. The impact of training on skill development, application, and intended outcomes is critical. According to Kirkpatrick & Kirkpatrick (2016), the ultimate measure of successful professional learning is "the degree to which participants apply what they learned during training when they are back on the job [and] the degree to which targeted outcomes occur as a result of the training and the support and accountability package" (p. 14, 27). Thus, clearly defined practices and targets are needed to measure training effectiveness for teachers and staff.

Quality and quantity of training also seem pertinent to ensuring teachers implement new practices with fidelity and positively impact student achievement. A systematic review by Yoon et al. (2007) revealed that the quantity of teacher training needed to build teacher capacity equated to an average of about 50 hours of training to impact student outcomes significantly. Darling-Hammond et al. (2017) elaborate that these hours would take place over months with opportunities for practice and refinement. Overall, practitioners have identified strategic



planning, instructional leadership and coaching, and school design and development as major areas of capacity-building needed in designing a dual enrollment program that results in academic excellence for all (Vargas & Hoffman, 2021).

***Pillar 4: Academic Excellence***

Ideally, a high-quality curriculum and effective professional development, combined with appropriate student supports and scaffolding, result in conditions that promote academic excellence. As defined by Magnet Schools of America (2021),

Academic Excellence is demonstrated through a commitment to multi-dimensional instruction focused on student needs. Multiple assessment strategies are employed to monitor student learning, progress, and success. High expectations are clearly articulated, and personalized supports are in place to address the interests and aspirations of all students. In addition, positive peer support, an outgrowth of mixing middle-class and low-income students, has been instrumental in encouraging students to dream bigger and be more engaged in school. (Magnet Schools of America, 2021)

Many dual enrollment programs implement challenging courses with embedded supports that promote students' academic success. Alongside high expectations that "foster equal academic success" (Bierbaum & Sunderman 2021, p. 3), student supports typically include targeted interventions and enrichment. In their study of ten early college high school principals, Duncheon and DeMatthews (2018) found four common themes that captured how school leaders supported students' academic excellence: "instructional rigor, targeted interventions, embedded supports, and student enrichment" (p. 282). Strategies within these themes included supporting high-quality instruction through professional development and schoolwide pedagogical approaches, summer bridge programs and tutoring, embedded skill-building courses (study skills

or college-readiness), tutoring, and extracurricular enrichment such as clubs and athletics (Duncheon & DeMatthews, 2018). Miretzky (2016) also noted the prevalence of summer bridge programs that onboard incoming students prior to the official start of the school year.

According to Karp (2012), dual enrollment programs can also “be seen as a social intervention in which potential college students learn about the norms, interpersonal interactions, and behaviors expected for college success” (p. 22). In addition to the opportunity to “try on” being a college student, a caring school environment with positive teacher relationships is another frequently cited element of student support in dual enrollment programs (Jett & Rinn, 2020; Knight-Diop, 2010; Martinez et al., 2022; Song et al., 2021). According to Song et al. (2021), further examination of these supports and the intermediate outcomes, such as social-emotional learning and college knowledge “that occur during high school may further elucidate the [early college] impacts on students’ postsecondary outcomes” (p. 136). This assertion influenced this study’s focus on how school leaders implement dual enrollment programs, including the successes and challenges in providing adequate student supports to impact student success in college coursework.

Social themes also frequently emerge in the literature regarding strategies promoting students’ academic success in dual enrollment programs. Relationships with peers and social networks can influence students’ academic engagement and aspirations (Elliot et al., 2018; Gleasure, 2020). Peer supports can help students adapt to challenges and develop emotional resilience (Calhoun et al., 2019). Further, a school culture of “warmth, respect, and acceptance” promotes an optimal experience for students and is particularly necessary for integrating school environments (Gleasure, 2020, p. 18). Caring relationships can be just as necessary as academic supports in promoting student success.

As a result of challenging coursework with robust and personal supports, “Early college schools is one of the largest and most successful secondary school reform initiatives in the country” (Vargas & Hoffman, 2021, p. 195). Results of quantitative studies on outcomes for dual enrollment students demonstrate positive effects on a range of academic indicators, including increased graduation rates, increased college attendance and persistence, and increased attainment of college credits and college degrees (Berger et al., 2013; Edmunds et al., 2017; Karp et al., 2007; Song et al., 2021). Findings also showed positive, statistically significant effects across represented student groups, including those “traditionally underrepresented in college” (Berger et al., 2013, p. 4; Edmunds et al., 2017). Such findings demonstrate promise that dual enrollment participation can effectively close achievement gaps.

As illustrated here, the early college theme is founded on a vision for improving equitable outcomes, including students’ increased attainment of college degrees (Berger, 2010; Song et al., 2021). As asserted by Vargas & Hoffman (2021), “Early colleges have an explicit focus on serving students underrepresented in higher education, including low-income students, students of color, English language learners, and first-generation college-goers” (p. 195). Dual enrollment programs offer students the opportunity to experience tuition-free college in a setting that promotes a college-going culture. At the same time, embedded supports help students learn how to succeed in college courses before leaving high school.

#### ***Pillar 5: Family and Community Partnerships***

Family and community partners also provide a supportive network and a culture of care, which can impact student success in dual enrollment high schools.

Family and Community Partnerships are mutually beneficial, offer a system of support, shared ownership, and a caring spirit, and are designed to enhance a theme-integrated

educational environment. Partnerships with parents are essential for a rich educational experience for students. Community partnerships include a diverse array of stakeholders, including business, health and human services, and policymakers, to support the education of all students and offer them a real-world view toward the future. (Magnet Schools of America, 2021)

In these ways, support systems for students extend well beyond the school building and traditional school day.

Family influence is a critical factor in student decisions to participate in a dual enrollment program, and parents serve as a vital form of support to students navigating the culture of schooling (Yosso, 2005) and overcoming the challenges of rigorous coursework (Ongaga, 2010). Family members can also positively or negatively influence decisions to enroll in a dual enrollment program (Sáenz & Combs, 2015), and parents, in particular, can play a large role in influencing students' academic goals and aspirations (Ceja, 2004). Family engagement may also provide students with enrollment support, financial support, and emotional guidance (Leonard, 2013). While most teens rely on parental support in the adolescent years, the dual enrollment magnet environment may elevate the importance of these supports as students navigate challenging coursework and social relationships.

Equally critical to student success are community partnerships, which strengthen and sustain magnet programs (Walton, 2011). According to Marvin (2022), partnerships can “bring diverse perspectives, innovative ideas, knowledge, and skills that enhance magnet school implementation and effectiveness [in addition to resources and] unique learning experiences for students and staff” (p. 11). In early college magnet programs, schools partner with a college or university to provide students with college-going opportunities, including access to college

courses while students are still in high school (Song et al., 2021). In addition to university partners, schools may have an array of other partners who provide services and opportunities to students and families (Valli et al., 2018), such as physical and mental health services, parent education, internships and work-based learning opportunities, and academic supports and enrichment. The importance of these partnerships contributes to expanding the traditional role of school principals as community leaders who engage multiple community stakeholders (Peters, 2019).

### **Chapter Summary**

This review provided an overview of significant court cases that impacted desegregation efforts in the U.S. today, including the expansion of magnet schools and the establishment of early college magnet programs in particular. The historical, judicial, and political context illustrated in this section outlined more than a century of cases that codified or challenged segregation and the Court's compelling interest and strategic actions to intervene to reduce, prevent, or eliminate ethnic, racial, and economic segregation in schools. More recent court decisions limited how school districts could aim to achieve desegregation. Together, these decisions illustrate how (a) magnet schools became the preference of many districts as a legal means to achieve voluntary desegregation, (b) the race-neutral approaches districts can take in promoting and implementing magnet schools, and (c) the federal financial support available to establish new or significantly revised magnet programs.

Next, the conceptual framework outlined significant elements of magnet school implementation and key ideas that influenced the literature review and study design approach. The conceptual framework for this study, as organized by the five magnet pillars, illustrates how school leaders might understand and approach the implementation of a comprehensive, school-

wide, dual enrollment magnet program that contributes to all students' academic excellence. The role of magnet leaders can be complex as leaders encounter successes, challenges, and tensions to exhibit leadership and achieve diversity, implement innovative curriculum and professional development, foster academic excellence, and embed culturally responsive family and community partnerships in pursuit of supporting an equitable program and school culture. Scholarly ideas, including the idea of educational leaders as cultural workers, frame the role of school leaders as those who might challenge problematic educational systems and reveal new ways of working that honor students' assets and ultimately contribute to their academic success.

Existing research, as viewed through the framework's practical and theoretical lenses, revealed gaps in understanding how school leaders implement dual enrollment programs, particularly their experiences, successes, and challenges in promoting integration and academic achievement in dual enrollment magnet schools in historically marginalized communities. However, additional research is needed to understand how magnet school leaders create these conditions in a dual enrollment high school setting to promote equitable access to opportunities and programs that empower students. The next chapter discusses the design and rationale for using a mixed methods case study design to understand how one school perceived and experienced changes, successes, and challenges after implementing a dual enrollment magnet.

### **Chapter 3: Research Design and Methodology**

This single, mixed methods case study aimed to understand how school leaders implemented a new dual enrollment magnet program at a highly-segregated neighborhood school in Southern California. This chapter details the case study design, context of the case, data sources and collection strategies, human subjects considerations, and approaches to analysis. The first section, as follows, explains the rationale for using a mixed methods case study design and the nature of the study.

#### **Case Study Design**

While dual enrollment magnet programs have the potential to improve academic outcomes for students and close achievement gaps, practices that exclude or marginalize students, such as tracking, can undermine magnet schools' equity aims. Additionally, much of the research on dual enrollment emphasizes quantitative student outcome data and lacks information on how school leaders approached implementation. Therefore, it is critical to understand how school leaders established and promoted a new dual enrollment magnet program in a traditional high school setting, including successes and challenges in providing equitable access and student support. An explanatory mixed methods case study design enabled the in-depth analysis of program components, using multiple sources of data to understand and explain the complex array of factors that impact school changes and student outcomes.

This case study provided insight into program implementation elements to address the aforementioned gaps in the research. A case study is an “empirical method that investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context” (Yin, 2018, p. 15) while providing an opportunity to conduct in-depth, systematic analysis (Creswell & Creswell, 2017). For this case, the phenomenon under investigation was school leaders’

implementation of a dual enrollment magnet program in aspects of leadership, diversity, innovative curriculum and professional development, academic excellence, and family and community partnerships. Research on how school leadership teams implemented a dual enrollment program alongside the program's outcome data revealed program design elements that warrant additional research to determine if they may be replicated in other settings.

While a multiple-case design was initially considered to explore dual enrollment magnet implementation, a single case was selected to strengthen the study and highlight the unique program structure at this particular school. Multiple-case designs may provide some analytic benefits (Yin, 2018); however, multiple cases can weaken a study, especially when the researcher is a novice to case study research (Wolcott, 1992). Wolcott (1992) argues that case comparison is better suited to more experienced researchers to aggregate case study results and discover any systematic relationships across cases. On the contrary, single case studies are more appropriate for unique or unusual cases that may reveal new insights. An in-depth study of West Cal High School's unique setting and structure provided insights that may serve to guide the implementation of its dual enrollment program to sustain and improve equitable access and student outcomes.

A mixed-method case study design was also selected to align with pragmatic and transformative worldviews. Pragmatism's problem-centered approach allows researchers to choose the best approaches to understanding the problem (Creswell & Creswell, 2017). Meanwhile, this study's conceptual framework included the idea of school leaders as cultural workers (Giroux, 2007; Roda, 2020) and the integration theory of choice, rooted in the action orientation pertinent to a transformative worldview, with the underlying purpose of using research to "improve society" (Creswell & Poth, 2016, p. 25; Mertens, 2003). Both of these



approaches merged in this case study to understand the successes and challenges of the dual enrollment magnet program to consider ways the program may have achieved or fallen short of its equity aims, and inform further research, replication, or revision of program strategies to improve program implementation for future generations.

Mixed methods provided a more complete picture of a topic as complex as a student integration program, where qualitative or quantitative methods alone may have been inadequate. Evaluating the impact of a program on school or student outcomes is complex since multiple causes may contribute to outcomes, and the context or environment may influence outcomes. Due to such complexity, a mixed-methods approach that enabled data collection from a broader range of sources was necessary to create a comprehensive picture of programmatic successes and challenges. The use of multiple methods and sources strengthens the basis of any findings and conclusions (McLafferty et al., 2010; Yin, 2018).

Data collection and analysis approaches were sequential and explanatory, beginning with a quantitative data analysis phase (Phase 1) to explain changes since the program began, followed by a qualitative phase (Phase 2) in which the quantitative findings were explained using qualitative data. This sequential explanatory component of the design enabled the inclusion of community voices by incorporating qualitative interview data to explain and build upon quantitative outcomes in more detail. The design and research questions for each phase are shown in Table 4.

**Table 4***Explanatory Sequential Study Design and Research Questions*

Phase	Research Questions	Data Collection (Analysis)
Phase 1 (quan)	RQ1- What has changed at the school since the dual enrollment magnet program was implemented?	surveys enrollment & achievement data  (descriptive statistics)
Phase 2 (QUAL)	RQ2- How did school leaders foster successful outcomes of the dual enrollment magnet program? SQ2: How did school leaders facilitate: SQ2a: ethnic, racial, and socioeconomic school diversity; SQ2b: innovative curriculum and professional development; SQ2c: academic excellence; and SQ2d: family and community partnerships? RQ3- How did school leaders experience and address challenges to program implementation? SQ3 How did school leaders experience and address challenges to fostering: SQ3a: ethnic, racial, and socioeconomic school diversity; SQ3b: innovative curriculum and professional development; SQ3c: academic excellence; and SQ3d: family and community partnerships?	interviews corroborated by site visit reports  (thematic analysis)

*Note.* RQ indicates research questions and SQ sub-questions.

Altogether, this study design weaved multiple theories and methods together to address the multi-faceted research questions and study's purpose, to learn how school leaders implemented a dual enrollment magnet program over a 5-year period. This design addressed critical elements of magnet program implementation via successes and challenges, which may lead to improvements in program design and inform areas for future research.

## The Case

West Cal was awarded nearly 5 million dollars in grant funding to develop and design its dual enrollment program and embed practices that promote student integration and support students to succeed in challenging college coursework. This case focused on how leaders implemented the dual enrollment program at West Cal High School over the 5-year funded period.

West Cal is a comprehensive high school in Southern California that serves approximately 1,000 9th-12th grade students who primarily reside in the school's attendance boundary. When the study was conducted, Mesa Verde City College (MVCC) leased a building on the high school campus, MVCC West, where students could take college classes taught by MVCC professors. The program had no academic entrance criteria, and all students at the high school were encouraged to take early college classes for dual credit starting in 9th grade. Students could then choose to continue to take additional dual enrollment classes throughout their 4 years of high school. The courses offered were part of a dual enrollment course sequence designed to promote optimal transition into college coursework and maximum transferability of up to 60 college credits to California State Universities and the University of California. In addition to earning significant college credits, students who took the maximum number of possible courses in an established sequence had the opportunity to earn an associate's degree.

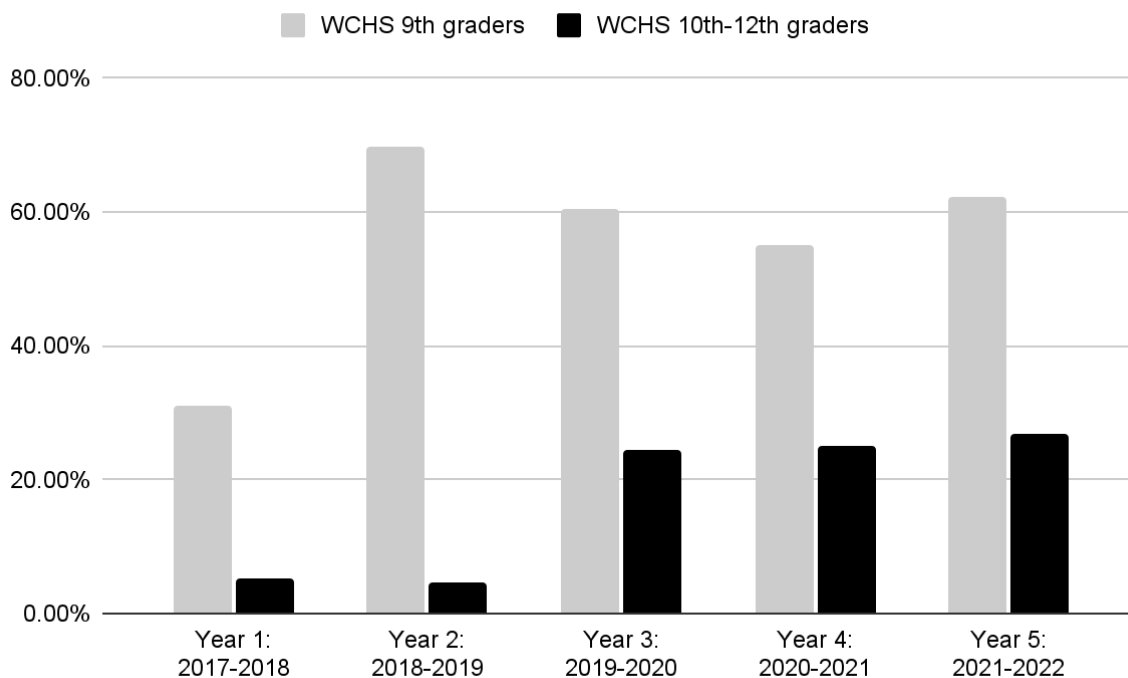
All 9th-grade students at West Cal were encouraged to enroll in dual enrollment coursework and a career-themed academy (arts, business, engineering) inclusive of general education classes (math, science, history, English), academy-themed electives, field trips, and work-based learning opportunities. As students advanced through the grades, they could opt to continue taking dual enrollment courses (up to 15 credits during each school year and 8.3 credits

each summer). A listing of general dual enrollment course offerings in the recommended sequence, as described in one of the school's magnet site visit reports, is as follows:

- Grade 9: Personal Growth and Development; Health and Nutrition
- Grade 10: Spanish 1; Spanish 2; Oral Communication; Social/Behavioral Science
- Grade 11: Arts/Humanities; Physical Science; Biological Science
- Grade 12: Social/Behavioral Science; Mathematics; English Composition; Critical Thinking

The unique setting and structure of West Cal's program, a college building situated on a high school campus that permitted any interested high school student to participate in college courses at the start of any given semester, reflected an innovative effort well-suited for case study research.

When the program first began, 71 out of 229 9th-grade students (31%) completed one or more college courses and received credit. For that same period, 35 of 663 students in 10th-12th grades (5.28%) earned college credit (9th-grade data were disaggregated from 10th-12th grade data to track how many students initially participate in dual enrollment as compared to how many students choose to continue after the program's introductory courses; U.S. Department of Education, 2018). Five years later, the number of students earning college credits tripled. In 2021–22, 168 of 270 ninth-grade students (62.2%) and 176 of 654 10th-12th grade students (26.9%) earned college credits (U.S. Department of Education, 2022). A summary of the percentages of students who earned college credits is illustrated in Figure 3.

**Figure 3***Dual Enrollment Course Completion Over Time*

*Note.* This table was created using data sets adapted from: *MSAP annual performance report: Dual enrollment program student enrollment*, by U.S. Department of Education, 2018-2022. Copyright 2018, 2019, 2020, 2021, 2022 by Mesa Verde School District. Reprinted with permission.

As dual enrollment has expanded in California, Smith et al. (2022) noted disparities in dual enrollment program access, citing that Black and Latino students are underrepresented. In the same article, Smith et al. (2022) simultaneously indicated that West Cal's community college district defied this trend in recent years, enrolling Black and Latino students in percentages similar to high schools in the area. MVCC West students are 94% Black or Latino, and most students who successfully completed the first dual enrollment course completed at least two college courses. Therefore, West Cal's strategies to achieve representation merit further attention, including analysis to understand which program features may be effective and replicable in other cities. By understanding the successes and challenges leaders perceived or

experienced in implementing the new dual enrollment magnet program at this school, researchers and practitioners may determine which program components contribute to equitable participation and outcomes.

The selected program was also an ideal case for this study to understand implementation over 5 years, from 2017 to 2022, alongside impacts because most of the school's leadership team had consistently worked at the site since the inception of the school's dual enrollment magnet program. Many staff and teachers were also alums or parents of West Cal students. The principal, a West Cal parent and alumnus, started at the site just before its dual enrollment magnet program launched. Other school leaders had worked at the school since the program began and therefore possessed historical and current knowledge of the dual enrollment magnet program's implementation. The site and target population for the study were accessible without additional permissions.

Some initial successes and challenges regarding program implementation were readily apparent from available federal grant documentation prior to conducting the study. Annual performance reports for each year of implementation include executive summaries written by magnet staff as required by the grantor to monitor program implementation and outcomes. Prominent themes from this existing data include student recruitment and program promotion, academic program development, parent engagement, teacher buy-in, and the effects of the COVID-19 pandemic. Significant successes and challenges, as perceived by magnet program staff at the site, are listed in Table 5.

**Table 5***Successes and Challenges of West Cal High School's Magnet Implementation*

School Year	Successes	Challenges
2017-2018	hiring of highly qualified project personnel; development of action plans	delays in curriculum development and early college integrated units
2018-2019	continued development of the early college theme; expansion of dual enrollment courses; doubled students earning college credits	teacher buy-in for curriculum development
2019-2020	increased and increasingly diverse enrollment; increased participation in tours and prospective student visits	uncertain student engagement and achievement during remote learning due to COVID-19 pandemic; Many students (116) dropped dual enrollment courses
2020-2021	increased marketing efforts, including word of mouth marketing resulting in increased student applications; increase parent involvement	student engagement during remote learning; difficulty pursuing teacher curriculum development during remote learning; substitute teacher shortages
2021-2022	increased word-of-mouth marketing and return to on-campus events resulting in increased applicants and increasingly diverse applicant pool; first cohort of magnet students graduated, including valedictorian who earned an AA; 68% of the 2022 senior class graduated with more than 24 college units, while the other 32% had varying numbers of college credits on their transcripts; 57 on-site dual enrollment courses offered	substitute teacher shortages; less collaborative planning time; limited in-person recruitment events; some students struggling to pass dual enrollment classes

*Note.* This table illustrates site magnet staff's perceptions of successes and challenges to implementation over the 5-year period, as documented for grant reporting purposes and submitted to the U.S. Department of Education. Adapted from: *MSAP annual performance report: Dual enrollment program student enrollment*, by U.S. Department of Education, 2018; *MSAP annual performance report: Dual enrollment program student enrollment*, by U.S. Department of Education, 2022. Copyright 2018, 2019, 2020, 2021, 2022 by Mesa Verde School District. Reprinted with permission.

These staff reflections help readers understand staff perceptions of general highlights and barriers. However, more information is needed to understand specific practices that contributed to these outcomes as well as more nuanced feelings and experiences of school leaders that might not be included or applicable in grant reports. Further, as written by the staff responsible for program implementation to the grantor, these reflections are for the purpose of demonstrating

progress and would therefore reflect that bias. Thus, claims should be corroborated by other sources of data to substantiate their validity.

### **Sources of Data**

Existing data sources, including archival records and documents, provided insight and aligned with the study's research questions. These sources provided quantitative data on student, teacher, and parent perceptions during pre- and post-implementation years and quantitative outcomes or qualitative data regarding program implementation activities. Quantitative outcome data-informed questions for further inquiry via qualitative interviews and document review.

#### ***Archival Records***

Archival records included existing quantitative survey data and public use files. Survey data captured teacher, parent, and student perceptions about particular program components. Surveys included magnet program surveys and state-administered school climate surveys. Public use files included annual enrollment, achievement, and suspension data.

**Surveys.** Archival data from two existing sets of survey data were analyzed. Available survey items from each data set were reviewed, and questions were selected for further data collection and analysis based on their relation to one of the magnet pillars. Any relevant questions that were not included in both the beginning and full implementation years (2017-2018 and 2021-22) were eliminated. The final list included 50 survey data items, which were organized by magnet pillar and construct (see Appendix A).

These two survey data sets provided some insight into program outcomes. The first survey data set included school-level magnet program survey results. These magnet surveys were administered to 10th-grade students and high school teachers by an external program evaluator and were available for Spring 2018 (start of implementation) and Spring 2022 (full



implementation). These surveys asked questions specifically about magnet theme implementation at the school. Student surveys were administered to approximately 122 10th-grade students in 2018 and 204 10th-grade students in 2022 (54% and 74% response rates, respectively). Student questions primarily addressed diversity and academic excellence. They included the extent to which the respondents agreed to statements like, “I wanted to attend this school because of the magnet theme” and “Our magnet theme makes school challenging” (Herman et al., 2018, p. 92; Wang et al., 2022, p. 44). Teacher surveys were administered to 45 teachers in 2018 and 40 teachers in 2022 (100% and 82% response rates, respectively). Questions reflected each magnet pillar except family and community partnerships. For example, questions regarding curriculum and professional development included, “The professional development I have received has helped me integrate lessons with the magnet theme into lessons” (Herman et al., 2018, p. 53; Wang et al., 2022, p. 25).

Results from the California School Climate, Health, and Learning Survey (Cal-SCHLS) System were also analyzed. Cal-SCHLS is a system of three surveys: the California Healthy Kids Survey, the California School Staff Survey, and the California School Parent Survey. These statewide surveys about school climate, student wellness, and safety have been administered since 1997 and are administered annually to over one million students (California Department of Education, 2022c). School-level results for West Cal students in Grades 9 and 11 were available for 2016-17 (pre-implementation) and 2021-2022 (full implementation). Response rates for 9th graders were 33% ( $n = 74$ ) in 2016-17 and 52% ( $n = 95$  students) in 2021-22. Response rates for 11th graders were 44% ( $n = 116$ ) in 2016-17 and 20% ( $n = 37$ ) in 2021-22.

School-level results for staff were also available for 2016-17 and 2021-2022. Staff respondents included teachers, counselors, and administrators. Response rates were 92.7% ( $n =$

51) in 2016-2017 and 85.5% ( $n = 47$ ) in 2021-22. Parent results from the 2016-17 and 2021-22 administration years were also available but should be interpreted cautiously due to small sample sizes ( $n = 10$  and  $n = 79$ , respectively). For this reason, 2016-2017 parent results were not included in the analysis. Constructs from the surveys related to the magnet pillars primarily connected to academic excellence and family and community partnerships. The staff survey also touched on aspects of diversity and leadership. Sample items included the extent to which the respondents agreed to statements, such as: (a) “Adults who work at this school feel a responsibility to improve this school,” (b) “Students respect each other’s differences,” (c) “Adults from this school respect differences in students,” and (d) “Parents feel welcome to participate at this school” (CalSCHLS Survey Modules, 2023a, pp. 5-6, 8).

**Public Use Files.** Public use files contain school, district, and state-level enrollment and achievement data. The State of California’s DataQuest website (<https://dq.cde.ca.gov/>) provides public access to school enrollment, assessment, and accountability data. This data could be easily disaggregated by student groups and compared to district and state averages. Enrollment, suspension rate, graduation rate, and math and English language arts assessment data were available for all 5 years of this case, with exceptions for missing assessment data from the 2019-2020 school year due to the pandemic. However, all student engagement data should be interpreted cautiously for 2019-2020 through 2021-2022 due to the COVID-19 pandemic and related changes in teaching, learning, and data collection and reporting. The State of California only published data deemed valid and reliable for these years, and per these guidelines, data for Mesa Verde School District was not published (California School Dashboard, 2022).

### ***Documents***

Documents confirmed implementation activities and corroborated perceived successes and challenges of program implementation as provided by interview participants. These documents included annual site visit reports and a fidelity of implementation report. Site visit reports were generated by an external program evaluator over the 5-year period. Reports documented recruitment, magnet curriculum development, professional development, and parent involvement activities for each year of implementation. The fidelity of implementation report was prepared by the site evaluator in Year 5. These reports were prepared based on on-site observations and staff-submitted documentation to understand the fidelity of implementation. Findings from these reports were included in the Phase 2 section of Chapter 4. The wealth of available data compared alongside these program documents supported the creation of a more complete picture of how the dual enrollment program was implemented and its short-term outcomes.

### ***Interviews***

Notably, specific leadership practices and program implementation strategies were minimally addressed by survey questions. To fully address this study's research questions, enable rich discussions about complex aspects of program implementation, and gather data from multiple perspectives within the study's relatively short timeline, interviews were selected as another data collection strategy. Interviews, as opposed to focus groups, were preferred to promote honest contributions from participants, whereas participants may be hesitant to share negative responses or feelings in front of their colleagues. Interviews were also preferred as parents and staff have been inundated with surveys. A wealth of survey data already existed that could complement the personal responses shared by interview participants.

In-depth, semi-structured interviews with school leaders provided additional insight into how the dual enrollment program was implemented. Non-random purposive sampling was used to select volunteer participants to recruit for interviews who reflected the unique contributions to program implementation, reflective of and respective to their leadership roles. 13 prospective participants were emailed the recruitment email script and informed consent form. A second paper copy of the same invitation to participate was sent to participants who did not respond to the initial email inquiry. Three targeted participants declined to interview. A mutually convenient time and location were confirmed to schedule interviews with the remaining ten interested participants. All ten interviews took place in February 2023. Interviewees included three administrators, four teacher leaders, two parent leaders, and one counselor.

**Principal and Assistant Principals.** The school's administrative leaders were selected as ideal interviewees for their roles in program implementation and their respective expertise and unique perspectives on school systems and policies. The school administrators had served at the school throughout the implementation period and had personal experience with the program as each had enrolled their own children in the school's dual enrollment program.

**Counselor and Teacher Leaders.** Counselors and teachers were directly responsible for scheduling or implementing the early-college-integrated curriculum and were the direct recipients of most of the professional development offered at the school. A counselor and four teacher leaders who had worked at the school for at least 5 years were recruited to volunteer in this study. Ideal interviewees were recommended by a site administrator as people who had a direct or indirect role in program implementation as decision-makers and influencers of school culture. A recruitment letter seeking volunteers was sent to these select counselors and teacher leaders (see Appendix B).

**Parent Leaders.** Parent leaders who served on one or more parent committees (English Learner Advisory Council, School Site Council, African American Parent Council, Parent Teacher Student Association, Magnet Steering Committee), had been a parent at the school for more than 3 years, and who represented diverse socioeconomic and racial backgrounds were also recruited to participate. Parent leaders brought unique perspectives through their personal connections and understanding of their children's experiences and their unique involvement in influencing school policies, plans, culture, and climate. Some interviewees represented multiple perspectives, as some administrators and teachers were also parents of West Cal students.

Interview documentation omitted any personally identifiable information regarding the participants, and interviewees were reminded to avoid using personal names or any personally identifiable information of any school or district staff or specific persons in their responses. This exclusion was intended to encourage honest contributions. Interviews were audio-recorded for transcription purposes only using Otter (<https://otter.ai/>). Audio files were discarded within one hour of the end of each interview session once the transcription was finalized and available for download via an encrypted file. Transcripts were stored as encrypted files on a password-protected device.

Data collected from interviews provided diverse and varied perspectives from adults who engaged differently in supporting program implementation. These interviews were essential to understanding program actors' perceptions and experiences.

### ***Reflective Notes***

Case study notes were maintained throughout the research process. These type-written notes were taken during document and interview transcript analysis. Notes were reviewed within 24 hours to ensure they were legible and captured ideas accurately. Notes included a reflective

journal entry to capture key ideas that surfaced during data analysis. These notes and reflections were maintained in the case study database so that future researchers could refer to them.

### **Human Subjects Considerations**

Much of this study relied on publicly available data sources and documents containing school-level data not specific or identifiable to particular students, teachers, parents, or administrators. Interviews, however, involved research on individual perceptions. Thus, specific written permission was obtained from the university's Institutional Review Board (IRB; Appendix C) and school district to carry out the study, and informed consent (Appendix D) was collected from all interview participants. This consent communicated how data would be used to improve local practice and inform future research that could help other practitioners.

All participants were volunteers over age 18 who were not from quasi-protected groups and who were not professionally associated with the researcher in any supervisory or evaluative capacity. The study may have posed minimal risk to the participants (possible loss of confidentiality and emotional or potential psychological distress). To prevent or mitigate these risks, pseudonyms were used for all names, places, and identifiable events to protect the district's and participants' privacy and confidentiality. Where it would not affect the interpretation of findings, minor details and references were changed to provide reasonable anonymity. Interviews were audio-recorded for transcription purposes only, and notes and transcripts did not identify content attributable to named individuals. All records were encrypted and stored in a password-protected drive.

Participation in this study did not have any negative impact on program evaluations, instructor evaluations, or employment, and this study did not involve significant time away from the delivery of curriculum or instruction. Interviews were not conducted by supervisors involved

in employment decisions. No financial, professional, or personal conflicts of interest were associated with this study. There were no financial contributors to this study.

### **Validity and Reliability**

Construct validity was increased by using multiple data sources, incorporating multiple perspectives, including peer and participant reviews, and maintaining detailed records (Guba & Lincoln, 1985; Yin, 2018). Multiple data sources enabled triangulation, which seeks to locate where lines from different reference points intersect or converge (Yin, 2018). Documents such as site visit reports were used to corroborate the evidence from other sources. Yin (2018) notes that such “documentation is useful even though it is not always accurate and may not be lacking in bias” (p. 113). Rather than serving as a basis for drawing conclusions, site visit reports were used to corroborate specific implementation activities.

To further increase the validity of constructs, a chain of evidence was established and maintained in the case study database. The chain of evidence included detailed procedures for data collection and analysis, including reflections on how any processes varied from planned procedures. Key participants and peers also reviewed drafts of the integrated findings to confirm the accuracy of descriptions and increase validity (Guba & Lincoln, 1985).

Other validity concerns with an explanatory sequential mixed methods design include the accuracy of overall findings if all options are not considered for explaining the quantitative results and the use of different samples across phases. To increase validity, the researcher considered multiple options for explanations of quantitative results and used multiple data sources to corroborate findings. Additionally, different samples during Phase 1 and Phase 2 of the study may have impacted validity. While both phases included samples of people from the same general populations (students, teachers/staff, parents), students and non-leaders were

excluded from interviews. Future research to interview students and non-leaders could address this concern.

To increase the study's reliability, a secure online spreadsheet, Case Study Database, was used to compile a list of all documents, archival records, and case study notes. The list was formatted as an annotated bibliography with a summary of the document's purpose and use and a link to the full document or record. Additionally, a uniform interview protocol (Appendix E), adapted from Yin (2018), was used to describe the study's rationale, interview questions, and interview procedures. The case study database, including all case study notes, the chain of evidence, and the interview protocol, promoted the increased reliability of this study.

Additionally, prior to conducting interviews, a pilot interview was conducted to test the interview protocol and proposed interview questions to improve the validity of qualitative data. The interview protocol was tested in January 2023, after which changes were made to improve the protocol (see Appendix F). First, additional instructions were added to interview procedures to inform participants that the intent of the interview is to understand successful leadership practices and experienced challenges more broadly, as opposed to a particular leader's personal characteristics. Next, the pilot interview informed needed revisions to guiding questions. The initial specificity of guiding interview questions regarding successes and challenges seemed to be leading and too narrow to address the study's intent. For example, questions regarding challenges elicited responses that tended to focus on individuals' behaviors rather than schoolwide patterns. Revised questions did not delineate for interviewees whether a question was intended to understand a success or challenge. The questions were reworded to capture both perceived successes and challenges depending on the interviewees' experiences and perspectives and to achieve the aim of understanding leadership practices and systems as opposed to personal



leadership qualities. This revised protocol supported the documentation of procedures and aided adherence to the intended line of inquiry amidst the vast amount of information collected from multiple interviews (Yin, 2018).

### **Analysis**

Non-crossover analysis was used during each respective phase of the study. First, descriptive statistics were applied to analyze existing quantitative school-level enrollment, achievement, and survey data for Phase 1. For data that was available throughout the 5-year year period, including enrollment and academic achievement data, data points for each year were plotted to illustrate trends over time and reveal any patterns that might indicate areas of change based on increases or declines over time. The Magnet and Cal-SCHLS survey data presented an opportunity to compare early and full implementation perceptions using school-level results that represented multiple perspectives (students, staff, parents). Differences were calculated between the pre and post-results to determine which survey items demonstrated the greatest range to reveal potential shifts over time. Where relevant and possible, district results were provided for contextual reference. Quantitative data are presented in Chapter 4 via frequency distribution and summary tables and a detailed description of summary data. These quantitative findings were used to refine interview questions further and inform qualitative data collection and analysis in Phase 2.

Qualitative data was analyzed using Creswell and Creswell's (2017) 5-Step Analysis Process. Data was first organized and prepared through transcribing interviews with Otter.ai software and scanning documents, then read for overall meaning, followed by coding and categorizing text with labels. Additional rounds of coding enabled synthesizing of the data across

multiple data sets. After several iterations of this process, patterns were identified, and data were interpreted into prominent themes.

An initial deductive approach was used to code interview transcripts. Thematic analysis included a priori themes based on the conceptual framework and themes from the literature (leadership- collaboration, operational systems, instructional; diversity - choice, respect, interaction, equity and inclusion; curriculum & professional development- participation, effectiveness, rigor; academic excellence- care, high expectations, support, impact; and family & community partnerships- welcoming environment, partnership, communication). New codes emerged during the coding process. Further review of survey data and other data provided by case documents enabled the re-examination of the additional relevant data points.

Otter.ai software enabled simultaneous transcription of interviewee responses and initial qualitative data review. Transcripts were read and edited within one hour of the interview to correct any words that were not accurately transcribed and replace any school, district, or personal identifiers with pseudonyms. Otter.ai software additionally assigned summary keywords, generated by its artificial intelligence software based on the frequency of usage; however, these were disregarded as they were generally common words of less relevance to the intended line of inquiry, such as the name of the school or college partner. Full transcripts were downloaded from Otter.ai and saved as encrypted files on a password-protected device. Then, audio recordings were deleted to protect the privacy and confidentiality of the interviewees.

The full interview transcripts were then uploaded to HyperRESEARCH, a software to assist in the coding process. Documents, including magnet site visit reports and a fidelity of implementation report were uploaded to HyperRESEARCH as sources. Pertinent information related to a priori codes was highlighted, as were additional excerpts that might be of interest for

new codes, and reflective notes about coding decisions were maintained in a reflective notes tab in the case study database.

After two transcripts were coded, the researcher took additional steps to increase the reliability and validity of the findings. A frequency report was used to visualize overlapping and irrelevant themes. Codes were refined, and definitions of each code were written into the HyperRESEARCH code book. Transcripts were re-coded where appropriate based on the updated code book, and the code book and initial transcripts were then shared with a peer doctoral student to establish intercoder reliability. The peer researcher separately coded each of the two initial transcripts using Quirkos. The findings from each coder were compared and discussed, and codes and code definitions were updated and further refined to improve the reliability of the findings. Next, the remaining interviews were conducted. The integrated findings were then shared back with an interviewee for member-checking to ensure the researcher accurately captured the perceptions and experiences of the interview participants.

Finally, HyperRESEARCH was also used to enhance reporting of themes. The software produced code frequency reports, charts, and word clouds to visualize prominent themes. Qualitative findings are presented via thick descriptions of significant themes in Chapter 4. After quantitative and qualitative data were collected and analyzed separately, findings from multiple sources were interpreted to discuss how the qualitative findings explained quantitative results (Creswell & Creswell, 2017). This integrated data analysis step provided opportunities to compile and analyze relevant data points to synthesize and develop a set of findings.

### **Reporting Findings**

Findings from all sources were integrated and reported by phase and thematic categories in Chapter 4. This format was selected to aid the intended audience, K-12 educator practitioners,

in locating the specific findings and conclusions that may be most relevant to them. Reported findings included the construction of logic models to display outcomes for each pillar alongside implementation activities. Logic models are graphic displays of concepts that illustrate the relationship between implementation activities or events to “theoretically predicted events,” in this case, the perceived or experienced short-term outcomes revealed through analysis of multiple data sources (Yin, 2018, p. 186). Conclusions are explained in Chapter 5, followed by implications for practitioners and future research.

### **Limitations of the Study**

The study presented several limitations that may have impacted the study’s findings. These limitations included the lack of precision in socioeconomic status data, validity concerns regarding ethnicity and race data and academic achievement data, the lack of availability of valid data on long-term student outcomes, and the inherent limitations to the generalizability of findings for a single case study.

The lack of reliability of student socioeconomic status data related to enrollment demographics. Socioeconomic integration is relevant to this study; however, school-level socioeconomic status data, such as qualification for free or reduced-price lunch, has been unreliable in recent years due to (a) 2019 changes in California to expand eligibility for free or reduced-price meals in schools and (b) the impact of the 2020 coronavirus pandemic on employment. Further, free and reduced-price lunch is a flawed variable since its basis is in federal income guidelines, which shift (Ware, 2019).

Data on ethnicity and race also presented limitations. This data was collected based on predetermined categories from which parents may select options (Hispanic or Not Hispanic for ethnicity and a limited number of selections for race). It is important to note that these selections

may not accurately depict the ethnic or racial identity that a parent or student might otherwise use to describe themselves. For example, students who identify as ethnically Hispanic and racially White would be reported as Hispanic or Latino in state and federal educational data systems. In contrast, the student may identify and present as White. The Hispanic or Latino subgroup represents students with a wide array of racial identities, including those who may identify as White, Latino, or biracial White and Latino. Therefore, enrollment data by ethnicity and race may fail to represent the full extent of any demographic shifts at the school of study. Of course, this limitation may apply to other racial categories as well. Nevertheless, this data point has been reported consistently via the U.S. Census and school reports, so this was the available data to utilize at this time for monitoring demographic shifts.

Additionally, student outcome data on academic indicators such as enrollment and persistence in college may have provided additional insight into the impact of the dual enrollment magnet program. However, at this time, such outcome data was not yet available. Further, academic data was likely impacted by the COVID-19 pandemic, which resulted in school closures, remote learning, and excessive absences among students and teachers due to quarantines between March 2020 and June 2022. Therefore, academic data included in this study should be interpreted cautiously.

Finally, this study aimed to provide an in-depth case study of one school. Due to the limited number of participants and the narrow scope of the research, the results of this study may not be generalizable to other schools and settings. However, this study may inform future researchers of aspects of magnet implementation that warrant more extensive study.

## **Assumptions of the Study**

Several assumptions underlie this study design. One assumption included the presumed honesty of interview participants. An interview protocol was used to address these assumptions and encourage valid responses. Similarly, data from existing surveys were assumed to reflect valid responses. To support this assumption, all survey reports stored in the case study database included the original researchers' explanation of survey validity and instructions to participants.

Based on the study's conceptual framework, there were also inherent assumptions in interpreting findings and conclusions. These included the assumption that the education system, its policies, and structures as presently designed privilege and center White norms while unfairly disadvantaging some individuals and communities, undermining their full potential and contributing to unequal student outcomes. Thus, this study assumed that school leaders must challenge and change systems to facilitate more equitable student outcomes. The study's conceptual framework also assumes that common elements are necessary to establish an effective magnet program, and these elements can be observed and measured.

Another assumption of this study was the value of possible findings. While study findings may not be typically generalizable to other programs, findings may provide valuable insight to practitioners. According to Flyvbjerg (2006), "Context-dependent knowledge and experience are at the very heart of expert activity," and the proximity to the case and feedback from study participants can bring clarity about the usefulness of research findings (p. 222). The research questions and study design were informed by existing literature and peer-reviewed studies to address this assumption.

## **Chapter Summary**

This mixed methods case study aimed to understand how school leaders implemented a dual enrollment magnet program. Data from documents, archival records, and interviews were collected and analyzed to examine how school leaders engaged in activities to promote and implement critical aspects of the program alongside potential impacts. The proposed analysis of this information intended to consider how this case might inform future practice within the school and the larger educational community, including magnet and early college practitioners. Findings from this study follow in Chapter 4.

## Chapter 4: Research Findings

The first chapter of this study introduced the problem and the study's purpose and significance. Segregated schools generally predict disparate academic outcomes for students due to differences in resources and access to opportunities (Kucsera et al., 2015; Reardon et al., 2021; Riel et al., 2022). Such opportunity gaps can be addressed through specialized magnet programs, including dual enrollment programs. However, early college programs have not historically reflected the diversity of California high schools (Smith, 2022). Even racially and economically diverse schools may perpetuate practices that segregate or further marginalize students, such as tracking (Howard & Noguera, 2020), tiered systems of schools (Caruthers et al., 2022; Harris, 2022), or school gentrification (Posey-Maddox et al., 2014; Roda, 2020). The primary aim of this case study was thus to understand how school leaders established and facilitated student integration, equitable access, and positive academic outcomes in a multiracial and increasingly diverse dual enrollment magnet school.

Chapters 2 and 3 presented a review of the literature and the study's methodological design. The literature review included the historical context of segregation and desegregation in California and the United States, the history of magnet schools and early college programs, and an overview of the existing research on magnet schools and dual enrollment programs through the lens of the five pillars of magnet schools, the integration theory of choice, and the idea of school leaders as cultural workers. The study's methodology was then described as an explanatory sequential mixed methods case study design, which included two phases. In Phase 1, existing survey data and evaluator reports were analyzed to understand the dual enrollment program's short-term outcomes and to inform the interview questions posed in Phase 2, which included conversations with school leaders to understand their perceived successes and



challenges of program implementation. This chapter presents the study’s findings to answer the following research questions:

- Phase 1- RQ1: What has changed at the school since the dual enrollment magnet program was implemented?
- Phase 2- RQ2: How did school leaders foster successful outcomes of the dual enrollment magnet program?
  - SQ2: How did school leaders facilitate:
    - SQ2a: ethnic, racial, and socioeconomic school diversity;
    - SQ2b: innovative curriculum and professional development;
    - SQ2c: academic excellence; and
    - SQ2d: family and community partnerships?
- Phase 2- RQ3: How did school leaders experience and address challenges to program implementation?
  - SQ3: How did school leaders experience and address challenges to fostering:
    - *SQ3a*: ethnic, racial, and socioeconomic school diversity;
    - *SQ3b*: innovative curriculum and professional development;
    - *SQ3c*: academic excellence; and
    - *SQ3d*: family and community partnerships?

### **Phase 1 Results: Changes Over Time**

This section of quantitative results focuses on changes at the magnet school to answer RQ 1, “What has changed at the school since the dual enrollment magnet program was implemented?” School-level findings are reported and organized by each of the five magnet pillars. Where applicable, district data are also included for contextual reference.

Survey results are identified throughout this section in relation to the overall percentage of favorable responses. “Favorable” indicates that respondents agreed or strongly agreed with a positive statement or indicated a positive statement was pretty much true or very much true.

### ***Leadership***

In areas of leadership, survey results demonstrated some areas of increased favorable responses and some areas of decreased favorable responses since the dual enrollment program began (see Table 6). From 2016-2017 (pre-implementation) to 2021-22 (full implementation), staff reported more favorable responses to feelings of “trust and collegiality among staff,” with 93% agreement, an increase of 11% over the 4 years. However, staff participation in decision-making decreased by 9% over the same period for a total of 73% agreement in 2020-2021.

**Table 6**

#### *Survey Findings Related to Leadership*

Survey Items	WCHS 2017 %	WCHS 2022 %	Change %	MVSD 2022 %
Collaborative Leadership				
1. This school promotes trust and collegiality among staff. [t]	82	93	11	89
2. This school promotes personnel participation in decision-making that affects school practices and policies. [t]	82	73	-9	74
3. Adults who work at this school feel a responsibility to improve this school. [t]	84	82	-2	81

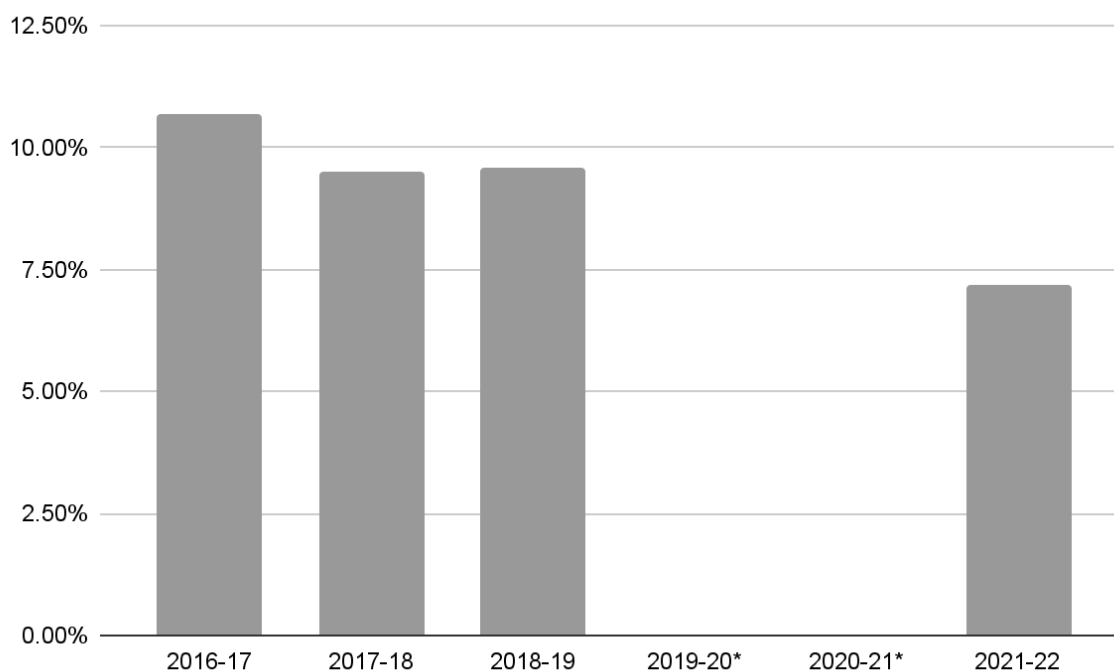
*Note.* Symbols are used to represent if the survey responses were from teachers and staff [t], parents [p], or students [s]. The overall percentage of favorable responses for West Cal High School in 2021-2022 was compared to responses to the same items at the beginning of implementation. The overall percentage of favorable responses for Mesa Verde School District in 2021-2022 was compared to West Cal High School responses to the same items in 2021-2022 to calculate the difference between school and district-level responses. Adapted from CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission.

Suspension data were also compared over time as one indicator of school policies and systemic changes that may impact student engagement. A decrease in suspensions is a general indicator of reduced discipline incidents on a school campus and may therefore indicate

improvements in school culture and climate. Over 5 years, the suspension rate decreased from 10.7% to 7.2%, as shown in Figure 4.

**Figure 4**

*Suspension Rates at West Cal High School Decline from 2016-17 to 2021-22*



*Note.* \*Data is omitted for 2019-2020 and 2020-21 due to the COVID-19 pandemic, wherein students were learning from home for part of the school year. The specified school in the data source reference is not included to protect the anonymity of interview participants. From: *Conditions and climate: Suspension rate*, by DataQuest, 2023 (<https://www.caschooldashboard.org/reports/>). In the public domain.

### ***Diversity***

When its magnet program began, student enrollment by ethnicity, race, and socioeconomic status varied from district averages by 10% or more for each of Mesa Verde's largest ethnic or racial subgroups, and school and district enrollment steadily declined each year. Since establishing its dual enrollment magnet program in 2017, enrollment at West Cal increased by approximately 44 students. Enrollment increased by 125 students from Fall 2019 to Fall 2021 (the school continued to experience declines in enrollment in the first implementation years, with

an enrollment boost occurring after the third full year of program implementation). Such increases did not occur at the district level, where enrollment has steadily declined. The enrollment percentage of White students also increased while maintaining enrollment numbers of Black and Latino students (California Department of Education, 2022b). At West Cal, the percentage of economically disadvantaged students also increased; however, it is unclear how the COVID-19 pandemic or changes in collection procedures may have impacted these figures due to increased student eligibility for free and reduced lunch (see Table 7).

**Table 7**

*2017-18 and 2021-22 West Cal High School Compared to District Enrollment*

Total Enrollment by Ethnicity or Race	WCHS 2017-2018 892 N (%)	WCHS 2021-2022 936 N (%)	MVSD 2017-2018 16,881 N (%)	MVSD 2021-2022 14,542 N (%)
Hispanic or Latino	638 (71.5)	637 (68.1)	10,589 (59.8)	9,163 (57.8)
White	16 (1.8)	53 (5.7)	3,279 (16.8)	3,033 (19.1)
Asian	15 (1.6)	16 (1.8)	1,252 (7.1)	1,126 (7.1)
Black or African American	199 (22.3)	209 (22.3)	2,272 (12.2)	1,667 (10.5)
Two or More Races	16 (1.8)	19 (2)	553 (3.1)	671 (4.2)
Socioeconomically Disadvantaged	725 (81.3)	808 (86.3)	10,698 (63.4)	10,033 (69)

*Note.* This table illustrates school and district enrollment by group for the 2017-18 and 2021-2022 school years. West Cal has increased enrollment from the underrepresented group of White students while maintaining enrollment for all other ethnic/racial groups. The specified school in the data source reference is not included to protect the anonymity of interview participants. From: *School Enrollment Multi-Year Summary by Ethnicity*, by DataQuest, 2023 (<https://dq.cde.ca.gov/dataquest/page2.asp?level=School&subject=Enrollment&submit1=Submit>). In the public domain.

Student and staff survey data demonstrated mostly positive changes related to diversity and equity (see Table 8). First, survey questions intended to assess whether students liked and attended the school for the magnet theme were analyzed as related to student recruitment to promote school diversity. Responses to these items indicated the extent to which the magnet

theme was attributed to increased enrollment. Responses demonstrated improvements between early and full-implementation years, with increases of 24% and 25%. Over the same period, more staff (88%) also agreed that facilities were well maintained and clean, an increase of 7%. This item was included as a possible indicator of school attractiveness and resource investment. Agreement for this item exceeded the district average.

**Table 8**

*Survey Findings Related to Diversity*

Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
Attractive Magnet Theme/School				
1. I like the magnet theme at my school. [s] <sup>ab</sup>	65	89	24	n/a
2. I wanted to attend this school because of the magnet theme. [s] <sup>ab</sup>	39	64	25	n/a
3. This school has clean and well-maintained facilities and property. [t] <sup>d</sup>	81	88	7	62
Respect				
4. Students respect each other's differences. [t] <sup>d</sup>	88	97	9	85
5. Adults from this school respect differences in students. [t] <sup>d</sup>	96	97	1	98
6. This school fosters an appreciation of student diversity and respect for each other. [t] <sup>d</sup>	94	100	6	95
Interaction				
7. Students get along well with one another. [t] <sup>d</sup>	92	93	1	93
8. Teachers show that they think it is important for students of different races and cultures at this school to get along with each other. [t] <sup>d</sup>	98	95	-3	96
Equity and Inclusion				
9. Students' participation in magnet theme activities reflects the racial mix of the school. [t] <sup>ab</sup>	45	90	45	n/a
10. This school considers closing the racial/ethnic achievement	94	93	-1	85

Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
gap a high priority. [t] <sup>d</sup>				
11. I feel like I am a part of this school. (11th grade) [s] <sup>e</sup>	52	68	16	47
12. I feel like I am a part of this school. (9th grade) [s] <sup>c</sup>	58	65	7	49

*Note.* Symbols are used to represent if the survey responses were from teachers and staff [t], parents [p], or students [s]. The overall percentage of favorable responses for West Cal High School in 2021-2022 was compared to responses to the same items at the beginning of implementation (2017 for items 3-8, 10-12 and 2018 for item 1, 2, 9 based on the survey source). The abbreviation n/a where indicated represents not applicable for surveys in which there was not available data. The overall percentage of favorable responses for Mesa Verde School District in 2021-2022 was compared to West Cal High School responses to the same items in 2021-2022 to calculate the difference between school and district-level responses. <sup>a</sup>Adapted from *2018 MSAP student and teacher survey report*, by J. Herman, V. Bozeman, and J. Wang, 2018, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>b</sup>Adapted from *2022 MSAP student and teacher survey report*, by J. Wang, V. Bozeman, L. de Vries, and Q. Debley, 2022, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>c</sup>CalSCHLS Survey Modules. (2023b). *Middle/high school climate in-school module (English)*. CalSCHLS. [https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223\\_final.pdf](https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223_final.pdf). Reprinted with permission. <sup>d</sup>CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission.

Staff also selected mostly favorable responses and increasingly favorable responses between survey administration years, agreeing that students interacted and respected each other and that instructional practices and student participation in dual enrollment were reflective of the diverse student body. 2021-2022 school-level results also exceeded district averages.

One of the areas with the largest increase over time was agreement that student participation in magnet-themed activities reflected the racial mix of the school, an increase of 45% from 2017-2018 to 2021-22 to 90% agreement. While improved, just over half of 9th and 11th-grade students agreed they felt they were a part of the school, an area of lower relative agreement than other survey items, although school responses exceeded district averages.

### ***Innovative Curriculum and Professional Development***

Survey responses also demonstrated consistent increases in agreement related to curriculum and professional development, indicating increased implementation of the early college magnet theme since program implementation began (see Table 9). Pre and post-survey data comparisons regarding instructional prioritization of the magnet theme increased by 14% for

a total of 85% agreement, an indicator of increasing implementation and instructional focus on the magnet theme. Professional development, teacher-reported comfort and time incorporating the magnet theme in instruction also increased, as did favorable responses to the application of professional development. Teachers responded more favorably that training helped them implement the magnet theme. Students also increasingly agreed that they experienced early college in their classes and that this thematic exposure made their classes more challenging.

**Table 9**

*Survey Findings Related to Curriculum and Professional Development*

Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
Participation in Professional Development				
1. How many hours did you spend on professional development activities related to magnet theme implementation, including unit development? [t] <sup>ab</sup>	3	36	33	n/a
2. How many hours did you spend on professional development activities related to the development of magnet-theme instructional strategies? [t] <sup>ab</sup>	0	36	36	n/a
3. This school has staff examine their own cultural biases through professional development or other processes. [t] <sup>d</sup>	73	98	25	86
4. This school provides the supports needed for teaching culturally and linguistically diverse students. [t] <sup>d</sup>	81	92	11	83
Effectiveness of Professional Development				
5. To properly implement the magnet theme, I have altered my teaching methods. [t] <sup>ab</sup>	29	64	35	n/a
6. I am comfortable teaching lessons that are related to the magnet theme. [t] <sup>ab</sup>	63	79	16	n/a
7. Please indicate the approximate number of hours per week you incorporate your school's magnet theme into your lessons. [t] <sup>ab</sup>	6	31	25	n/a
8. The professional development I have received has helped me integrate lessons with the magnet theme into lessons. [t] <sup>ab</sup>	18	74	56	n/a
9. I learn about the magnet theme in most of my classes. [s] <sup>ab</sup>	44	59	15	n/a

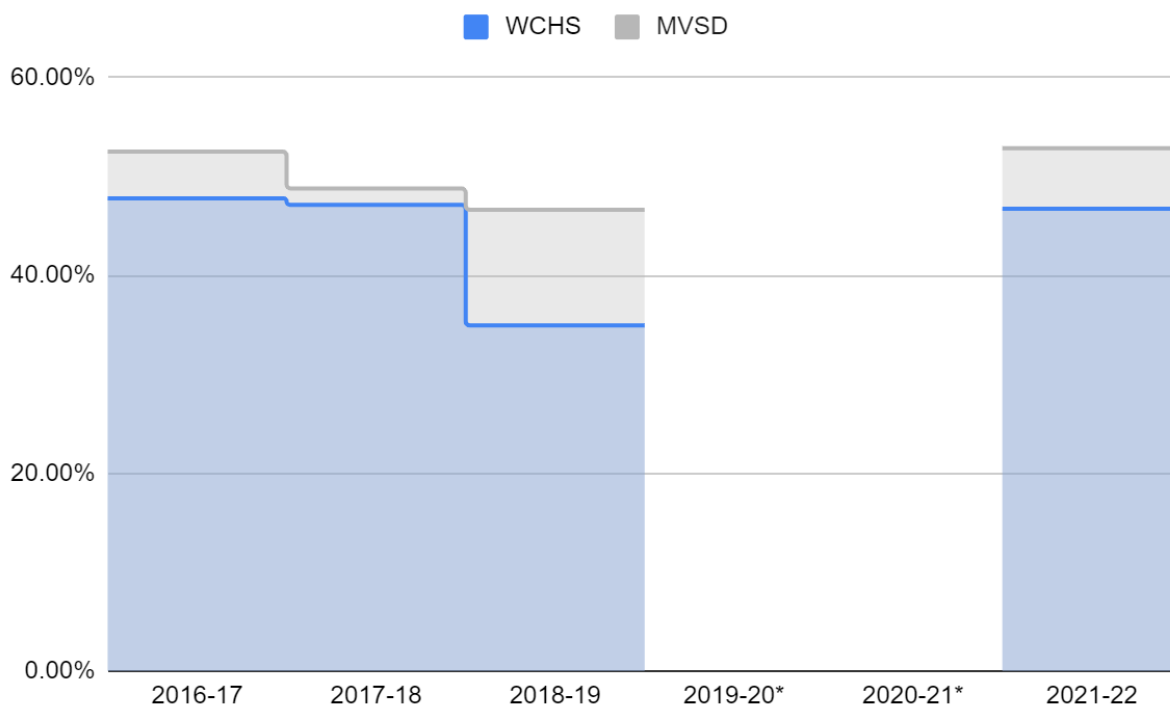
Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
10. This school emphasizes using instructional materials that reflect the culture or ethnicity of its students. [t] <sup>d</sup>	77	86	9	84
11. It is clear that the magnet theme is an instructional priority of this school. [t] <sup>ab</sup>	71	85	14	n/a

*Note.* Symbols are used to represent if the survey responses were from teachers and staff [t], parents [p], or students [s]. The overall percentage of favorable responses for West Cal High School in 2021-2022 was compared to responses to the same items at the beginning of implementation (2017 for items 3-4 and 2018 for item 1, 2, 5-10 based on the survey source). The overall percentage of favorable responses for Mesa Verde School District in 2021-2022 was compared to West Cal High School responses to the same items in 2021-2022, where possible, to calculate the difference between school and district-level responses. The abbreviation n/a where indicated represents not applicable for surveys in which there was not available district-level data.<sup>a</sup>Adapted from *2018 MSAP student and teacher survey report*, by J. Herman, V. Bozeman, and J. Wang, 2018, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>b</sup>Adapted from *2022 MSAP student and teacher survey report*, by J. Wang, V. Bozeman, L. de Vries, and Q. Debley, 2022, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>d</sup>CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission.

### ***Academic Excellence***

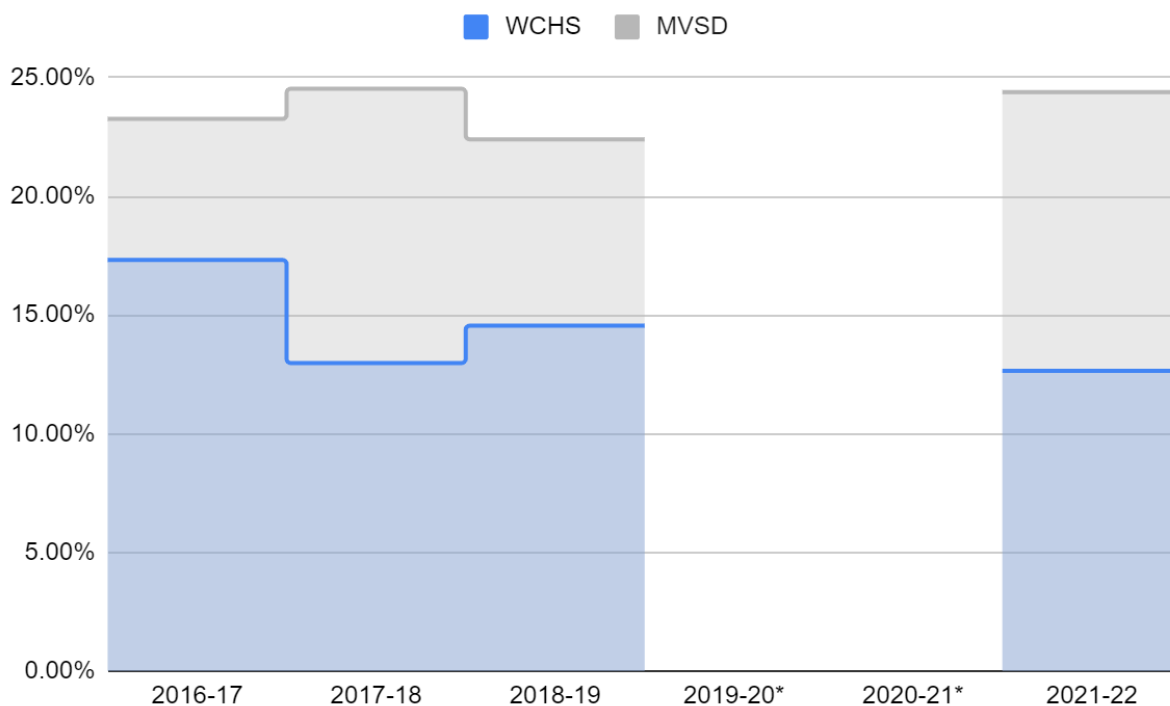
Changes in academic excellence over time were measured using state test score data, graduation rates, and survey responses. State test scores demonstrated widening gaps between school and district-level student achievement in English language arts (Figure 5). In 2021-2022, 46.75% of students met or exceeded standards in English language arts as compared to 47.8% in 2016-17 before the dual enrollment magnet program was implemented and 52.86% districtwide in 2021-2022. The gap between school and district performance was larger than before program implementation.



**Figure 5***English Language Arts Standards Proficiency Rates Over Time*

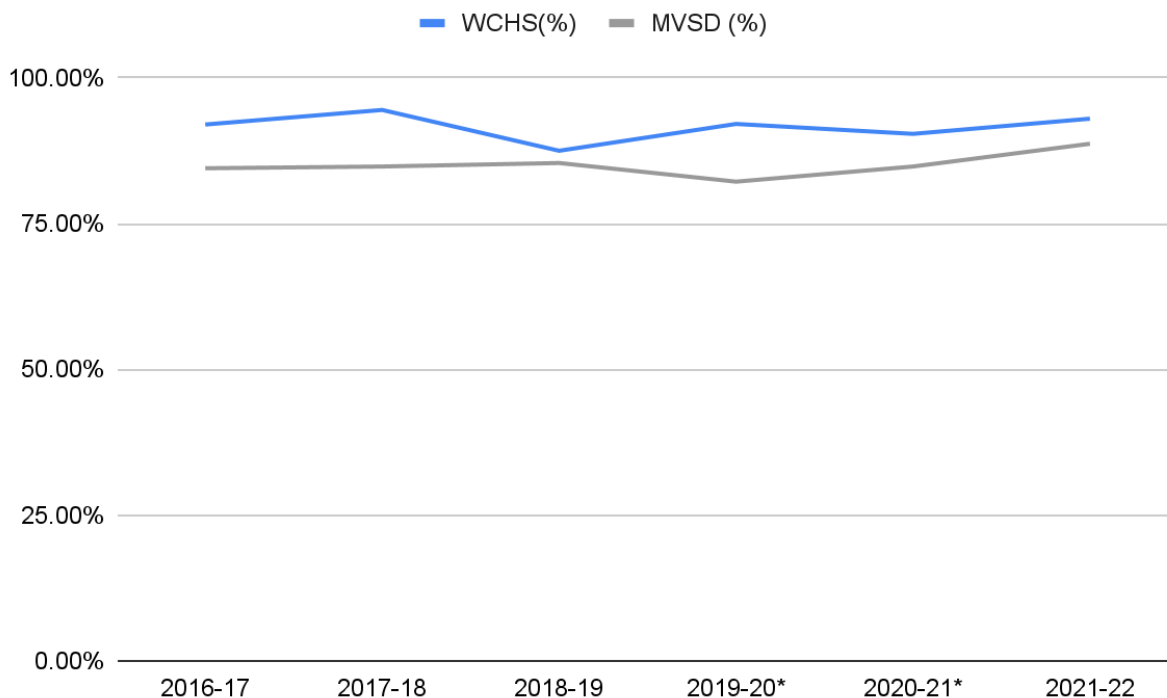
*Note.* \*Data is omitted for 2019-2020 and 2020-21 due to the COVID-19 pandemic, wherein students were learning from home for part of the school year. The specified school in the data source reference is not included to protect the anonymity of interview participants. From: *Academic performance: English Language Arts*, by DataQuest, 2023 (<https://www.caschooldashboard.org/reports/>). In the public domain.

Similar widening gaps between school and district-level student achievement in mathematics were also apparent (see Figure 6). In 2021-2022, 12.65% of students met or exceeded standards in mathematics compared to 17.32% in 2016-17 before the dual enrollment magnet program was implemented and 24.39% districtwide in 2021-2022. The gap between school and district performance was wider than in pre-implementation years.

**Figure 6***Mathematics Standards Proficiency Rates Over Time*

*Note.* \*Data is omitted for 2019-2020 and 2020-21 due to the COVID-19 pandemic, wherein students were learning from home for part of the school year. The specified school in the data source reference is not included to protect the anonymity of interview participants. From: *Academic performance: Mathematics*, by DataQuest, 2023 (<https://www.caschooldashboard.org/reports/>). In the public domain.

High School graduation rates show that West Cal High School has maintained and slightly increased graduation rates from 92% in 2016-2017 to 93% in 2021-2022 (Figure 7). However, districtwide increases over time have been greater, from 84.5% in 2016-2017 to 88.7% in 2021-2022.

**Figure 7***Four-Year Adjusted Cohort Graduation Rate Over Time*

*Note.* \*Data may be less valid and reliable for 2019-2020 and 2020-21 due to the COVID-19 pandemic, wherein students were learning from home for part of the school year. The specified school in the data source reference is not included to protect the anonymity of interview participants. From: *Academic engagement: Graduation rate*, by DataQuest, 2023 (<https://www.caschooldashboard.org/reports/>). In the public domain.

While teachers increasingly agreed that the magnet theme improved student achievement, other student and staff survey data related to academic excellence demonstrated maintenance or declines in several areas over the years (see Table 10). Of note, students reported less favorable responses to perceptions of care, and teachers and students reported less favorable responses to perceptions of high expectations of students compared to pre-implementation results. Despite these decreases, parents and students responded favorably (96% and 85%, respectively) that West Cal promotes academic success for all students, and overall results included more favorable responses than district averages. Regarding student support, students' responses demonstrated increasingly favorable perceptions over time of the availability of help as needed; however,

students also responded less favorably than pre-implementation to questions regarding adequate counseling services and teacher supports, including re-teaching of content as needed.

**Table 10***Survey Findings Related to Academic Excellence*

Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
Caring Adults				
1. At my school, there is a teacher or some other adult who really cares about me. 11th gr. [s] <sup>c</sup>	63	63	0	53
2. At my school, there is a teacher or some other adult who really cares about me. 9th gr. [s] <sup>c</sup>	64	55	-9	45
3. Adults who work at this school really care about every student. [t] <sup>d</sup>	88	89	1	89
High Expectations				
4. At my school, there is a teacher or some other adult who believes that I will be a success. 11th gr. [s] <sup>c</sup>	77	66	-11	58
5. At my school, there is a teacher or some other adult who believes that I will be a success. 9th gr. [s] <sup>c</sup>	76	70	-6	58
6. Adults who work at this school believe that every student can be a success. [t] <sup>d</sup>	92	87	-5	86
7. This school promotes academic success for all students. [t] <sup>d</sup>	90	87	-3	88
8. This school promotes academic success for all students. [p] <sup>c</sup>	n/a	96	n/a	86
9. Our magnet theme makes school challenging. [s] <sup>ab</sup>	49	69	20	n/a
Support				
10. This school is a supportive and inviting place for students to learn. [t] <sup>d</sup>	96	98	2	98
11. This school emphasizes helping students academically when they need it. [t] <sup>d</sup>	92	98	6	93
12. This school provides adequate counseling and support services for students. [t] <sup>d</sup>	94	87	-7	75
13. Teachers re-teach topics because student performance on assignments or assessments did not meet high standards.	92	60	-32	n/a

Survey Items	WCHS '17/'18 %	WCHS 2022 %	Change %	MVSD 2022 %
[t] <sup>ab</sup>				
Academic Outcomes				
14. My school's focus on the magnet theme has improved the achievement of my students. [t] <sup>ab</sup>	26	77	51	n/a
15. As things stand now, how far in school do you think you will get [in school]? [s] <sup>ab</sup>	64	60	-4	n/a

*Note:* Symbols are used to represent if the survey responses were from teachers and staff [t], parents [p], or students [s]. The overall percentage of favorable responses for West Cal High School in 2021-2022 was compared to responses to the same items at the beginning of implementation (2017 for items 1-12 and 2018 for item 13-15 based on the survey source). The overall percentage of favorable responses for Mesa Verde School District in 2021-2022 was included for contextual reference. The abbreviation n/a where indicated represents not applicable for surveys in which there was not available district-level data or where school-level data was not deemed valid or reliable that administration year due to low participation rates. <sup>a</sup>Adapted from *2018 MSAP student and teacher survey report*, by J. Herman, V. Bozeman, and J. Wang, 2018, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>b</sup>Adapted from *2022 MSAP student and teacher survey report*, by J. Wang, V. Bozeman, L. de Vries, and Q. Debley, 2022, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>c</sup>CalSCHLS Survey Modules. (2023b). *Middle/high school climate in-school module (English)*. CalSCHLS. [https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223\\_final.pdf](https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223_final.pdf). Reprinted with permission. <sup>d</sup>CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission. <sup>e</sup>CalSCHLS Survey Modules. (2023c). *California school parent in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csps-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csps-2223_in-school_final_watermarked.pdf). Reprinted with permission.

### ***Family and Community Partnerships***

Due to participation numbers, pre and post-implementation data from parents were less reliable than those of staff and students. However, some of the same survey items were administered to teachers, students, and parents, enabling a comparison of results across samples to triangulate and understand the reliability of findings. While more than 85% of teachers and parents agreed or strongly agreed that the school welcomed and partnered with parents, a similar response to surveys before the full implementation of the program, students responded less favorably (see Table 11). Approximately half of the 9th and 11th graders surveyed agreed that their parents felt welcome to participate at the school, a decrease of more than 10% compared to 4 years earlier.

**Table 11***Survey Findings Related to Family and Community Engagement*

Survey Items	WCHS 2017 %	WCHS 2022 %	Change %	MVSD 2022 %
Welcoming Environment				
1. Parents feel welcome to participate at this school. (11th grade) [s] <sup>c</sup>	58	48	-10	44
2. Parents feel welcome to participate at this school. (9th grade) [s] <sup>c</sup>	66	54	-12	46
3. Parents feel welcome to participate at this school. [t] <sup>d</sup>	94	93	-1	93
4. Parents feel welcome to participate at this school. [p] <sup>c</sup>	n/a	85	n/a	76
5. This school is welcoming to and facilitates parent involvement. [t] <sup>d</sup>	92	93	1	95
Partnership				
6. This school encourages parents to be active partners in educating their child. [t] <sup>d</sup>	90	89	-1	91
7. The school encourages me to be an active partner with the school in educating my child. [p] <sup>c</sup>	n/a	87	n/a	83
Communication				
8. Teachers at this school communicate with parents about what their children are expected to learn in class. [t] <sup>d</sup>	92	97	5	90
9. Teachers communicate with parents about what students are expected to learn in class. [p] <sup>c</sup>	n/a	76	n/a	73

*Note.* Symbols are used to represent if the survey responses were from teachers and staff [t], parents [p], or students [s]. The overall percentage of favorable responses for West Cal High School in 2021-2022 was compared to responses to the same items at the beginning of implementation (2017). The overall percentage of favorable responses for Mesa Verde School District in 2021-2022 was compared to West Cal High School responses to the same items in 2021-2022 to calculate the difference between school and district level responses. The abbreviation n/a where indicated represents not applicable for surveys in which there was not sufficient parent survey participation for school level data.

<sup>a</sup>Adapted from *2018 MSAP student and teacher survey report*, by J. Herman, V. Bozeman, and J. Wang, 2018, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>b</sup>Adapted from *2022 MSAP student and teacher survey report*, by J. Wang, V. Bozeman, L. de Vries, and Q. Debley, 2022, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission. <sup>c</sup>CalSCHLS Survey Modules. (2023b). *Middle/high school climate in-school module (English)*. CalSCHLS. [https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223\\_final.pdf](https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223_final.pdf). Reprinted with permission. <sup>d</sup>CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission. <sup>e</sup>CalSCHLS Survey Modules. (2023c). *California school parent in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/cspss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/cspss-2223_in-school_final_watermarked.pdf). Reprinted with permission.

## Phase 2 Results: Implementation Successes and Challenges

Phase 2 included semi-structured interviews of ten participants to understand and interpret quantitative program outcomes. Interviews ranged from 24 to 73 minutes (an average of 39 minutes each). They were conducted in a semi-structured manner, using an interview protocol and guiding questions to generate conversation and allowing the discussion to diverge somewhat to capture participant perceptions and experiences adequately. The interview protocol, including guiding questions, is located in Appendix F. Interviews were audio-recorded (with permission) to collect transcription data, enabling the identification of frequent or prominent themes and the use of transcript excerpts to illustrate key points.

### *Description of the Sample*

The sample of ten participants included West Cal High School administrators, parents, teachers, and a counselor. Multiple interviewees identified with the school in various ways, such as employees who were also alums and parents of students who attended West Cal. All were regarded as school leaders in some capacity (administrators, department chairs, athletic directors, parent group leaders). Pseudonyms for each participant, their general and approximate demographic information, and information regarding participants' professional and personal connections to West Cal are listed in Table 12.

**Table 12**

### *Interview Participants*

Pseudonym	General Demographics	Primary Role at WCHS	Alum of WCHS	Has a Child who Attended WCHS
1. Dr. Lewis	m / 41 / Black	Administrator	Yes	Yes
2. Dr. Rico	m / 42 / Latino	Administrator	Yes	Yes

Pseudonym	General Demographics	Primary Role at WCHS	Alum of WCHS	Has a Child who Attended WCHS
3. Ms. Davis	f / 41 / Black	Administrator	No	Yes
4. Ms. Nelson	f / 47 / Black	Parent	Yes	Yes
5. Ms. Anderson	f / 51 / White	Parent	No	Yes
6. Ms. Dewitt	f / 43 / White	Teacher	No	No
7. Mr. Alfaro	m / 45 / Latino	Teacher	Yes	Yes
8. Mr. Connelly	m / 44 / White	Teacher	No	No
9. Mr. Moore	m / 39 / Black	Teacher	No	No
10. Ms. Nuno	f / 50 / Latina	Counselor	No	No

*Note:* Demographics include gender/approximate age/ and ethnicity or race. The letter m indicates male, and f indicates female. No participants identified as non-binary.

These participants were purposefully included for their respective connections to the school and the length of personal or professional experience with the school community. All voluntarily agreed to participate and had 5 or more years of experience or association with the school. Participants with less than 5 years of experience in the school environment were excluded from this study, as were those who did not have the time or interest to participate in an interview. Participants were also selected to reflect the diverse demographics and perspectives of the school community.

Interview results focus on how school leaders implemented the dual enrollment program to answer RQs 2, “How did school leaders foster successful outcomes of the dual enrollment magnet program?” and RQ3: “How did school leaders experience and address challenges to program implementation?” As with Phase 1, findings are organized by each of the five magnet



pillars. The frequency of relevant and noteworthy themes, many of which will be discussed in this section, is illustrated in Table 13.

**Table 13**

*Frequency Tree of Top 25 Themes from Interview Data*

Themes	Subthemes (frequency)
Leadership Successes	Actions to promote buy-in (20) Hiring (19)
Leadership Challenges	Program scheduling, logistics (28) Teacher involvement in decisions (7)
Diversity Successes	Appeal of dual enrollment model (30) Word-of-mouth, testimonials (18) Open to all (13) Principal visibility (9) Respect for different perspectives (8)
Diversity Challenges	Tracking (19) Neighborhood gentrification (6)
Innovative Curriculum and Professional Development Successes	Effective professional development (23) Easing in with easier courses (13)
Innovative Curriculum and Professional Development Challenges	Inconsistent integration of college skill-building (30)
Academic Excellence Successes	Academic environment (47) Additional supports (21) Students self-perceptions (13) Caring adults (13)
Academic Excellence Challenges	Impact of COVID-19 (44) Acclimating to college expectations (17) Inadequate academic supports (12)
Family and Community Partnerships Successes	Collaborative environment (24) Open door communication (6)
Family and Community Partnerships Challenges	Need to understand MVCC system (3)

*Note.* Frequencies represent the total occurrences in which the theme was mentioned and may include multiple occurrences from the same interviewee where a theme was repeatedly emphasized.

## *Leadership*

In the area of leadership, interview participant responses reflected the dual role of leaders as change managers and change leaders. Frequently occurring themes related to leadership successes included the accessibility and commitment of school administration, a caring school environment, and the effectiveness of the principal's hiring practices. Common implementation challenges reflected logistical complications related to the nature of dual enrollment (merging high school and college systems). This challenge included constraints that limited teacher input and collaborative decision-making related to the logistical impacts of dual enrollment.

**Leadership Successes.** Most interviewees commented on the school administration's commitment, accessibility, and high visibility as factors that contributed to an improved school climate and increased enrollment over the past 5 years. As Principal Dr. Lewis stated, "We are invested. We are in the community, and that means a lot." He elaborated,

You have to want it more than anything else. You have to feel like this is my school. This is my house. This is my kids and my family... You know, there have been some very tough days, but it's worth it because the kids deserve the best.

Fellow administrators, teachers, and parents agreed that the principal, in particular, was "everywhere" in the community and equally accessible on campus, whether he was leading tours or seen in his office through his open door, even when he was busy or meeting with others.

Interviewees also mentioned the principal's credibility based on his multiple personal connections to the school as contributing to a more academic school climate. Administrator and parent Ms. Davis recalled,

The biggest difference from when my son was here...I think, [is the] work that the kids are doing, the expectations. Like, when my son was here, people were like, "Why do you have a backpack?"... I think that's changed a lot because of Dr. Lewis because when Dr. Lewis came, being from Mesa Verde, being a graduate of West Cal, it was easy. You know, the West Cal alumni...if they believe in you, they are going to back you 100%. And I think, with Dr. Lewis coming back and all the work that he's done, and then having the MVCC classes here, that definitely helps. But people believe in him, and people believe in his vision, and they believe in where he's going. And so that has helped change the culture. And he's no-nonsense.

According to interviewees, school leadership's "open door" policy and emphasis on building student connections also reduced behavior incidents on campus. Like several interviewees, Ms. Nuno, a counselor, referred to her open-door and expanded to explain school culture as a feeling of family, "You know, we really are a family. Like, we really care for one another, and I think the kids see that, and that starts to, you know, be seen in the community."

The principal's effective hiring practices were another common theme repeated in response to questions about improved school climate over time. Ms. Davis explained,

I think the principal has made a lot of really good hires...Hiring our coaches as security and instructional aids is probably the biggest thing that's helped because teachers know that the coaches are here, and the kids and the parents know that you know, if there's a problem, the coach is probably going to come.

The school principal agreed that one of the most important contributors to the school's improvements has been "getting the right people in the right places." In particular, Dr. Lewis stated that he hired personnel because of their commitment to serving his school community,

emphasizing, “They care and they would have applied regardless. It doesn't matter if your school is a magnet or not.” While the magnet program may not have contributed to attracting applicants for vacant positions, site visit reports confirmed that by Year 4 of implementation, “teachers and administrators [were] seeking transfer into the school.” In addition to the committed teachers who have long contributed to the students at West Cal, many of the new hires and transfer teachers and staff also brought a passion for particular extracurricular activities that were not previously offered at the school, resulting in increased athletic, music, and club opportunities for students. The administration also discussed how West Cal has many teachers of color on campus, which can help students connect and achieve as they “see themselves in their teachers.”

It should be noted that the theme of effective hiring was explicitly regarding the high school campus teachers and staff and not the college professors, which the school’s city college partner hires. However, the three administrators interviewed described the importance of meeting with the college to ensure optimal hiring of instructors to meet the needs of students in terms of course offerings as well as professor compatibility with serving high school students. As one administrator described, the dual enrollment counselor “is really working hard to make sure that there is a better... understanding of dealing with high school students even though you're teaching a college course.” MVCC also recently hired an assistant dean to oversee operations on the MVCC West campus to support collaboration between the high school and college and address program needs.

**Leadership Challenges.** School leaders expressed the greatest challenges in building and maintaining buy-in among teachers for the early college program and coordinating the many logistics involved in merging high school and college operations, including scheduling as the most frequently mentioned logistical challenge. Overall, these challenges reflected the practical

complexities of collaboration between two entities. Frequent themes regarding leadership responses to these challenges tended to reflect the need for conversation or discussion to help teachers, in particular, understand and prepare for change.

Despite positive shifts in later implementation years, site visit reports and interviews reflected early challenges to gaining buy-in for the early college magnet program. In 2018 and 2019, an external evaluator noted the program's "ongoing struggle to translate a vision into an authentic working model" and the program administrators' challenges in defining the program's theme and structure. The evaluator recommended that the team clearly define the program and outcomes and include teachers in discussions to increase their understanding of the program:

A common definition for Early College should be adopted to help everyone understand the mission and vision of the theme-based program. All teachers should know about the grant and understand/subscribe to the need for the change in instructional practice.

School administrators also lamented that such conversations did not happen earlier in the implementation process. Dr. Lewis elaborated,

It'd have to be discussed, what does dual enrollment mean? What do you want to see for our students? What would dual enrollment do for our campus? Do we need dual enrollment? I think you always need dual enrollment, but just having those conversations [was important]. I think the biggest issue we've had is that those conversations weren't happening with teachers in the beginning, so some are reluctant, and they don't understand...If you don't feel like you're part of something, if you don't feel like you were brought into the conversation, then you sometimes are against it.

The need to include teachers in conversations to increase buy-in from the beginning was clear. As interviews continued, a theme emerged that such conversations would continue to be needed as the program grows and evolves.

The high school teacher leaders interviewed commonly agreed they did not and still do not always know what was “going on” with dual enrollment. While teachers commented that they now supported the program and have seen the benefit to students, they described the experience of feeling increasingly left out of conversations or decisions that impacted their school as the dual enrollment program grew. During interviews, administrators also commented that teachers might not be included in decision-making around dual enrollment because they do not have access to see the “full picture” needed to make a programmatic decision. The school administration also agreed that more should be done to explain things to teachers, even if constraints would likely prevent teachers from making decisions.

Course scheduling decisions were one of the most frequent sources of concern mentioned during interviews. For example, one administrator said that dual enrollment decisions (at the 5-year mark of implementation) were largely about “What are we going to offer? When are [students going] to take it?” While these questions sounded comparatively minuscule in that instance, the nature of what courses MVCC offered was one of the most frequently expressed worries among interviewees.

The source of this concern was the realization by high school teachers that any MVCC courses offered within a high school teacher’s content area may reduce or eliminate the need for the course to be taught on the high school campus. As expressed by an administrator, “So for a teacher, they may be concerned about affecting numbers in [their] class. Are we gonna lose teaching staff because kids aren't taking those courses?” Parents similarly perceived MVCC

course offerings as a source of tension between high school and college. One parent, Ms. Nelson, explained,

I was nervous about that as a parent. I was worried about if there was going to be some animosity from the teachers on campus versus the MVCC professors because it does steal [their] students, even though we said that wasn't going to happen. There [are] some classes, so that is happening.

High school teachers recalled that they were reassured that MVCC professors would not teach any classes that replaced core high school courses. Nevertheless, they noticed students opting to take more and more MVCC courses in lieu of high school courses. A high school teacher, Ms. Dewitt, reflected on this realization:

The majority of what we've talked about this year has been that we've really noticed that a lot of core content teachers are losing their students to MVCC... at the beginning of the grant, they kept saying that that wouldn't happen...now it's happening.

The fears and worries around scheduling and high school course staffing (as impacted by MVCC courses) were among the most frequently mentioned themes during interviews. While teacher leaders commented in support of the program and the benefits to students, they also expressed a desire to be better informed about the changes and any long-term safeguards that may be implemented to prevent the elimination of high school teaching positions from the campus (No one interviewed confirmed that any high school positions had been eliminated, but the fear of future position reductions was prevalent).

Administrators noted that they addressed scheduling concerns directly, emphasizing the importance of discussions in overcoming this challenge. Dr. Lewis shared, "Honestly, it's having straightforward conversations, going up and talking to people...it's being vulnerable, honest,

[and] up front.” While there were other logistical challenges to scheduling, such as mismatches between the high school and college calendar year and instructional days, the decision around which courses were offered and taught by MVCC instructors was the challenge most frequently mentioned as a source of tension that impacted students and teachers. Responses to such complex challenges were reflected in recurring themes of transparent conversations and a professional commitment to consider how to create a schedule that would not result in eliminating high school positions. As Dr. Lewis reflected,

You can't always you can't totally make them feel better...but it's on me to then not lose [that] teacher and [consider] what else [they] can teach. What else can you do? ...At least you have that conversation upfront with staff.

Teacher leaders and administrators acknowledged the importance of greater discussion about what changes could occur as the dual enrollment program grew. Administrators also indicated a desire to support teachers and continue to advocate to keep the same staffing levels while focusing on student benefits in decision-making.

### ***Diversity***

Interview data confirmed increased and increasingly diverse enrollment at West Cal. When asked what the most noticeable change was to West Cal since the grant began, more than half of the interviewees commented about the growing student population and shifting demographics. This sentiment was shared by teacher Mr. Moore:

The school is bigger, and the demographics have changed a bit. Class demographics and racial dynamics have changed a bit. That's the most direct change. You have more upper-middle-class students, it seems like, or students of college-educated parents, and then our racial demographics seem to have changed a bit to more White students than before.



Other initial responses included the dual enrollment program and improved school climate, which interviewees mentioned as factors that drew increased and diverse enrollment. Site visit reports also noted this marked shift in enrollment. The program evaluator wrote,

The White student population has doubled to 3%, and more White and Asian families are touring the school and asking about the Early College curriculum. Students are transferring in from a variety of schools throughout the area, not just the surrounding neighborhood, because of the Early College theme. Student enrollment is on the rise.

This change was attributed by interviewees to improved school perceptions caused by a number of factors, including the attraction and promotion of the magnet theme, school administrators, and an improved school environment.

Access to the magnet theme by all students was another resounding diversity pillar success across multiple interviews as attributed to school policies. However, these successes were accompanied by concerns of the potential for student tracking and the fear that the original intent of equitable outcomes for students might be lost over time.

**Diversity Successes.** To foster increased enrollment in an era of declining enrollment in MVCC, school leaders engaged in outreach, which was bolstered by the early college theme's explicitly academic focus. School tours were repeatedly expressed as an important student recruitment strategy as were four components that interviewees felt were particularly attractive to families, including the magnet theme, the visibility of the school principal, the availability of dual enrollment staff with the expertise to explain the program model and benefits, and the follow-through in offering the program as explained, which contributed to additional positive word-of-mouth marketing.

Site visit reports from the external grant evaluator captured the specific, themed branding and reflections of the academic environment after 3 years of implementation. As described by the evaluator,

The [dual enrollment] brand is clear from the marquee to murals on the sides of buildings, from the entrance to the exits, in hallways, and in classrooms. Public relations materials carry the magnet name. The local newspaper(s) published articles about the newly renovated [facilities] ...The school has embraced its name, as has the community. The schoolwide effort is well-defined. Hallways, classrooms, and the surrounding grounds are immaculate, colorful, and inviting. Displays of current student work along with positive student feedback was also noted...It appears that this year's cohort of parents are choosing the school specifically because of the college-readiness atmosphere on campus and in classrooms. There is a uniformity of messaging in each classroom...College banners and flags. Student work is displayed both inside and outside of classrooms showing much more rigorous work than previously noted. Classroom environments are academic, interactive, and engaging.

School facilities were also improved, according to site visit reports, including upgraded furniture and new equipment in specialized elective classrooms.

The dual enrollment magnet theme also directly countered perceptions that the school may not provide an academically challenging environment. According to teacher Mr. Alfaro, [Dual enrollment] has made many parents feel safer about their choice. In regards to academics specifically. It's been a safe choice for them. And it makes it easy. It makes it so easy to have these conversations that, in the past, were just so hard to have. I could talk until I was blue in the face, trying to sell the academics and people just pointing

straight at a computer. You know, saying, “Hey, look at your scores, look at your ratings,” and I have to go into that, and that takes forever. But when you say we have college, we have college professors on campus, there's not even a question. They don't even care about the ratings anymore. That goes out the window.

School ratings were mentioned several times by parents, teachers, and administrators as a contributing factor to negative perceptions about the school, and many of the interviewees agreed that West Cal was a good school before dual enrollment, albeit one with more disciplinary incidents and a less academic focus overall when compared to their descriptions of the school today.

Even when parents or teachers who were interviewed agreed their children would have attended West Cal anyway, they mentioned that the magnet benefits, such as easy access to college courses and free college credits, still helped them to recruit other families to attend that might have otherwise attended private schools. Mr. Alfaro continued,

There's a lot of people in Mesa Verde that can't afford to send their kids to the private schools or are seeing that the private schools really aren't giving all the options that we're giving. I've had a few kids come from private schools, and they're like, we didn't have this. We didn't have the choices... They were amazed that we had the MVCC classes on campus.

Dual enrollment offered students an opportunity they could not get anywhere else in Mesa Verde.

Multiple interviewees also attributed increased enrollment to the charisma, visibility, and accessibility of the principal and the impact of Dr. Lewis' school tours. As mentioned

previously, Dr. Lewis was described by many this way, and to hear him tell it, there is an intention to promote the school in addition to his commitment and school pride.

Any high school is 24 hours, but if you're changing perceptions... You know, I wear West Cal gear every weekend. Why? I want people to see West Cal at the grocery store, at the mall. I am wearing West Cal almost every weekend because I want people to see the school.

Increasing community awareness of the positive shifts at West Cal and its new dual enrollment program was said to increase tour participation, which interviewees attributed to important changes in people's perceptions of the school. One parent remarked, "I think people have totally made so many assumptions in the past, and when they're actually on campus, they're like, oh, these kids are smart and kind." Others commented that parents have "revelations" on school tours when they see that the school is safe, hear about the program offerings from counselors with dual enrollment expertise, or hear testimonials about recent graduates and their college attendance.

According to multiple interviewees, parents also saw a more academic environment on tours than they would have seen in the past, one with fewer discipline incidents. Administrator Dr. Rico described a changed school climate:

Our behavioral issues aren't what they used to be. There's a lot less, a lot fewer problems when it comes to behaviors, to suspension. So I have seen that. And despite the pandemic, I do see, especially this year, I see kids a little bit more focused on grades and doing well in school. Even though it's not where I want it to be yet, it's not perfect, I do see that trend of students taking their academics a lot more seriously.

Administrators attributed this change to an intentional focus on providing students with a positive, connected environment.

In addition to seeing the school, word-of-mouth was a frequent theme that was said to draw more prospective parents to visit or choose West Cal. Other parents or school alumni “spread the word,” sharing their experiences and encouraging others to tour or attend. The school counselor explained, “You just have a few parents saying, ‘We're doing great at West Cal. We're loving it.’ And it makes a big difference.” The current parents interviewed were proud to play a role in sharing their positive experiences at West Cal and encouraging others to tour. According to Ms. Nelson,

There are parents that would have absolutely said no, and they know now from the experiences that other students have had, from families that they trust, and from the reputation of the programs... They feel more confident in giving it a shot.

According to parent and teacher leaders, some families who toured the school still choose to attend elsewhere, but the interest and positive conversations about the school had increased.

In addition to the attraction of the magnet theme and resulting increases in enrollment, another frequently cited diversity success was the open access of college classes to all students. According to all interviewees and site visit reports, the dual enrollment program was open to all students. As described by the program’s evaluator,

The common thread is that all 9th-grade students will receive two introductory college courses: Intro to College and Personal Growth and Development. The remainder of the sequence of early college course offerings in grades 10-12 are left to the student to opt in or out and can be taken concurrently with their career-focused academy courses.

The dual enrollment program had no prescribed entrance exams or criteria for admission. Dr. Lewis explained, “In our program, anybody can do a class. We try to put all of our freshmen in that class just so they can get acclimated to college.” However, just as often as open access to college courses was mentioned, some West Cal leaders also shared concerns about students who were not initially successful in college courses.

**Diversity Challenges.** Those interviewed agreed that there were potentially harmful consequences for students who failed college courses, mainly that poor grades were permanently listed on students’ college transcripts (just as any dual enrollment grades would be). Dr. Lewis explained,

Now, after your first semester, if you get D's and F's in your class, well, nobody will put you in that class because it's gonna hurt you if you don't pass it. But you can work yourself back up to being able to take a college course.

Several high school teachers worried that the placement of previously unsuccessful students in only high school courses the next term created the potential for a two-tiered system of college-ready students taking increasing numbers of MVCC courses and students who were not academically prepared for college taking mainly high school courses.

There was a near 50/50 split of opinion on whether the school had inadvertently established a structure that would eventually resemble tracking. While all agreed that initial college course access was open and equitable, course scheduling for students not initially successful in 9th-grade college courses was a clear source of tension. One teacher, Ms. Dewitt, explained, “It's almost like a tracking system now. So the high-level students are all taking the MVCC courses, and all of the lower-level students are just in the core classes here.”

Administrator, Dr. Rico, explained the dilemma and concerns for both sides of the argument.

[We need to be] more careful, so that we're not just enrolling kids in class or registering kids for classes and making sure that they can actually handle the class, and that they're going to pass the class and not have an incomplete or an F or a withdrawal on their college transcripts. Because, you know, ultimately, those classes are college courses, and they are part of their college transcripts. So [counselors have] been a little bit more on top of that issue, making sure that the kids can actually handle the class. My concern is that it'll become, you know, a two-track system...and that's something that we'll have to keep an eye on.

When asked about tracking, administrators explained that students were grouped heterogeneously by their chosen career academies and only dropped from the MVCC courses they would not pass (based on their performance in the class up to the drop deadline). Students below a 2.0 did not generally continue in college courses after 9th grade. However, administrators, teachers, and a counselor additionally shared that students who had failed could opt back in to additional college classes with approval. Nonetheless, tracking concerns were prominent, especially as a fear for the future. More generally, threats to sustaining the dual enrollment program's equitable access and original equity aims were a concern.

### ***Innovative Curriculum and Professional Development***

West Cal's dual enrollment program allowed students to take college courses during the traditional high school day, in which students could earn high school and college credits simultaneously. This structure alone may be regarded as an innovative magnet curriculum and was deemed successful across multiple interviews. The sequencing of college courses was also highlighted by many as an important and effective feature of West Cal's program. Magnet schools also typically integrate the theme into core classes, as was the expectation for West Cal.

Such thematic integration requires extensive training. While some areas of training were viewed as impactful, such as anti-bias training, other areas of training were perceived as insufficient or inconsistent, including teacher preparation on the high school and college campuses to incorporate particular teaching strategies or approaches to promote optimal student success in college courses.

**Innovative Curriculum and Professional Development Successes.** By the second year of implementation, West Cal students could take the following MVCC courses on the MVCC West campus, located on the high school grounds: Intro to College, Personal Growth and Development, Health Education, Speech, Introduction to Sociology, and College Algebra. By Year 5 of implementation, courses expanded to include anywhere from 15-18 offerings per semester, including Psychology, Humanities, Weather and Climate, African American History, Mexican American History, Critical Thinking, and Music Appreciation. One successful element of the college curriculum appeared to be student interest in the depth and specificity of course content. As one parent, Ms. Nelson recalled,

With my own children, one of the things that I get excited about is the nature of the conversation. So a professor obviously has more leverage than a K-12 teacher in terms of what they're talking about because they can go in-depth on this one subject in a different kind of way...They can bring in world events in a different way. They can engage the students in a different way, and so that has really made a difference for my children...it also goes into a passion or an interest, just like when you or I were in college, how you can get into something real specific.

Multiple teachers and parents mentioned students' interest in the course content of MVCC classes and how exposure to new and different content expanded students' worldviews.



Another critical curriculum component, as mentioned in multiple interviews, was related to the sequencing of courses. Participants agreed that students benefited from beginning with more accessible college courses in 9th grade to build their confidence and competence. Principal Lewis explained, “The first class is Personal Growth and Development. They take that course, they do well...Alright, let's give you Health. We ease them into it.” The counselor similarly expressed the importance of students passing their first early college classes to build students’ self-confidence, “They get a feel for it, and then they're like, okay, I can do this.” Parent leaders also recognized the benefit of these courses alongside other school supports, “A lot of parents liked that because it's sort of their kids get eased into the MVCC experience.” College courses were supplemented with a weekly Early College Seminar taught on the high school campus, which included time for teachers and counselors to share college preparation and dual enrollment program information. Several interviewees also recommended that even more classes could be added that might prepare students to succeed in later, more advanced coursework to increase the chances that students would pass their college courses.

In terms of successes, there were also mentions of specific professional development by teachers and administrators that they perceived as impacting their professional practice or schoolwide culture. Administrators described training efforts to support teachers in maintaining high, yet reasonable, student expectations: “We did a book study. We actually had somebody come and talk about bias, which was really helpful, and it made people think about their biases, which is enlightening.” Administrators and some teachers mentioned that this training, combined with stories that administrators shared about personal challenges students may have faced, particularly during the COVID-19 pandemic, shifted their classroom practices and policies. Dr. Rico stated,

It was trying to help teachers balance expectations with reality...pushing kids to do better, but also, you know, being very aware of what they were going through, and maybe the worksheet isn't the, you know, the most important thing...so trying to help teachers find that balance.

Similar conversations about race, bias, and classroom practices took place during teacher collaboration time, and some teachers felt that this training positively impacted student interactions and shifted teacher practice. Ms. Dewitt described such benefits:

We talk about it in our department meetings, especially because when we focus on culture, we read the Gholdy Muhammad book *Cultivating Genius*. So, it's all about criticality and identity, so I'm doing a lot of that work. It's something that has, I think, transformed the culture here on campus. I do a bias unit with my [students, and] they're very open, towards the end, to other perspectives.

Teacher leaders also mentioned other professional development instances specific to their particular content areas. However, training in integrating college readiness skills into the curriculum was notably absent from most teachers' interview responses unless mentioned as an area of need.

**Innovative Curriculum and Professional Development Challenges.** As made apparent through interviews and site visit reports, the greatest challenge related to curriculum and professional development was the inconsistent integration of the early college theme and college preparatory skill-building in high school and college courses. As explained in one evaluation report, training was provided but not to the extent needed. Most of the theme exposure or “dosage” students received was based on their enrollment in college courses (discrete courses) instead of high school teachers integrating the theme into their courses. The evaluator noted,

The weakest item was professional development (PD) dosage supporting the magnet theme...Although the magnet PD was varied, teachers, on average, received fewer trainings than were expected. According to the documentation, total magnet dosage averaged 13.4 hours/week (3.4 hours for units and 10 hours for discrete courses)...Throughout the project, most of the magnet instruction has been conducted through discrete courses.

The site evaluator recognized that by implementation Year 4, many high school teachers were not receiving sufficient training in supporting students with college skill-building or did not buy into the training or adapt instruction to integrate more college preparation skill-building.

Teachers who were heavily engaged in training and its applications created instructional units that embedded the school's Early College Outcomes into their courses: Reading, Writing, Inquiry, Presentation, Agency, and Reflection (see Appendix G). According to site visit reports, there were 89 teacher-developed instructional units in total by Year 5. However, integrated thematic units were written by a small percentage of teachers. One of the teacher leaders who participated in significant professional development and unit development mentioned teacher collaboration and curriculum development as a source of positive instructional shifts that helped her realize where she could better support students by adding college preparation skills, such as presentations or goal-setting. She stated,

We have spent a lot of time on doing college skills in our core classes here...

Collaborating with my other colleague and actually writing the units, I can see gaps that I had...so writing units helped me realize where I had gaps.

This experience, while positive, was not widespread, however. As the evaluator relayed, "Not everyone was comfortable with the Early College Outcomes, or they hadn't deeply invested in

those outcomes or applied them to their own work.” The lack of consistent training was reflected in inconsistent instructional shifts in high school course instruction.

Based on interviewee responses, factors impacting a consistent training and curriculum development effort may include the disruption of the pandemic, teacher buy-in, competing training priorities, and the quality and coherence of professional development. As explained by another teacher leader,

It wasn't good training anyways. People were very lost. Again, we were sold a vision of what it would be like, and then it was just, here's what it's actually like, and you gotta get with the program, and then it just fell apart. So with, like, high school teacher instruction, it's a lack of buy-in or a lack of training, or both, or just a lack of training. It was all created, pretty haphazard, it seems, like in terms of what the Early College Outcomes are and what the rubrics look like, and then how you're supposed to use that to inform your instruction. [There were] a few meetings. If I recall correctly, they were in the summer, so not everybody was there, and then we had administrative change, of course. And then, just like with all school improvement efforts, people come and go, and things get lost in communication, and we just never really saw... I don't think there's really anything different that's happening in our classrooms because of dual enrollment.

As more interviews took place, the inconsistency of training in the early college theme and teacher participation in unit development became more apparent.

Another commonly mentioned challenge by high school teachers interviewed was a concern that college professors did not receive enough training to support high school students. While site visit reports indicated that some training of this nature occurred via an onboarding course for MVCC professors, *How to Teach High School Students at a College Level*, it seemed

there was a general feeling among interviewees that training of college professors was inadequate to support young teenagers. Mr. Moore expressed,

One of the big challenges I'm seeing is students having experiences with professors that aren't the best educational experiences. And granted, those are college professors, so they don't have the experience or training in working with adolescents that we do. So, one of the big challenges is making sure that the teaching that's going on over there is what's right. I know ... if it is a college-level course, it's about building students up to be able to succeed... We have to make sure, as teenagers, they ...are being served well, and that includes, you know, having teaching methods that work well for them.

High school teacher leaders acknowledged that they, in particular, are trained and prepared to work with adolescents, while college professors may not have that same training or preference. Specific concerns mentioned included the need for flexibility to meet the needs of students. At the same time, teachers recognized that increased expectations in college-level courses were part of the dual enrollment experience. Some students did meet higher expectations. Teacher, Mr. Connelly, explained,

You know, the flip side of that is for a high achieving kid who is dedicated to school and knows what they want to do, it's frickin' awesome. A kid can get out of here and have a ton of college credits already... that's amazing. In terms of opening up opportunities for those kids and saving them money when they do go to college and not having to pay for a certain number of classes, it's fantastic. But percentage-wise, the number of kids it's actually working for at that level. I don't know what it is, but if I had to guess, I'd say it's pretty slim.

While high school teachers recognized that some students were succeeding, they felt that more needed to be done to support students for broader success.

### *Academic Excellence*

Academic excellence, from an implementation perspective, is how teachers and staff demonstrate a commitment to preparing students to succeed in appropriately challenging coursework. Increased access to opportunities and high expectations were common themes of successful student supports. However, supporting students in acclimating to college professors' expectations and providing adequate supports for all students to take and pass college courses was also an area in which interviewees perceived challenges, especially during the pandemic.

**Academic Excellence Successes.** When asked about academic outcomes from the dual enrollment program, interviewees commonly expressed a “college-going” culture built at West Cal and the resulting increase in students' self-perceptions and aspirations as college students. As described by parent leader Ms. Nelson,

There's something visually you can see just from talking to students. They feel a lot more agency in the choices that they're making for themselves because they have these outside options, and they see the connection between taking a college class in high school and how that might impact their future.

Parent leaders also mentioned that college was “demystified” for their children as they had to be more personally responsible in college classes. College onboarding was Ms. Anderson's experience when asked about the changes she noticed in her son's academic experience:

It definitely is because he's getting that interaction with a college professor. [He's] having to be accountable for himself, like, I can't help him, right? I can't email the

teacher. So that's definitely beneficial...they're helping him to be an advocate for himself, right?

Interview responses indicated that students had increased exposure to college along with increased class responsibilities and increased course choices, resulting in increased confidence and expanded aspirations for the future: "I see it come out in terms of their ambitions, what they want to do, and then having the having the conversations about what their interests are when they go on after high school" (Ms. Nelson). The nature of the dual enrollment program and its academic theme seems to have provided students with access to authentic college opportunities and the personal responsibility accompanying those experiences.

One of the common themes mentioned attributing to student success was school leaders' personal coaching conversations with students, helping them understand differing expectations of college professors or even helping them navigate college and practice how to advocate for their needs. Counselor Ms. Nuno described such coaching sessions with students:

Sometimes, a kid doesn't know how to express himself yet, and they need someone there to support them, or they need someone to say it first, and then they can say it. Yeah, I mean, sometimes I have to give the words to the kids and say, "This is what you're gonna say to your professor. Yeah, practice it with me. You know, tell it to me." And then, "Okay, now go ahead and go to your professor and go ask that."

School administrators, teachers, parent leaders, and the counselor mentioned these types of conversations in helping guide students to navigate college classes. Notable impacts on student agency were also mentioned, with interviewees often relating and empathizing with their own experiences learning to acclimate to the college environment.

The magnet program also provided additional counseling staff to provide these types of supports, described as critical by Dr. Lewis, among others:

They're helping [students] to do registration. They're showing [students] how to use Canvas. They're doing all those things. You have very strong [dual enrollment] counselors who will talk to the students and let them know, “Hey, these are expectations.” We have to prepare them for what's going to occur, and that's big too. That's huge.

This additional staff was noted as the most crucial support to be able to operate the program, as the additional counselors and advisors serve as the liaisons between the high school and college campus, from helping students officially enroll in MVCC to supporting students in the courses and then helping students navigate post-secondary options and financial aid.

Another recurring theme was the support and influence of high school peers in varying ways. One parent mentioned students’ comfort in taking college classes with high schoolers on their campus instead of with young adults on the main MVCC campus. Teachers and administrators also shared the impact they noticed of peer effects as students followed others’ college-going habits. Dr. Lewis explained, “They just are doing what other students do. They see their friends taking the [college] courses, and it's just natural...It's just what we do.” Sometimes peer influence was more overt, as expressed by Ms. Nelson, “They tell their friends, and they see they see the goal line a little differently, and college is demystified a little bit.” It also seems that peer influence extended to teacher practices. Some administrators shared that more teachers shifted their practices to expect more academic engagement from students as more students and their classroom peers demonstrated readiness for more challenging coursework.



**Academic Excellence Challenges.** However, the shift to a college-going culture was not immediate and still seemed to miss some students. According to site visit reports, by the end of Year 2, students had a greater awareness of the program and their school's new magnet theme. However, as Principal Lewis explained, placing students in college courses was insufficient:

I think the expectations [before] were so low for our kids...I had to go in there freshman year and support the college professor because some of our freshmen they're not ready to be a high school student, let alone a college student.

Several teachers also described that, initially, some students did not realize the differing expectations between high school and college courses and how much less flexible college professors might be in response to absences or missed assignments.

So the biggest adjustment was... the school here is like a family, and everybody, like, takes care of each other, and students have a lot of support. So then going to the MVCC class, college professors are like, "Do it." And when they don't do it, they get an F. So that was a big shock for them because they're, like, "Wait a minute, what?" Or just knowing how to navigate a college course, like, liberated a student. Here, for example, she was sick, and she didn't come to school, and so she missed her speech for her speech class, and she got a zero, and then the professor was like, "No, you can't make that up. You weren't here." She was like, "What, I was sick?" And he was like, "Well, you should have told me." So it's just like little logistical stuff that kind of got to him. But the majority [of students] realized that not everybody was going to be very ...accommodating. (Ms. Dewitt)

Multiple interviewees mentioned this challenge for students of acclimating to inflexible expectations. This idea was especially discussed concerning student-athletes who needed to miss afternoon classes frequently to attend games.

Additionally, while counseling staff and tutoring are provided to help students navigate and pass college courses, the supports were described as inadequate due to a large number of students taking dual enrollment courses as the program expanded.

So we have a huge increase in students enrolled in this program. So that leads to all the other stuff that you might expect, but we don't necessarily have the equal capacity on the other side to support students inside of these classes. (Ms. Nelson)

All interviewees indicated that additional supports were needed to help students with social-emotional and academic guidance, but accounts varied somewhat. Parent leaders, like Ms. Nelson, mentioned a need for on-site tutoring services, “The tutoring services that I'm familiar with are virtual or in person at the main campus.” Meanwhile, teachers, including Mr. Alfaro, mentioned a wealth of available tutoring services, “You know, I think at one time I was walking around when I saw like three or four tutoring groups, just in a five-minute walk that I was doing.” While the need for tutoring was unclear, a need for a range of supports, from social-emotional to reading skills that enable students to access higher-level texts were expressed by participants.

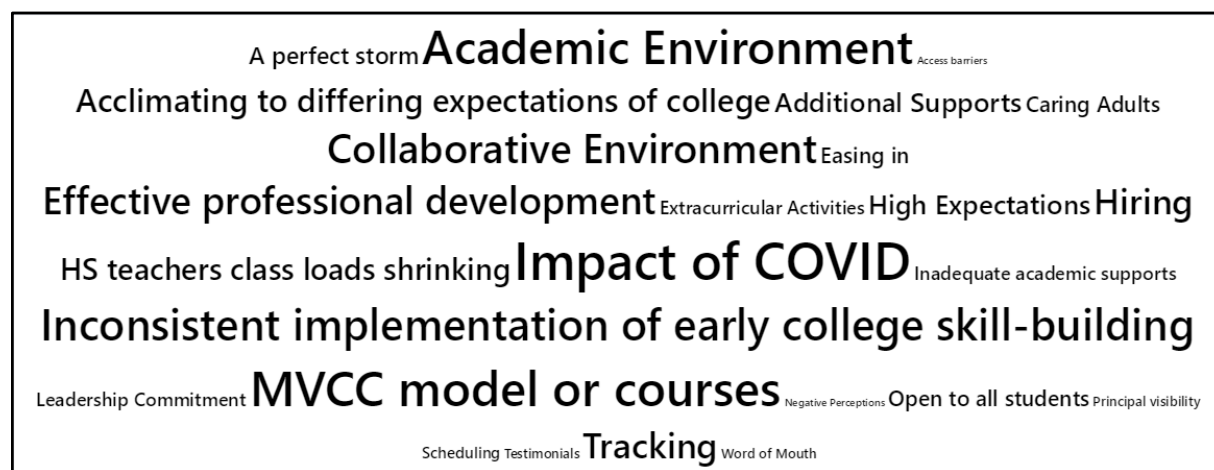
Even parent leaders with students performing well in college classes expressed a need for additional support services. Ms. Anderson expressed, “Well, I wish counselors had more time to meet. I wish they had more time to actually counsel or have meetings with the kids and their parents.” Interviewees like Ms. Anderson shared that one barrier preventing adequate counseling services, despite more counselors on campus, was time: “There's so much time and scheduling

[for] the MVCC classes... making sure that MVCC classes map out okay...that kids are enrolling...[making] sure their grades are getting processed.” Overall, interviewees agreed that providing additional support was crucial to ensuring the dual enrollment program was prepared to deliver on its equity aims.

These needs were also exacerbated by the COVID-19 pandemic, which began approximately two years into the program’s implementation. As illustrated in the word cloud in Figure 8, COVID-19 was the most prominent challenge mentioned in interviews and site visit reports.

### Figure 8

#### *Word Cloud*



According to evaluator comments in site visit reports, “The high school experience was drastically changed with the arrival of the pandemic. Neither teacher[s] nor student[s] were prepared for online instruction.” Staff reported high chronic absenteeism rates for students, increased teacher absences, increased social-emotional needs among students, and difficulty engaging and motivating students online. Further, a fidelity of implementation report created by

the program's external evaluator highlighted multiple concerns with student engagement during remote learning. The evaluator continued,

In response to questions related to challenges teachers faced conducting instruction during a given week, 63% of teachers stated that getting students to complete daily or weekly assignments was challenging. In addition, 50% of teachers stated that keeping students engaged and motivated was challenging. In line with this, only 38% of teachers reported that their students stay focused on their schoolwork, and only 19% reported that their students always complete their schoolwork. Only 16% of teachers reported that students are always on time for their classes. Further, only 16% of teachers reported that their students adjusted easily to changes between learning from home and learning in person from school. In sum, [this rating is characterized] by the high chronic absence rate (39.2%), increase in teacher absences, and increase in student social/emotional issues.

During the pandemic, the evaluator explained that professional development shifted from the school's magnet theme to technology, as teachers and college professors had to "transition from face-to-face to remote teaching/learning." High school teachers also shifted their online courses into the same "cloud-based learning management system" used by the college, which was a major instructional shift.

However, teaching and learning were only a part of the impact on students. As further described by the program's external evaluator,

What had previously been "home" (a safe place) for many students, was taken away. Upper-class (grades 10-12) students, who were used to popping in to discuss concerns and issues with their teachers and administrators, could only communicate by phone and/or email. There was no graduation, no prom, no end-of-year parties. School as they

knew it stopped. Teaching and learning as everyone knew it changed. That was the impact of the coronavirus on the school.

This evaluator also speculated that pandemic-related changes might not only impact students' academic outcomes but make it difficult to measure the effectiveness of the dual enrollment program on student achievement.

Even after students returned to learning on the school campus, staff relayed that pandemic-related challenges continued since students missed critical opportunities for learning and socialization. Some teachers and professors needed to be cognizant of how different students' experiences may have been while physical school campuses were closed. The evaluator's site visit report captured the impacts:

Students returning from the COVID-19 years were not used to school, to schedules, to structure. This affected the teachers' ability to cover material and/or teach content. There were more discipline issues than pre-pandemic. Working with the MVCC Professors was different also. They didn't understand what the kids returning from the pandemic quarantines were going through.

While students and teachers were generally happy to be back together, high school administrators confirmed that Year 5 of implementation, the first year that students returned to in-person learning, was actually more challenging than the year of remote learning due to numerous teacher absences and increased student anxiety and depression. Dr. Rico reflected,

Last year was so rough, so rough, and I think just about any educator will tell you how atrocious last year was... There wasn't a day that went by that I didn't have a student in [my office], like visibly shaking and crying.

In response to these shifting needs during COVID-19, school administrators established a Wellness Center on campus with a full-time therapist. The focus of professional development shifted to building relationships with and supporting students. Administrators also conducted home visits and shared with teachers some problematic situations students were dealing with that prevented them from fully engaging in school. Dr. Rico continued,

There was one particular student. We went, and he wasn't getting his work done. He wasn't attending classes. And he had a hotspot. We got him a hotspot, and so we went to his house, and like, you know, "What's going on?" And he invited us and took out his Chromebook. He was trying to open up a Google Doc, and we see the little thing buzzing around. Zoom, zoom. And this was just to open a Google Doc, you know. That's not even trying to go online for a meeting, which takes up a lot more memory and a lot more space on your computer. So he couldn't even open up a Google Doc, and it took, I think, 15 minutes just to open it up.

Administrators felt that sharing stories like this impacted the high school teachers' approaches to accommodating student needs. In some ways, this emergency also brought staff together to rally around students. According to Dr. Lewis:

The number one thing that I have noticed is that these teachers care about their students. They are connecting with the students... The biggest change is that teachers are working together. There is more collegiality. Everyone is pitching in to help each other. It's more inclusive of everyone on campus, instead of just between departments ... Teachers are working well beyond the school day... There is more collaboration with MVCC. People are coming together to resolve problems.

School administrators reported that most students were doing much better now and that school operations were more reflective of a typical school year.

### ***Family and Community Partnerships***

Some recurring themes across the other magnet pillars, such as collaboration and open communication, also emerged in discussions about family and community partnerships. Similar challenges among pillars also emerged, especially as related to supporting all students in navigating the educational system.

**Family and Community Partnerships Successes.** Just as students benefited from additional opportunities on campus, school leaders asserted the importance of partnership with parents to build successful programs. Administrators, in particular, described collaborating with parents and supporting their interests to lead various committees or emerging athletic programs. Interviewees and site visit reports confirmed increased parent involvement in school activities and increased membership in the school's Parent Teacher Student Association (PTSA). Site visit reports also indicated that virtual meetings and events during the pandemic provided expanded access, increasing parent participation.

The parents interviewed agreed that visible and genuine support with current parents and caregivers was important to a thriving campus culture, "The principal is always at every PTSA board meeting...support is invaluable. He's very supportive. So yeah, having a principal really engage those groups is important." This visibility and collaboration were equally important for families who may not join formal parent committees. As described by Ms. Nelson,

I don't feel that there's an increase in participation in meetings, but there's a lot of interest in what's going on, and feedback, and wanting to offer points of view on where people feel like they need more help. So all of that is happening, and I know that people go

directly too because it's so “open-door.” They go directly to the principal, counselor, or whoever.

As mentioned in the Leadership section, school leaders' open-door policies were frequently described as an asset in attracting new families and supporting and retaining families. This access was described as vital since, during the early years of the pandemic, the district did not permit families or other adults on campus (all meetings and appointments had to be virtual).

To re-engage families on campus post-pandemic, Dr. Rico encouraged current parents to go on campus tours during their English Learner Advisory Committee meetings. He felt that this gave families a chance to see teaching and learning on campus and also gave them information to inform their recommendations to the principal to improve outcomes for English learners. He reflected, “I think they feel valued because...they get to provide input.” By engaging families meaningfully, he also saw more interest in participation.

Parents, such as Ms. Nelson, also felt that this type of collaborative spirit extended to community partners, “There's a lot of openness to working with the community...There's a lot of openness to feedback, and that has only increased. The staff is willing to partner on things or hear about things or work on things.” Site visit reports also asserted that, in particular, the “school has built a strong relationship with its collaborative partner, Mesa Verde City College.” As mentioned previously, the pandemic brought staff from both organizations together to problem-solve and “adapt to the new norm” in support of students.

**Family and Community Partnerships Challenges.** The source of some of the barriers to parent participation discussed during interviews related to helping parents and families understand and navigate college systems. Potential barriers included access to technology, technical knowledge around grading systems, and communication barriers.



Parents leaders felt there was a need for greater support with technology and more communication in general. As explained by Ms. Nelson, “Even though our early college counselors put out a lot of material and how to enroll in a class, [there is] still always confusion, and it requires a certain level of comfort with computers that everyone doesn't have.” She realized college-specific terminology and processes might be unfamiliar to most high school parents.

I think parents need to more clearly understand how the grades work at MVCC, like what if my student has a withdrawal? What are their options? How does this impact their long-term future or college acceptance? So there's a need for more clarity there.

These parent leaders recognized that there were existing workshops but that it could be challenging for working families to attend.

Parent Ms. Anderson also expressed a preference for greater inclusion in program decision-making, which she perceived as occurring less often as the program expanded: “It just felt like it was more dialogue at those initial meetings. Whether it was listened to or not. I don't know.” She felt that once implementation began, it was probably more efficient for staff to “keep moving” instead of pausing for questions, such as “Why'd you do it this way? Or can we do it differently now?” Similarly to teachers, it seemed there was a desire by parents to be involved in program discussions more often.

### **Integrated Findings**

The purpose of this section is to integrate quantitative and qualitative findings. As an explanatory study, this data integration aims to understand how qualitative findings might explain quantitative outcomes. A logic model is used for each magnet pillar to answer the following research questions to illustrate these proposed explanations for significant findings.

- RQ1: What has changed at the school since the dual enrollment magnet program was implemented?
- RQ2: How did school leaders foster successful outcomes of the dual enrollment magnet program?
  - SQ2: How did school leaders facilitate:
    - SQ2a: ethnic, racial, and socioeconomic school diversity;
    - SQ2b: innovative curriculum and professional development;
    - SQ2c: academic excellence; and
    - SQ2d: family and community partnerships?
- RQ3: How did school leaders experience and address challenges to program implementation?
  - SQ3: How did school leaders experience and address challenges to fostering:
    - SQ3a: ethnic, racial, and socioeconomic school diversity;
    - SQ3b: innovative curriculum and professional development;
    - SQ3c: academic excellence; and
    - SQ3d: family and community partnerships?

Logic models are commonly used in program design and evaluation and are described by Yin (2018) as a tool that specifies and expresses a complex chain of occurrences or events over an extended period of time, which can be used in case study research to help explain the ultimate outcomes. The integrated findings and accompanying logic models depict inputs and results as described by multiple qualitative and quantitative sources to build a coherent justification for conclusive themes.

### *Leadership*

The school administration, particularly the school principal, was regarded as a highly dedicated and visible school leader. Qualitative data revealed that the greatest successes in addition to these leadership qualities were hiring decisions to continue building a strong teaching force, committed classified staff, and athletic coaching teams. Overall these leadership activities may have been attributed to increased trust and collegiality among staff and an improved school environment with decreased student discipline incidents as the general culture of the school improved. Administrator visibility and hiring athletic coaches as instructional aids or security guards during the school day is one example of an innovation to improve the school climate by focusing on personal connections and relationships with students.

The greatest challenge apparent during interviews was teachers' concerns about the potential impacts and fears for the program's future. High school teacher leaders indirectly and directly stated that they did not know much about policies, practices, or instruction at MVCC. The administration confirmed that teachers were not typically included in MVCC decision-making, which aligns with survey outcomes reflecting a decrease in personnel participation in decision-making after the program was implemented. School leader responses concurred that there was a need for more conversations inclusive of teacher and parent leaders to discuss decisions and their potential impacts (see Table 14).

**Table 14***Leadership Logic Model*

Inputs	Activities	Outputs	Outcomes
Successes			
-Committed, visible school administrators -Diverse teaching staff -Alums support -New dual enrollment program with a college partner	-Principal visibility on school tours -Open door policy -Hiring committed staff, including athletic coaches -Administration focused on connections with students	-Teachers requesting to transfer to teach at the school -Increased extracurricular opportunities -Decreased fights and discipline incidents	-Increase in trust and collegiality among staff (+11%) -Decrease in suspension rate (-3.5%)
Challenges			
		-Multiple constraints (transferability to colleges, high school required courses, union agreements) limit which courses are offered and who is qualified and permitted to teach them	-Decrease in high school personnel participation in decision-making (-9%)

*Note.* Increases or decreases listed as survey data outcomes represented an increase or decrease in the percentage of respondents who agreed favorably with the survey items as listed in full in Table 6.

***Diversity***

School leaders effectively marketed the new dual enrollment program through various means, including highlighting the program benefits, implementing facilities improvements, going out into the community, and hosting regular school tours for students and families to see the school first-hand. Families who experienced a more academic atmosphere and heard success stories from recent graduates shared their experiences with others. As a result, school enrollment increased and was increasingly representative of the diversity of the neighboring communities. Open access policies also ensured that students could take college courses, regardless of their academic history in middle school. This accessibility may have resulted in staff perceptions that

the magnet program increasingly represented the diversity of the student body and increased feelings by students that they were a part of the school.

Conversely, teacher leaders repeatedly expressed concerns that greater monitoring was needed to ensure the school did not inadvertently create a two-tiered system. School leaders reiterated the importance of allowing students to take additional MVCC courses after they demonstrated a greater likelihood of succeeding in college courses to eliminate the potential for a system that tracks students along two pathways. School administrators also noted the importance of the career academy structure to ensure that students continue interacting among heterogeneous ability groups in other high school courses, even if some students move out of college coursework due to a lack of interest or preparation to succeed. Overall, the need to monitor course enrollment and provide adequate support for students to succeed in college courses were noted as essential considerations to prevent what they described as a potential for a tracking system that would segregate students (see Table 15).

**Table 15***Diversity Logic Model*

Inputs	Activities	Outputs	Outcomes
Successes			
<ul style="list-style-type: none"> <li>- Magnet grant</li> <li>-Partnership with MVCC</li> <li>-College building adjacent to high school classrooms</li> <li>-Dual enrollment counseling team</li> <li>-Administrative focus on making connections with students</li> <li>-Open access policies</li> </ul>	<ul style="list-style-type: none"> <li>-Students take college classes during the school day for dual credit</li> <li>-Bi-monthly school tours</li> <li>-Principal visibility in the community</li> <li>-Positive information and news articles</li> <li>-Displays of student work</li> <li>-Facilities upgrades (murals, marquee, furniture, equipment)</li> <li>-Anti-bias, anti-racism training for high school teachers</li> <li>-Counselors monitor student progress</li> </ul>	<ul style="list-style-type: none"> <li>-Atmosphere of college-readiness</li> <li>-Shifting public perceptions</li> <li>-Increase in students who like the magnet theme and wanted to attend West Cal for dual enrollment (+24% and 25%)</li> <li>- Increase in well-maintained facilities (+7 %)</li> <li>-Testimonials by recent graduates, word of mouth referrals</li> <li>-Increase in school fostering appreciation for school diversity (+6%)</li> </ul>	<ul style="list-style-type: none"> <li>-Increased enrollment by 44 students</li> <li>-White population increased (3.9%) while maintaining similar of Hispanic and Black students (-1 and +10 respectively)</li> <li>-Increase in student respect for differences (+9%)</li> <li>-Increase in magnet participation reflective of school diversity (45%)</li> <li>Increase in students feeling they are part of the school (+16% and 7%)</li> </ul>
Challenges			
		<ul style="list-style-type: none"> <li>-Students are placed in high school courses when they are failing college courses so students do not receive failing grades on their permanent college transcripts</li> <li>-Students with GPA below 2.0 do not continue in dual enrollment</li> <li>-Suddenly increased class sizes in high school courses</li> </ul>	<ul style="list-style-type: none"> <li>-Students performing well in dual continue to take college classes while students who fail take high school courses</li> <li>-Decrease in staff agreement that adults believe <i>all</i> students can succeed (-5%)</li> </ul>

*Note.* An increase in economically disadvantaged students was noted. It was unclear how the COVID-19 pandemic or changes in collection procedures may have impacted these figures due to increased eligibility, so these figures were not included. Increases or decreases listed as survey data outcomes represented an increase or decrease in the percentage of respondents who agreed favorably with the survey items as listed in full in Table 8.

### ***Innovative Curriculum and Professional Development***

The new dual enrollment magnet necessitated teacher professional development and changes in curriculum offerings at West Cal to reflect the magnet theme throughout the school day. As the program became fully implemented, dual enrollment offerings at MVCC increased from a few introductory courses to 15-18 potential course offerings per semester by 2022. Students, therefore, had increased access to the magnet curriculum by taking these courses. The available MVCC courses were also purposefully sequenced, beginning with courses that interviewees described as easier, to promote students' greater potential for early success in the program.

Additionally, high school teachers engaged in professional development in the program's first years to incorporate college preparation strategies into their core content classes. As a result, teachers reported increased comfort in integrating college preparation strategies into their lessons and felt that the magnet theme was an increasing priority at the school. Increased prioritization and comfort in integrating the magnet theme, in turn, might have impacted some teachers' implementation of altered teaching methods, such as increased presentation or reflection strategies for students. Overall, more teachers reported that training helped them to incorporate the magnet theme effectively. Students, too, responded that they experienced increased exposure to the magnet theme in their classes, although they may have meant MVCC courses, where most early college exposure seemed to take place.

Unfortunately, the number of teachers who participated in a significant number of magnet training hours and the development of early college units was proportionately small to the size of the high school staff. While teachers increasingly reported spending significant time in training to incorporate the magnet theme, the total percentage of teachers with significant training hours

(10+/year) only reached 36% of teachers, and only 31% of teachers surveyed reported that they implemented early college strategies into their instruction for the desired hours per week (7+).

Another considerable challenge related to early college professional development was the perception and experience of high school teacher leaders that college professors needed more training in supporting adolescent students. While college professors were not surveyed or included as interviewees in this study, high school teachers relayed multiple examples of students who may have benefited from more flexible practices and accommodations appropriate for young teens who were learning to be college students.

In addition to training in the early college theme, another essential training component at West Cal was anti-bias and anti-racism training to provide teachers with instructional strategies that promoted an inclusive and equitable learning environment for all students. Diversity, equity, and inclusion are common professional development foci in magnet programs that intentionally focus on student integration and increasing diversity. Overall, 98% of teachers agreed that they examined their personal biases through professional development, a 25% increase from the start of the magnet program. Most teachers also agreed that West Cal provided supports to teach culturally and linguistically diverse students and emphasized using culturally inclusive instructional materials. This extensive professional development may have contributed to the proportionately high agreement on many associated questions within the diversity pillar. For example, 100% of teachers agreed that the school fostered an “appreciation of student diversity” (CALSCHLS, 2023a, p. 5). Overall findings reflected shifts in instructional practices and curriculum offerings, depending on the focus on professional development in a given year, including diversity, equity, and inclusion training (see Table 16).



**Table 16***Innovative Curriculum and Professional Development Logic Model*

Inputs	Activities	Outputs	Outcomes
Successes			
<ul style="list-style-type: none"> <li>-Magnet grant</li> <li>-New dual enrollment theme with college partner and college building adjacent to high school classrooms</li> <li>-Open access policies</li> <li>-Dual enrollment counseling team</li> <li>-Training partners</li> </ul>	<ul style="list-style-type: none"> <li>-Students take college classes during the school day for dual credit</li> <li>-Access to 15-18 course choices/semester</li> <li>-Students start with easier courses in grade 9</li> <li>-Teachers and consultants develop an integrate Early College Outcomes</li> <li>-Anti-bias, anti-racism training for high school teachers</li> <li>-Technology training</li> </ul>	<ul style="list-style-type: none"> <li>-Increase in training effectiveness to incorporate magnet theme (+56%)</li> <li>-Increase in teacher comfort incorporating the magnet theme (+16%)</li> <li>-Increase in altered teaching methods (+35%)</li> <li>Increase in magnet theme as priority (14%)</li> <li>Increase in anti-bias training (25%)</li> <li>Increase in supports for teaching diverse students (11%)</li> </ul>	<ul style="list-style-type: none"> <li>-Some students earn dual credit and build increasing confidence in college courses</li> <li>-Increase in student exposure to magnet theme in classes (+15%)</li> <li>-Increase in inclusive materials (+9%)</li> <li>-100% of teachers agree the school fosters appreciation of student diversity</li> </ul>
Challenges			
		<ul style="list-style-type: none"> <li>-Less than half of teachers (36%) spend significant time in training related to magnet unit development and strategies</li> </ul>	<ul style="list-style-type: none"> <li>-Less than half of teachers (31%) implement the theme in their classroom for significant hours</li> </ul>

*Note.* Increases or decreases listed as survey data outcomes represented an increase or decrease in the percentage of respondents who agreed favorably with the survey items, as listed in full in Table 9.

### *Academic Excellence*

West Cal and MVCC embedded several student supports, including two additional counselors and a college and career advisor, all dedicated to the program to assist students with registering for MVCC, providing guidance related to students' MVCC courses, and supporting students with preparation for post-secondary options, including applying for college and financial aid. Students were also provided the opportunity to engage in free tutoring and were provided with free college course materials. Additionally, West Cal's dual enrollment program structure supported students' acclimation to college, with the physical college building situated a few steps from high school classrooms and the opportunity for students to take college classes with college professors alongside their high school peers without the presence of older college students.

Interview data revealed that this free and accessible college access increased students' exposure to college. For some, it made college feel like an attainable aspiration they might not have previously considered, often as influenced by the behaviors or encouragement of students' high school peers. Survey data indicated that students experienced more challenging coursework and were increasingly aware of the available help and support. Teachers increasingly felt that the magnet improved students' achievement.

Despite these robust supports, multiple survey indicators categorized within the pillar of academic excellence showed declines since the beginning of the magnet implementation. The largest decrease was high school teachers re-teaching of topics when students did not meet high standards. Other declines included reduced student agreement that adults care about them (-9% for 9th graders) and believed in their success (-6% of 9th graders and 11% for 11th graders) and a 7% decrease in agreement that counseling services were adequate. Amidst declines, some

survey results indicated comparatively high agreement compared to district averages and, in some cases, high school ratings overall.

Interview data provided a possible explanation for one of the declines, a perceived lack of adequate counseling services. Interviewees noted that additional counseling services were needed as the dual enrollment program expanded. There was also a perceived need for additional mental health supports in response to the pandemic. Further, awareness of current in-person tutoring and how to access it seemed inconsistent. Interview data may also indicate why fewer teachers agreed that adults believed all students could be a success; several teachers shared concerns for students who were not succeeding in early college coursework. Some areas of decline did not have clear possible explanations noted by data from interviewees' perceptions and experiences.

However, one overwhelming challenge that frequently occurred in interview discussions related to academic challenges was the COVID-19 pandemic and its impacts. While it was not certain if the pandemic was the only source of any perceived declines in academic excellence supports or academic outcomes, such as test scores, it was clear that many educators and administrators interviewed felt that the pandemic created additional burdens for some students. The program evaluator also speculated that pandemic-related changes might not only impact students' academic outcomes but make it difficult to measure the effectiveness of the dual enrollment program on student achievement (see Table 17).

**Table 17***Academic Excellence Logic Model*

Inputs	Activities	Outputs	Outcomes
Successes			
-Magnet grant -Caring, committed staff - New dual enrollment theme with college partner -College building adjacent to high school classrooms -Open access policies, dual enrollment counseling team -Tutoring	-Students attend college with their high school peers -Increased student choice of courses -Conversations to help students navigate college expectations -Assistance with college registration, navigating post-secondary system	-Increased college exposure, student agency, and college aspirations -Students encourage and influence each other -Increased expectations of high school teachers and college professors -Increase in student perceptions that the magnet theme is challenging (+20%) -Increase in emphasis of help available (+6%)	Increase in graduation rate (+1%) -Increase in teacher believe that magnet theme improves student achievement (+51%) -168 of 270 ninth-grade students (62.2%) and 176 of 654 10th-12th grade students (26.9%) earned college credits
Challenges			
		-Decrease in adequate counseling supports (-7%) -Decrease in teachers re- teaching as needed (-32%)	-Decrease in student perceptions that adults care and adults believe in them 6-11%) -Decrease in agreement that adults believe all students can succeed (- 5%) -Decrease in English language arts proficiency (-1%) -Decrease in mathematics proficiency (-4.7%)

*Note.* Increases or decreases listed as survey data outcomes represented an increase or decrease in the percentage of respondents who agreed favorably with the survey items, as listed in full in Table 10.

***Family and Community Partnerships***

Quantitative and qualitative data revealed generally positive perceptions among staff and students about family and community engagement at West Cal. Administrators indicated positive new partnerships with parents and an open door to communicating with families, which they felt contributed to increased PTSA membership, new extracurricular opportunities for students, and

increased. Parent survey responses and site visit reports corroborated these ideas. The highest-rated outcomes were that 87% of parents felt encouraged to be active partners in their children's education, and 85% felt welcomed. Students' agreement with this same survey item was significantly lower (48%-54%) for unexplained reasons.

Apparent challenges revealed by interview data and supported by surveys included parents' perceptions that more communication could be helpful to indicate what students were expected to learn in class and, in particular, how the MVCC system worked. The parents interviewed mentioned that access to this information could be impeded by a lack of access to technology and confusion about how the high school and college systems varied (see Table 18).

**Table 18**

*Family and Community Engagement Logic Model*

Inputs	Activities	Outputs	Outcomes
Successes			
<ul style="list-style-type: none"> <li>-Dedicated school leaders</li> <li>-Committed, diverse teachers and staff</li> <li>-Alumn support</li> <li>-Dual enrollment staff</li> <li>-New dual enrollment theme with college partner</li> </ul>	<ul style="list-style-type: none"> <li>-Collaborating with parents to increase leadership opportunities - Leadership visibility at meetings and events</li> <li>-Administration open to feedback</li> <li>-Open door to communication</li> <li>-Tours for current parents</li> </ul>	<ul style="list-style-type: none"> <li>-Increased PTSA membership</li> <li>-New extracurricular offerings</li> </ul>	<ul style="list-style-type: none"> <li>-85% of surveyed parents feel welcome</li> <li>-90%+ teacher perceptions of a welcoming environment and communication of expectations to parents</li> </ul>
Challenges			
		<ul style="list-style-type: none"> <li>-Some parents feel confused by multiple and varying systems between high school and college or have difficulty accessing information</li> </ul>	<ul style="list-style-type: none"> <li>-Decrease in student perceptions that parents feel welcome (-10-12%)</li> </ul>

*Note.* Increases or decreases listed as survey data outcomes represented an increase or decrease in the percentage of respondents who agreed favorably with the survey items, as listed in full in Table 11.

## Chapter Summary

Since the dual enrollment magnet program was implemented, there have been notable changes at the school. Of these changes, successes included increased and increasingly diverse enrollment, facilitated by an attractive academic theme, improved school environment through effective hiring and a focus on relationships, and school leaders' highly visible and accessible approach to attracting and supporting families. At the same time, teachers engaged in various professional development activities to support students in the new theme and provide more inclusive and equitable environments. Students benefited from the experience of an increasingly academic school environment, access to free college courses, and the opportunity to engage as college students in a high school environment. Meanwhile, parent engagement increased via many of the same strategies that attracted families to the school in the first place, the visibility and accessibility of school administration.

However, program implementation was not without challenges. The greatest challenges were scheduling MVCC courses and teacher concerns that they were left out of program decisions, supporting equitable access for students in college courses when they were not passing the classes, promoting the consistent implementation of early college strategies in core classes and college courses, realizing gains in students' achievement amidst the pandemic, and ensuring all families had access to information about how to support their children in MVCC.

Overall, this chapter described findings to discuss changed outcomes since West Cal implemented its dual enrollment magnet program and how school leaders may have fostered successful outcomes or experienced and approached perceived challenges to program implementation. The implications of these findings as related to the study's research questions and recommendations for future practice are discussed in Chapter 5.

## Chapter 5: Discussion, Conclusions, and Recommendations

Integrated schools have long been a strategy to disrupt the patterns of differential resources and opportunities between segregated schools and the resulting gaps in academic outcomes for students. Further, integrated school environments promote cross-cultural and cross-class friendships, which can reduce intergroup prejudice (Pettigrew, 2021), increase students' economic mobility (Chetty et al., 2022), and prepare students to engage meaningfully in a multilingual and multicultural society. Magnet schools, in particular, have been a politically and socially popular strategy to achieve integrated schools, driven by parental choice, as opposed to mandatory school assignments and busing (McCarthy, 2019; Riel et al., 2022).

Early college as a magnet theme has increased in popularity, and recent investments in dual enrollment programs, in particular, have emphasized expanding college access and increasing academic opportunities for students traditionally underrepresented in college, including Black students, Latino students, English language learners, socioeconomically disadvantaged students, and first-generation college students. Programs like early college magnets, intended to promote integration and advanced academic opportunities, have demonstrated increased graduation rates, increased college attendance and persistence, and increased attainment of college credits and college degrees for students in one or more of these respective student groups (Berger et al., 2013; Edmunds et al., 2017). Accordingly, California's recent legislation has been supportive of dual enrollment partnerships (AB-288 College and Career Access Pathways Partnership Agreement, 2015; AB-30 Community colleges: College and Career Access Pathways partnerships, 2019; AB-2617 Pupil instruction: dual enrollment programs: competitive grants: College and Career Access Pathways partnerships: best practices: communication and marketing strategy, 2022). The U.S. Department of Education has also

recently increased federal funding for the Magnet Schools Assistance Program (Office of Elementary and Secondary Education, 2022a). This increased investment warrants a closer look at dual enrollment magnet programs and how schools implement them to benefit students.

Dual enrollment's emphasis on access for students traditionally underrepresented in college makes it a promising model for educational equity and excellence. However, choice-based academically-themed programs may inadvertently institute practices that marginalize the very students they intend to serve, such as through tracking or tiering of access to academic opportunities (Howard & Noguera, 2020) or marketing schools in ways that might sacrifice valued school traditions or social dynamics for increased enrollment of middle-class families (Posey-Maddox et al., 2014; Roda, 2020). Therefore, this case study focused on understanding how school leaders implemented a dual enrollment magnet program and how school leaders fostered student integration and academic success while navigating barriers to providing an equitable program that honors and values the existing school community.

The study's conceptual framework included a combination of ideas and theories to engage in pragmatic and transformative inquiry. From a practical perspective, the five pillars of magnet schools (leadership, academic excellence, curriculum and professional development, diversity, family and community partnerships) were used to understand the nature of magnet program implementation activities. Meanwhile, the theoretical idea of educational leaders as cultural workers (Giroux, 2007; Roda, 2020) informed how leaders might serve as advocates who critique and change systems to close opportunity and achievement gaps for students. Further, the integration theory of choice (Ayscue et al., 2018; Johnson & Nazaryan, 2019) aided in understanding the complexities of desegregation through regulated choice to improve student



outcomes. These ideas merged into a framework that aided in critically analyzing practices that might warrant replication or further reflection and revision.

An explanatory sequential mixed methods design was used to study the case, West Cal High School, and answer the following research questions:

- RQ1: What has changed at the school since the dual enrollment magnet program was implemented?
- RQ2: How did school leaders foster successful outcomes of the dual enrollment magnet program?
  - SQ2: How did school leaders facilitate:
    - SQ2a: ethnic, racial, and socioeconomic school diversity;
    - SQ2b: innovative curriculum and professional development;
    - SQ2c: academic excellence; and
    - SQ2d: family and community partnerships?
- RQ3: How did school leaders experience and address challenges to program implementation?
  - SQ3: How did school leaders experience and address challenges to fostering:
    - SQ3a: ethnic, racial, and socioeconomic school diversity;
    - SQ3b: innovative curriculum and professional development;
    - SQ3c: academic excellence; and
    - SQ3d: family and community partnerships?

First, quantitative outcomes measures (enrollment, engagement, and achievement data and pre- and post-survey results) were gathered and analyzed to determine changes at the school

since the program was implemented. Quantitative findings informed interview questions for a second phase of data collection to gather perspectives and experiences of school leaders to understand how program outcomes were attained. Each data set was analyzed separately to arrive at the study's findings. Descriptive statistics were used to calculate the range between pre- and post-data, and thematic analysis was used to code interview transcripts to arrive at common and noteworthy themes. Then, integrated findings were presented in logic models, joint data displays to connect quantitative outcomes with program activities and possible qualitative explanations.

### **Summary of Findings**

Study findings revealed program successes and challenges alongside relevant implementation activities and perceived or experienced factors that interviewees attributed to program outcomes. A summary of those findings follows, as categorized by each magnet pillar.

#### ***Leadership***

School leaders are instrumental to programmatic success (Straubhaar & Wang, 2022), and West Cal leadership was described as such by parents, teachers, and counseling staff. Interviewees frequently referred to the visibility and accessibility of the principal and school staff and the school's "open-door" culture as factors that increased their attraction to and affinity for West Cal. Parents and families increasingly chose to attend West Cal, and increased numbers of teachers requested transfers to the school. Meanwhile, interviewees also expressed administrators' particular leadership strengths, including effective hiring and a schoolwide focus on relationships and connections to improve school climate, presumably resulting in an overall improved school environment, including increased trust and collegiality among staff and decreased student suspensions. Improved school climate was, in turn, mentioned as a factor that

contributed positively to other pillar areas, including student diversity and family and community partnerships.

While teachers and staff perceived an improved staff and student climate, collaborative decision-making among personnel noticeably decreased throughout program implementation. As the partnership between West Cal and its college partner, MVCC, grew, high school teacher and parent leaders seemed less involved in conversations that might significantly impact their school. Course scheduling particularly caused concern for high school teachers as they witnessed increasing numbers of students taking dual enrollment classes taught by college professors instead of traditional high school courses.

### ***Diversity***

As evidenced by enrollment data and interview accounts, increased numbers of students were attending West Cal for the opportunities provided by dual enrollment. West Cal also increased the number of White students, an underrepresented group compared to the surrounding neighborhood demographics, while maintaining the number of Black and Latino students, increasing the school's ethnic and racial diversity. According to interview data, the principal contributed to school growth and integration through regular school tours and extensive community outreach, as is becoming more typical of leadership responsibilities for school administrators (Anast-May et al., 2012; Cucchiara, 2013; Dâmaso & Lima, 2020; McGhee & Anderson, 2019; Oplatka, 2007).

The school's overtly academic theme was also cited as a major contributing factor to positive shifts in enrollment. Academics are a common value, if not the most important factor, in families' school choice decisions (Smrekar & Goldring, 1999; Teske & Schneider, 2001), and classes taught by college professors for college credits seemed to help prospective families

overlook or ignore the schools typically low test scores. Families also toured a noticeably improved West Cal campus, as indicated by an increase in clean and well-maintained facilities, reduced discipline incidents, and an increasingly academic environment. By multiple measures, West Cal achieved first door strategies, activities aimed at integrating students into the school (George & Darling Hammond, 2021) through re-branding with an academic focus, alum testimonials, and word-of-mouth from current students and families who reported positive experiences.

West Cal's first door strategies also included inclusive enrollment practices and strategic siting decisions. West Cal and MVCC provided open access to dual enrollment for 9th-grade students. The program did not have academic entrance criteria or require entrance examinations. Additionally, the location of MVCC West on the West Cal Campus made the program physically accessible to students. Most of the district's students identified as economically disadvantaged students live in the neighborhoods surrounding West Cal. Most staff also agreed that magnet participation reflected school diversity once the program was fully established. Such inclusive access is essential to promote equitable, integrated magnet schools (George & Darling Hammond, 2021).

While first door desegregation strategies drew students from diverse backgrounds into the dual enrollment program, West Cal achieved other positive outcomes through second door strategies, which intend to integrate students within a school campus (George & Darling Hammond, 2021). Professional development for high school teachers included anti-bias training, book studies around culturally responsive and culturally affirming instructional strategies, and frequent staff meeting discussions about building relationships with students and understanding the unique challenges and circumstances that children may be navigating, especially during the

pandemic. These activities may have contributed to the measured increases in an environment that fosters an appreciation for diversity, students respecting each other's differences, and students feeling that they were a part of the school.

Amidst these successes, high school teachers commonly expressed concerns that more collaborative decision-making was needed to ensure equitable access to dual enrollment continued throughout students' 4 years of high school. Teachers' concerns were rooted in their experience that students who struggled to pass dual enrollment classes took more high school classes. When students were on track to fail an MVCC class, counselors transferred the students to high school classes (before drop deadlines). This monitoring was noted as important since failing grades would be listed on students' permanent college transcripts. However, some teachers worried that the result was a two-tiered system that tracked students and that students with increased socioeconomic barriers were most affected. This concern may explain one reason to explain the decrease in agreement among staff that adults believe all students can succeed. In response, school administrators asserted the importance of permitting students to opt to take additional dual enrollment courses when students were more academically prepared and scheduling students in heterogeneous groups by career academy.

### ***Innovative Curriculum and Professional Development***

The new dual enrollment partnership with MVCC enabled West Cal to offer up to 18 different college courses per semester by the Spring of 2022, including introductory courses such as Intro to College and courses that met requirements for core content classes. One apparent success from the data regarding discrete college courses was the Intro to College and Personal Growth and Development Classes offered in 9th grade. These were described as helpful to onboarding students in the college experience and promoting early college success. As students

gained increasing exposure to dual enrollment, more students agreed that they liked the magnet theme and wanted to attend West Cal for the dual enrollment program.

As a magnet program, thematic integration into all high school classes was also an expectation. This focus included integrating college readiness skills to increase competencies that the school defined as Early College Outcomes (see Appendix H). Professional development was provided to support the integration of these outcomes into instructional practices and curricular units. In alignment with existing research (Gay, 2018; Ladson-Billings, 1995; Paris & Alim, 2017), school administrators also emphasized teacher training in topics related to race and culture, including anti-bias training and culturally responsive teaching, as critical to achieving effectively integrated schools. Teachers also reported significant increases in anti-bias training, supports for teaching diverse students, and inclusive instructional materials, presumably contributing to 100% teacher agreement that the school fosters an appreciation of student diversity.

For training to impact teacher practice and student outcomes, professional development should be of sufficient quantity (Yoon et al., 2007) and be sustained, collaborative, subject-specific, and practice-based (Darling-Hammond et al., 2017; Desimone, 2009; Timperley et al., 2007). Survey results indicated that teachers increasingly felt comfortable incorporating the magnet theme and increasingly altered their teaching methods. Most teachers agreed that training in thematic integration was effective. However, interviews and other survey data revealed inconsistencies in thematic integration training participation and implementation. Less than half of teachers reported ten or more hours of training in the magnet theme, and most teachers reported that they implemented the magnet less than seven hours per week. High school teachers also asserted that college professors needed more training in supporting adolescent students.

### *Academic Excellence*

While schoolwide pedagogical practices may have been inconsistent, other strategies that are known to promote students' academic success in dual enrollment appeared to be more widespread. Duncheon and DeMatthews (2018) found that instructional rigor, embedded program supports such as skill-building courses, and enrichment and extracurricular activities contributed to student success in dual enrollment programs. West Cal survey data revealed that the magnet theme provided students with more challenging classes. Interview data described expanded access to student supports, including tutoring and additional counseling staff who assisted students with college advisement and technical support. Interviewees also mentioned increased extracurricular activities (band, athletics, and new clubs) as student enrollment grew and teachers and parents interested in supporting new opportunities were encouraged to do so.

These program features and expanded opportunities may explain why interviewees and survey respondents acknowledged increased college-going behaviors and college aspirations exemplified by students, increased expectations and challenging coursework, and increased availability of academic supports. According to existing research, these results may also stem from the structure of dual enrollment, as students acclimated to college norms and college behaviors by being actual college students as well as having positive relationships with caring, supportive teachers (Jett & Rinn, 2020; Karp, 2012; Knight-Diop, 2010; Martinez et al., 2022; Song et al., 2021). While there is not one clear explanation for improved academic excellence, by Year 5 of implementation, most teachers believed that the school's focus on dual enrollment improved their students' achievement, and West Cal's graduation rate and dual enrollment participation and pass rates increased.

However, one noticeable measure, student test scores, did not increase, and some other indicators of academic expectations and supports for students also decreased. English and math proficiency scores decreased over time. Student survey responses indicated decreased perceptions that adults cared about them and believed in them, despite high agreement among teachers that they did. Fewer teachers also agreed that they retaught topics as needed, and staff reported less agreement that counseling support was adequate. While there was not one clear explanation for each of these declines or inconsistencies, the COVID-19 pandemic was the most frequently cited challenge that impacted students' academic performance and social-emotional wellness overall. During remote learning, chronic absenteeism was as high as 39%, and there were reported increases in teacher absences as well. In response, school leaders shifted professional development for teachers to emphasize building relationships with students and accommodating students' academic needs with increased flexibility and understanding. It seemed school leaders also engaged in greater collaboration in response to the pandemic, which may have helped the school community to begin to recover in some ways.

### ***Family and Community Partnerships***

In addition to positive relationships with teachers, caregiver support has also been shown to help students navigate school systems (Yosso, 2005), overcome academic challenges (Ongaga, 2010), and aspire to enroll in dual enrollment programs and college (Ceja, 2004; Sáenz & Combs, 2015). Parent engagement increased at West Cal via many of the same strategies that attracted families to the school in the first place, the visibility and accessibility of school administration. Based on interview and survey data, West Cal seems to have provided a collaborative and welcoming environment to parents, families, and partners. Parent leadership groups have grown in size and interviewee accounts described school leaders as accessible.



While families felt welcomed, there were indicators that more information was needed to help parents be able to support their children in navigating the school system. Multiple interviewees mentioned difficulty in accessing information, specifically in regard to college systems. For example, parents mentioned that different grading systems were confusing. Additionally, 76% of parents felt that teachers communicated what students would learn. This indicates that there may be greater opportunities to improve access to information.

### **Conclusions**

The dual enrollment program at West Cal reflected an innovative model that combined high school and college, physically and programmatically. Physically, the college building was located on the high school campus. Programmatically, students earned high school and college credits by taking dual enrollment courses. As increased funding becomes available for dual enrollment and magnet programs, this unique model may offer insight into how school leaders can promote student integration and foster equally high academic outcomes for all students in dual enrollment settings.

### ***Duality***

Successes in relation to each of the magnet pillars were not indicative of any one implementation activity but a synergy between two factors. Similarly, the interweaving thread among the pillars and each of their relative challenges was the tension between two conflicting values or two separate bureaucracies. The conclusions that follow altogether represented the inherent successes and challenges of dual enrollment—or duality, the ideas about how two different systems coexist and may work in support or in conflict with one another.

**Programs and People.** First, the combination of the dual enrollment program design and leader behaviors contributed synergistically to successful outcomes. Offering students college

access in high school helped change perceptions that West Cal was not an academically rigorous school, thereby attracting enrollment. Further, the program delivered on its promise of expanded college access and opportunity. Students experienced tangible benefits, free college credits and college experience, in a supportive high school environment. These benefits were relayed to others, improving school perceptions and contributing to positive word-of-mouth testimonials. More students and families were therefore drawn to enroll in the program, and increasing numbers of students earned college credits.

In synergy with the program were school leader behaviors. There was resounding agreement that school leaders were highly visible, committed, and communicative. From the principal or counselor and their open doors to the teacher leaders conversing with students about how to talk with their college professors, to the parent leaders who engaged in a spirit of collaboration, school leaders and their commitment to students was a key success factor. When asked about implementation successes, common phrases included, “I think it was a perfect storm,” “I think it's hard to separate,” or “It’s just a lot of factors.” However, data revealed, most commonly, that successful changes at West Cal distilled down to the academic program and the people. Programmatic elements combined with leader behaviors worked in concert to improve school perceptions, more diverse and increased enrollment, and an academic environment characterized by student motivation and agency, and student success in college-level coursework.

**All and Some.** Second, there were tensions between the values that early college is for all students and the reality that educators felt a need to protect some students from failure. As more students attended West Cal and more students were attracted to dual enrollment, school leaders had to actively work on challenging the idea that college is only for students who arrive

academically prepared and ensure that dual enrollment benefitted students traditionally underrepresented in college. Open access policies, robust student supports, and ongoing professional development and coaching in culturally affirming and supportive instructional practices contributed to outcomes including high representation of Black and Latino students in dual enrollment. Still, concerns remained that the school could become, as one teacher said, more academically “tracked than it’s ever been before.” That same teacher and other participants also agreed that it would not be beneficial and, in fact, would be harmful to a student to remain in a college class and that they might ultimately fail. There was great tension between the ideas of classes that were open to all versus open to those succeeding. Dual enrollment programs and the nature of combining high school and college practices also presented other new tensions. For example, were high expectations (such as firm due dates) helpful for students to acclimate to the college environment or harmful, especially to the youngest teens still learning to be high school students?

**High School and College.** Finally, it became clear throughout the analysis that dual enrollment did not equate to one merged system but that several challenges were attributed to the nature of maintaining separate high school and college systems. Scheduling was a great challenge, logistically with varying school calendars, and also as a source of tension for high school teachers who perceived their role as diminishing. Training and implementation in the integration of college preparation skills at the high school were inconsistent, and college professors' training in supporting high school students was minimal. Parents, a vital support to helping students navigate school, also felt the information about the difference between high school and college systems was available but insufficient to reach all families. West Cal’s

program eliminated common access barriers to equitable participation in dual enrollment, yet the challenges of navigating and succeeding in dual systems exceeded available supports.

### **Study Limitations**

Several limitations may have impacted the credibility of the study results. These limitations included imprecise demographic data, validity concerns regarding academic achievement data, and the inherent limitations to the generalizability of findings for a single case study. Socioeconomic status and ethnic/racial demographic data may be unreliable or invalid based on collection and reporting practices; the data may not reflect how students self-identify, and changes in data collection or shifts unrelated to the program of study, such as migration patterns, may impact such data. Additionally, student engagement and outcome data were likely impacted by the COVID-19 pandemic, its resulting school closures, remote learning, excessive absences among students and teachers, and increased emphasis on relationships and social-emotional health over instructional supports. Therefore, academic data included in this study should be interpreted cautiously. Additionally, the study's narrow scope may limit the generalizability of findings to other schools or programs.

### **Implications**

School leaders at West Cal implemented a model that is likely one of its kind, a reimagined dual enrollment program that brings college to high school. Given the success and challenges at West Cal, there are several theoretical and practical implications and research recommendations.

#### ***Theoretical Implications***

At West Cal, perceptions were overturned and patterns of declining enrollment reversed. Students who have been traditionally underserved in college had access to college in high school

in multiple ways (open and free admittance, free textbooks and materials, an accessible location, the comfort of high school peers, and the support of additional counselors and tutors) that resulted in expanded academic opportunities. In some ways, the combination of visible and committed leadership, an attractive academic program, and active pursuit of culturally responsive practices challenged and changed some systems that have not traditionally served students well. Such successes may not have been achieved without all of those components. Meanwhile, findings indicate that there continued to be a need to challenge and question everyday practices and decisions at West Cal to maintain the mission of providing an equitable program.

### ***Practical Implications***

Based on challenges and concerns, an important implication for practitioners is the need for safeguards to ensure equitable access to dual enrollment classes, such as open access, entry-level college courses in which most students experience early success, and robust support systems. Additionally, dual enrollment programs may benefit from regular monitoring of program enrollment and outcomes and inclusive conversations with parents and teachers to ensure that the dual enrollment program continues to provide adequate and appropriate supports to achieve its equity aims.

Additionally, it appears that high school classroom teachers and college professors could benefit from increased communication and collaboration with each other. All participants spoke about the high school and college campuses as if they were still two separate programs. High school teacher leaders felt unaware of dual enrollment and left out of dual enrollment-related decisions. As described by Mr. Moore, teachers believed that they could positively contribute their ideas and expertise if included:

I think I've never felt more out of touch or out of the loop as a teacher than I have with dual enrollment-related stuff. I think if more teachers were involved throughout some of the issues, we could have been working [together] so that they wouldn't become big issues... making sure that it's equitable, making sure we're doing it with students' best interests in mind, making sure we're challenging them the right amount, but not amount that's going to be too much.

Collaboration between these two groups may require negotiated agreements of their respective unions, so the rationale and benefits to each group may be critical to achieving buy-in and support for this recommendation. The benefits of greater collaboration may include greater supports to improve equitable participation and success in dual enrollment.

Finally, consistent and transparent communication with teachers about how the dual enrollment may impact the school and their role in supporting the program, including professional development, appear to be critical components for consistent buy-in and consistent implementation of embedded skill-building supports that may improve student success in college courses. Dr. Lewis recommended, "Meet with the staff. Go over as much as you can. Be honest."

### **Recommendations for Future Research**

This study closely examined the implementation activities and outcomes of a dual enrollment magnet program from high school leaders' perspectives. Findings revealed ways that high school leaders fostered successful outcomes and responded to challenges. However, college partner perspectives are absent. Understanding college leaders' perceived successes and challenges could bring additional insights into additional ways to support students. Future research on the nature of collaboration between the high school and college partners, such as how school leaders from both organizations made decisions and established West Cal's unique

program structure, could also help other entities understand critical elements and characteristics of dual enrollment programs that have successfully eliminated transportation and financial barriers to dual enrollment.

Additionally, the outcomes reported are short-term. Dual enrollment programs have been shown to increase college attendance, persistence, and attainment of college credits and degrees (Berger et al., 2013; Edmunds et al., 2017; Karp et al., 2007; Song et al., 2021). Future research to examine how students in West Cal's program fared toward these outcomes would help others further understand the potential long-term benefits of dual enrollment. This study did not find positive academic impacts on traditional standardized assessments. While they may have been an invalid measure due to COVID-19, it would be important to know how students benefit in ways that may not be measured on standardized tests.

### **In Closing**

After an interview with a teacher leader about the dual enrollment magnet program, he emphasized the responsibility of school leaders to shape the future, ensuring rather than presuming that equitable practices would be sustained. He attributed this concept to science-fiction writer Octavia E. Butler. In an essay titled "Rules for Predicting the Future," O.E. Butler (2000) provided guidance to readers for anticipating future problems to strive for a better outcome:

- "Learn from the past" (O. E. Butler, 2000, p. 166). The history of U.S. school segregation, as presented in Chapter 2, the tendency for exclusion and marginalization, and the push-pull patterns of progress and rescission remind educators that equity is not likely if it is not constantly sought.

- “Respect the law of consequences” (O. E. Butler, 2000, p. 166). Every action and every plan has a consequence, and a well-intentioned program may still have unintended consequences. The benefits and risks of any program or policy must be considered and weighed.
- “Be aware of your perspective” (O. E. Butler, 2000, p. 166). Collaboration, conversation, and inclusion of diverse viewpoints are critical to assessing a program’s actual versus perceived impacts and outcomes.
- “Count on the surprises” (O. E. Butler, 2000, p. 264). They are inevitable. Despite this inevitability, school leaders should strive to foresee the future of their policies, plans, and actions.

So why try to predict the future at all if it’s so difficult, so nearly impossible? Because making predictions is one way to give warning when we see ourselves drifting in dangerous directions. Because prediction is a useful way of pointing out safer, wiser courses. Because, most of all, our tomorrow is the child of our today. Through thought and deed, we exert a great deal of influence over this child, even though we can’t control it absolutely. Best to think about it, though. Best to try to shape it into something good. Best to do that for any child. (O. E. Butler, 2000, p. 264)

O.E. Butler’s advice reminds us to reflect on the past, anticipate outcomes, see reality through multiple and different perspectives, and prepare for the unexpected to continually strive for and achieve high academic outcomes for all students in the future. Yes, it is “Best to try to shape it into something good. Best to do that for any child,” and all children (O. E. Butler, 2000, p. 264).



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## APPENDIX A

## Survey Items Related to Magnet Pillars

Pillar 1: Leadership		
Construct	Survey Items	Data Source
collaboration	1. This school promotes trust and collegiality among staff.	Cal-Sta
	2. This school promotes personnel participation in decision-making that affects school practices and policies.	Cal-Sta
	3. Adults who work at this school feel a responsibility to improve this school.	Cal-Sta
Pillar 2: Diversity		
Construct	Survey Items	Data Source
attractive choice program	1. I like the magnet theme at my school.	MS-Stu
	2. I wanted to attend this school because of the magnet theme.	MS-Stu
	3. This school has clean and well-maintained facilities and property.	Cal-Sta
respect	4. Students respect each other's differences.	Cal-Sta
	5. Adults from this school respect differences in students.	Cal-Sta
	6. This school fosters an appreciation of student diversity and respect for each other.	Cal-Sta
interaction	7. Students get along well with one another.	Cal-Sta
	8. Teachers show that they think it is important for students of different races and cultures at this school to get along with each other.	Cal-Sta
equity and inclusion	9. Students' participation in magnet theme activities reflects the racial mix of the school.	MS-Te
	10. This school considers closing the racial/ethnic achievement gap a high priority.	Cal-Sta
	11. I feel like I am a part of this school.	Cal-Stu

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 Pillar 3: Innovative Curriculum and Professional Development
 

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Construct	Survey Items	Data Source
participation	1. How many hours did you spend on professional development activities related to magnet theme development and implementation, including unit development?	MS-Te
	2. How many hours did you spend on professional development activities related to the development of magnet-theme instructional strategies?	MS-Te MS-Te
	3. This school has staff examine their own cultural biases through professional development or other processes.	Cal-Sta
	4. This school provides the supports needed for teaching culturally and linguistically diverse students.	Cal-Sta
effectiveness	5. To properly implement the magnet theme, I have altered my teaching methods.	MS-Te
	6. I am comfortable teaching lessons that are related to the magnet theme.	MS-Te
	7. Please indicate the approximate number of hours per week you incorporate your school's magnet theme into your lessons.	MS-Te
	8. The professional development I have received has helped me integrate lessons with the magnet theme into lessons.	MS- Te
	9. I learn about the magnet theme in most of my classes.	MS-Stu
	10. It is clear that the magnet theme is an instructional priority of this school.	MS-Te
	11. This school emphasizes using instructional materials that reflect the culture or ethnicity of its students.	Cal-Sta

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 Pillar 4: Academic Excellence
 

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Construct	Survey Items	Data Source
care	1. At my school, there is a teacher or some other adult who really cares about me.	Cal-Stu
	2. Adults who work at this school really care about every student.	Cal-Sta
high/rigorous expectations	3. At my school, there is a teacher or some other adult who believes that I will be a success.	Cal-Stu
	4. Adults who work at this school believe that every	Cal-Sta

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	student can be a success.	
	5. This school promotes academic success for all students.	Cal-Sta
	6. This school promotes academic success for all students.	Cal-Par
	7. Our magnet theme makes school challenging.	MS-Stu
support	8. This school is a supportive and inviting place for students to learn.	Cal-Sta
	9. This school emphasizes helping students academically when they need it.	Cal-Sta
	10. This school provides adequate counseling and support services for students.	Cal-Sta
	11. Teachers re-teach topics because student performance on assignments or assessments did not meet high standards.	MS-Te
impact	12. My school's focus on the magnet theme has improved the achievement of my students.	MS-Te
	13. As things stand now, how far in school do you think you will get [in school]?	MS-Stu

#### Pillar 5: Family and Community Partnerships

Construct	Survey Items	Data Source
welcoming environment	1. Parents feel welcome to participate at this school.	Cal-Stu
	2. Parents feel welcome to participate at this school.	Cal-Sta
	3. Parents feel welcome to participate at this school	Cal-Par
	4. This school is welcoming to and facilitates parent involvement.	Cal-Sta
partnership	5. This school encourages parents to be active partners in educating their child.	Cal-Sta
	6. The school encourages me to be an active partner with the school in educating my child.	Cal-Par
	7. School actively seeks the input of parents before making important decisions.	Cal-Par
communication	8. Teachers at this school communicate with parents about what their children are expected to learn in class.	Cal-Sta
	9. Teachers communicate with parents about what students are expected to learn in class.	Cal-Par

*Note.* This table details existing data for survey items related to each of the five magnet pillars. Surveys responses will inform interview questions. Survey data sources were abbreviated (Magnet Student Survey<sup>ab</sup>- MS-Stu; Magnet Teacher Survey- MS-Te; California School Climate, Health, and Learning Survey for Students -Cal-Stu<sup>c</sup>; Staff- Cal-Sta<sup>d</sup>; and Parents- Cal-Par<sup>e</sup>).

<sup>a</sup>Adapted from *2018 MSAP student and teacher survey report*, by J. Herman, V. Bozeman, and J. Wang, 2018, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission.

<sup>b</sup>Adapted from *2022 MSAP student and teacher survey report*, by J. Wang, V. Bozeman, L. de Vries, and Q. Debley, 2022, National Center for Research on Evaluation Standards, and Student Testing (CRESST). The Regents of the University of California. Copyright 2018 by The Regents of the University of California. Reprinted with permission.

<sup>c</sup>CalSCHLS Survey Modules. (2023b). *Middle/high school climate in-school module (English)*. CalSCHLS. [https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223\\_final.pdf](https://calschls.org/site/assets/files/1103/mshs-schoolclimate-in-school-2223_final.pdf). Reprinted with permission.

<sup>d</sup>CalSCHLS Survey Modules. (2023a). *California school staff in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csss-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csss-2223_in-school_final_watermarked.pdf). Reprinted with permission.

<sup>e</sup>CalSCHLS Survey Modules. (2023c). *California school parent in-school survey*. CalSCHLS. [https://calschls.org/site/assets/files/1103/csps-2223\\_in-school\\_final\\_watermarked.pdf](https://calschls.org/site/assets/files/1103/csps-2223_in-school_final_watermarked.pdf) Reprinted with permission.

## APPENDIX B

## Recruitment Email Script

Dear [name],

My name is Shannon Mumolo, and I am a doctoral student in the Graduate School of Education and Psychology at Pepperdine University. I am conducting a research study to understand the successes and challenges of your school's dual enrollment magnet program implementation, and I need your help!

I am seeking volunteer study participants for interviews about your school's dual enrollment magnet program. Your participation in the study is anticipated to take no more than 30-60 minutes.

Participation in this study is voluntary, and your identity as a participant will be protected before, during, and after the time that study data is collected. Strict confidentiality procedures will be in place during and after the study. To protect your privacy and confidentiality, pseudonyms will be used for all names, places, and identifiable events. Interviews will be audio-recorded for transcription purposes only, and notes and transcripts from interviews will not identify content attributable to individual participants. All records will be stored in a password-protected drive.

If you have any questions or would like to participate in this study, please feel free to contact me at your earliest convenience.

Thank you for your consideration of participation,

Shannon Mumolo  
Pepperdine University  
Graduate School of Education and Psychology  
Doctoral Student  
(626)487-1716  
shannon.mumolo@pepperdine.edu

## APPENDIX C

## IRB Approval

Pepperdine University  
24255 Pacific Coast Highway  
Malibu, CA 90263  
TEL: 310-506-4000

**NOTICE OF APPROVAL FOR HUMAN RESEARCH**

Date: January 23, 2023

Protocol Investigator Name: Shannon Mumolo

Protocol #: 22-10-2011

Project Title: Marketization without marginalization? Approaches to school integration in an early college magnet

School: Graduate School of Education and Psychology

Dear Shannon Mumolo:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual at [community.pepperdine.edu/irb](http://community.pepperdine.edu/irb).

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair  
cc: Mrs. Katy Carr, Assistant Provost for Research

## APPENDIX D

## Informed Consent

## PEPPERDINE UNIVERSITY

*(Graduate School of Education and Psychology)***INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES****IRB #:** 22-10-2011**Participant Study Title:** Success and challenges in establishing a dual enrollment magnet program**Formal Study Title:** Marketization without marginalization? Approaches to school integration in a dual enrollment magnet**Authorized Study Personnel:**Principal Investigator: Shannon Mumolo, MA  
Cell: (626) 487-1716**Key Information**

If you agree to participate in this study, the project will involve:

- Staff, parents, teachers, and alumni between the ages of 18-65
- Procedures will include participation in one interview
- 1 online visit is required
- This visit will take 30-60 minutes in total
- There are possible risks associated with this study (loss of confidentiality, psychological distress)
- You will be paid \$0 for your participation.
- You will be provided a copy of this consent form
- This study will not impact students' opportunity to learn, have any impact on the evaluation of any instructors, or involve any significant time and attention away from the delivery of regular curriculum or withholding of standard educational content. Instructor participants will not experience any adverse or negative impact on employment as a result of participating in this study.

**Invitation**

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to participate. If you have any questions, please ask.

**Why are you being asked to be in this research study?**

You are being asked to be in this study because you are either an employee, parent, or former student associated with the dual enrollment magnet program. You must be 18 years of age or older to participate.

**What is the reason for doing this research study?**

Early college magnet programs have different structures and supports. This research is designed to understand the successes and challenges of your school's dual enrollment magnet program.

**What will be done during this research study?**

You will be asked to participate in one interview, which will take 30-60 minutes.

**How will my contributions be used?**

Your ideas may be included in summaries of a program report or article. Any personal information that could identify you will be removed before any report or article is published.

**What are the possible risks of being in this research study?**

This research presents the risk of loss of confidentiality and emotional or psychological distress because the interviews involve questions about your perceptions or experiences with the dual enrollment magnet program.

**What are the possible benefits to you?**

You may have the opportunity to help improve the school's implementation of your school's dual enrollment magnet program. However, you may not get any benefit from being in this research study.

**What are the possible benefits to other people?**

The benefits to society may include a better understanding of how to help improve the way other schools create or implement new magnet or dual enrollment programs. Your ideas may also inform future areas that should be researched.

**What are the alternatives to being in this research study?**

Instead of being in this research study, you can share your thoughts or ideas about the dual enrollment magnet program directly with your school administration or program staff.

**What will being in this research study cost you?**

There is no financial cost to you for being a participant in this research study.

**Will you be compensated for being in this research study?**

You will not be compensated for your participation in this study.

**What should you do if you have a problem during this research study?**

Your welfare is the primary concern of every member of the research team. If you have a problem as a direct result of being in this study, you should immediately contact one of the people listed at the beginning of this consent form.

**How will information about you be protected?**

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. The data will be stored electronically through a secure server and will only be seen by the research team during the study and for 3 years after the study is complete. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB) of Pepperdine University, and any other person, agency, or sponsor as required by law. The information from this study may be published in scientific journals or presented at scientific meetings, but the data will be reported as group or as summarized data, and your identity will be kept strictly confidential.

**What are your rights as a research subject?**

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. For study-related questions, please contact the investigator(s) listed at the beginning of this form. For questions concerning your rights or complaints about the research, contact the Institutional Review Board (IRB):

Phone: 1(310)568-2305

Email: [gpsirb@pepperdine.edu](mailto:gpsirb@pepperdine.edu)

**What will happen if you decide not to be in this research study or decide to stop participating once you start?**

You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator or with Pepperdine University (list others as applicable). You will not lose any benefits to which you are entitled.

**Documentation of informed consent**

You are voluntarily making a decision whether or not to be in this research study. Verbal consent to this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you, (3) you have had your questions answered, and (4) you have decided to be in the research study. You will be given a copy of this consent form to keep.

**Participant feedback survey**

To meet Pepperdine University’s ongoing accreditation efforts and to meet the Accreditation of Human Research Protection Programs (AAHRPP) standards, an online feedback survey is included below:

<https://forms.gle/nnRgRwLgajYzBq5t7>

Participant consent will be verbal to protect the privacy and confidentiality of participants.

**Investigator certification**

Investigator signature certifies that all elements of informed consent described on this consent form have been explained fully to the subject. In my judgment, the participant possesses the capacity to give informed consent to participate in this research and is voluntarily and knowingly giving informed consent to participate.

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Signature of Investigator Obtaining Consent

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Date



## APPENDIX E

## Interview Protocol

**Section A. Overview**

1. **Purpose:** To understand how school leaders implemented a dual enrollment magnet program over a 5-year period.
2. **Questions:**
  - a. **RQ1-** What has changed at the school since the dual enrollment magnet program was implemented?
  - b. **RQ2-** How did school leaders foster successful outcomes of the dual enrollment magnet program?
  - c. **RQ3-** How did school leaders experience and address challenges to program implementation?
  - d. **SQ:** How did school leaders foster successes or experience and address challenges to: **SQ2/3a-** school diversity? **SQ2/3b-** innovative curriculum and professional development? **SQ2/3c-** academic excellence? **SQ2/3d-** family and community partnerships?
3. **Theoretical Framework**
  - a. Five pillars of magnet schools- leadership, academic excellence, curriculum and professional development, diversity, parent and community partnerships
  - b. Educational leaders as cultural workers- (Giroux, 2007; Roda, 2020) informs how leaders might serve as advocates who critique and change systems to close opportunity and achievement gaps.
  - c. Integration theory of choice- (Ayscue et al., 2018; Johnson & Nazaryan, 2019; Pettigrew & Tropp, 2006) as related to understanding the complexities of desegregation through regulated choice to achieve societal benefits
4. **Role of the protocol in guiding the case study researcher:** Maintain focus on the line of inquiry and promote consistent administration of interviews.

**Section B. Interview Procedures****Interview Procedures****Introduction**

- Introduce the interviewer and their role.
- Provide an overview of the purpose of the study.- successes and challenges of program implementation
- Provide an overview of the purpose of the interview- to understand their unique perspectives regarding the early college program implementation.
- While I have identified guiding questions, this interview is intended to be semi-structured. Therefore, I may skip or

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adjust questions or add new questions based on the flow of our conversation.

- The goal of this interview is to understand what has changed at your school and why since the dual enrollment magnet program was implemented. I'm particularly interested in learning more about the successes and challenges your school leadership team perceived and experienced to inform our future practice within the school and district. The results and analyses will be used for a written dissertation, and an anonymous case study report of high-level themes may be provided to other practitioners to enhance practitioner knowledge.

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**Privacy,  
Confidentiality, and  
Consent**

- This interview is intended to capture your perceptions and experiences but no information personally attributable to you or others in the school community.
  - To that extent, the use of names of individual persons or personally identifying characteristics should be avoided.
  - No information will be used for any program or staff evaluations, and pseudonyms will be used for all note-taking and in the written manuscript.
  - Consent
  - Share a copy of the informed consent form.
  - Verbally confirm that they agree to participate in the study and have read and understand the information contained in the informed consent form.
  - Ask if they have any questions.
  - Remind the participant that they may opt out at any time, and that participation is strictly voluntary. This includes asking to skip or move on from any questions.
  - Ask the participant if you have their permission to record the interview for transcription purposes. This transcript will support analysis to identify common themes across multiple interviews.
  - The audio recording itself will be deleted within one hour after the meeting concludes (when a transcript is available for download), and the transcript will not include any personally identifiable information. It will only be reviewed by me, my chair, or IRB upon request and will not be published anywhere.
  - Remind the participant that even if they consent to recording at this time, they can skip any question or request that the recording be stopped at any time.
  - Begin recording if the participant consents.
-

## Guided Questions

- Over the past five years, what's one change that stands out most to you? What do you think most contributed to that change occurring?
- Invite the interviewee to share additional examples or pose further questions to each other to clarify thinking. Consider clarifying or probing stems to elicit responses that guide the conversation to understand:
  - What did school leaders do to bring about that change?
  - How school leaders may have challenged or changed systems?

### Leadership

- What are some ways you have seen your school environment improve over the past five years, and what do you think brought about those changes?
- To what extent did teachers and staff participate in decision-making related to these changes or to your school overall?
- How has that changed over time? Why?

### Diversity

- How would you describe the diversity and equity of your school's dual enrollment program and why?
- Increased enrollment-
  - Reasons students chose your school
  - Reasons students in this attendance zone may not choose your school
- Student interactions and relationships
- Respect among students from diverse backgrounds
- Instructional practices were reflective of students' diverse backgrounds
- Student participation in dual enrollment reflective of the racial mix of the school
- How did the early college theme impact students' feelings about school?
- Their sense of connection to the school community?
- Do all students feel welcome? Why or why not?

### Curriculum and Professional Development

- What does students' exposure to the early college theme look like in the classroom, and how does that compare to instruction a few years ago?
  - Implementation of the magnet theme over time
  - Teacher-reported comfort
  - Incorporating the magnet theme in instruction
  - Professional Development
-

### **Academic Excellence**

- How has the school's dual enrollment program impacted students' academic outcomes?
  - Graduation rates
  - Standardized tests
  - College credits
  - Supports offered and how communicated
- Are the program's academic impacts equitable? Why or why not?
- What do staff or teachers do that most impacts student outcomes, positively or negatively?
- What barriers have you experienced or seen that have prevented these supports from reaching all students?
  - High expectations
  - Counseling services
  - Re-teaching of content

### **Family and Community Partnerships**

- How has the school's magnet theme influenced family engagement?
  - Caring relationships
  - Welcoming environment
  - Planning for college and career
  - Parent involvement
- What if any barriers are there for families wishing to engage more or differently?
- Has this changed or been impacted by the implementation of the new magnet theme?

### **Concluding Questions**

- Based on all that we've discussed, what do you see as the greatest success and greatest challenge to implementing this school's dual enrollment program?
- What advice would you give to someone establishing a new dual enrollment program to achieve that success?
- What is one recommendation you would make to overcome or avoid that challenge?
- Is there anything else you want me to know? / Have I missed anything?

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#### **Possible STEMS for follow-up questions**

#### **Clarifying Prompts:**

- Can you tell me more about...
  - What's an example of...
  - So, you...?
  - What do you mean?
  - To what extent did school leaders...?
-

- I'm curious to hear how...

**Probing Prompts:**

- How did that compare to...?
- What sort of an impact do you think...?
- How do you know...?
- What did you think when...?
- I wonder how that changed...

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**Closing**

- Thank the participant. Provide time for the participant to ask additional questions if needed.
- 

*Note: Probing and clarifying prompts adapted from *The art of coaching: Effective strategies for school transformation* by E. Aguilar, 2013. Copyright 2013 Jossey Bass.*

## APPENDIX F

## Revised Interview Questions and Rationale

	Interview Questions (and <i>Rationale for Changes</i> , where applicable)
1st Draft of Interview Questions	<ul style="list-style-type: none"> <li>● Invite the interviewee to share additional examples or pose further questions to each other to clarify thinking. Consider questions that focus the discussion:               <ul style="list-style-type: none"> <li>● What did school leaders do to bring about that change?</li> <li>● What were some initial successes? Barriers?</li> <li>● What are some successes or challenges related to your program implementation today?                   <ul style="list-style-type: none"> <li>● As related to the magnet pillars?                       <ul style="list-style-type: none"> <li>● leadership</li> <li>● academic excellence</li> <li>● curriculum and professional development</li> <li>● diversity</li> <li>● parent and community partnerships</li> </ul> </li> </ul> </li> </ul> </li> <li>● Ending questions:               <ul style="list-style-type: none"> <li>● What is one recommendation you would make to improve your program?</li> <li>● What advice would you give to someone establishing a new program?</li> <li>● Have I missed anything?</li> </ul> </li> </ul>
1st Revision of Interview Questions	<p data-bbox="435 1157 1386 1226"><i>Rationale for Changes: Detailed prompts were added based on the results of quantitative findings from Phase I.</i></p> <ol style="list-style-type: none"> <li>1. What has changed at the school since the dual enrollment magnet program was implemented?</li> <li>2. What's one change that stands out most to you? What did school leaders do to facilitate that change?</li> <li>3. Invite the interviewee to share additional examples or pose further questions to each other to clarify thinking. Consider questions that focus the discussion:       <ol style="list-style-type: none"> <li>a. What did school leaders do to bring about that change?</li> <li>b. What were some initial successes? Barriers?</li> </ol> </li> <li>4. What is one recommendation you would make to improve your program?</li> <li>5. What advice would you give to someone establishing a new dual enrollment program?</li> </ol> <p data-bbox="435 1843 1317 1875">These next questions relate to how school leaders fostered successful</p>

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outcomes of the dual enrollment magnet program.

**Leadership**

6. How did you build feelings of trust and collegiality among staff?
7. How did you make it clear that the magnet theme was an instructional priority?
8. How did you facilitate improved cleanliness and maintenance of facilities?
9. What did you do to facilitate decreased suspensions?

**Diversity**

10. What did you do to support increased enrollment and increasingly diverse enrollment?
11. How did your leadership team promote positive student interactions and relationships and respect among students from diverse backgrounds?
12. How did you ensure that instructional practices were reflective of students' diverse backgrounds?
13. How did you ensure that student participation in dual enrollment was increasingly reflective of the racial mix of the school?

**Curriculum and Professional Development**

14. How did your leadership team influence increased implementation of the magnet theme over time, including increased teacher-reported comfort and time incorporating the magnet theme in instruction?
15. What steps did you take to ensure that professional development was impactful?

**Academic Excellence**

16. What did you do to support increased graduation rates?
17. How did you influence the large increases in the number of students earning college credits?
18. How did the magnet improve student achievement and what did the leadership team do to impact that?
19. How did you ensure the dual enrollment magnet program promoted academic success for all students?
20. What supports did you offer and how did you communicate them?

**Family and Community Partnerships**

21. What did you do to make parents feel welcome?
22. How did you help parents plan for their child's college and career?

These next questions relate to how school leaders experienced and addressed challenges to the implementation of the dual enrollment magnet program.

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**Leadership**

23. What challenges did you perceive and experience in fostering staff participation in decision-making?
24. What challenges did you perceive and experience in supporting students' feelings of connectedness or belonging?

**Diversity**

25. What are the main reasons students choose your school?
26. What are some of the main reasons students in this attendance zone may not choose your school?
27. Why might some current students feel they are not a part of this school?

**Academic Excellence**

28. What barriers did you face in increasing student achievement (on standardized tests)?
29. What barriers did you perceive to incoming students knowing adults on campus care about them?
30. Where do you experience decreased expectations of students?
31. What are some barriers to adults having high expectations for students?
32. Why might students or staff feel that counseling services are less adequate than before the program began?
33. What might explain student perceptions that re-teaching of content has largely decreased since the program began?

**Family and Community Engagement**

34. What are some ways parents could feel more involved and welcome as partners in the school, and what may be preventing those strategies from occurring?

**Concluding Questions**

35. Is there anything else you want me to know?
36. Do you have any questions for me?

**Final Interview Questions**

*Rationale for Changes: Based on responses from pilot testing, similar questions were consolidated for efficiency. Other questions were re-worded. For example, rather than ask about successes and challenges separately, questions were revised to focus on magnet pillars and change over time, with possible follow-up prompts/topics to explore based on participant responses so as not to lead the interviewee's responses and to avoid explicit reference to any specific individuals.*

Introduction: The goal of these questions are to understand what has changed at your school and why since the dual enrollment magnet program was implemented. I'm particularly interested in learning more about the



successes and challenges your school leadership team perceived and experienced to inform our future practice within the school and district.

1. Over the past five years, what is one change that stands out most to you? What do you think most contributed to that change occurring?

Invite the interviewee to share additional examples or pose further questions to each other to clarify thinking. Consider clarifying or probing stems to elicit responses that guide the conversation to understand:

- a. What did school leaders do to bring about that change?
- b. How school leaders may have challenged or changed systems?

### **Leadership**

2. What are some ways you have seen your school environment change over the past five years, and what do you think brought about those changes?
3. To what extent did teachers and staff participate in decision-making related to these changes or to your school overall?
  - a. How has that changed over time?
  - b. Why?

### **Diversity**

4. How would you describe the diversity and equity of your school's dual enrollment program and why?
  - a. Increased enrollment-
    - i. Reasons students choose your school
    - ii. Reasons students in this attendance zone may not choose your school
  - b. Student interactions and relationships
  - c. Respect among students from diverse backgrounds
  - d. Instructional practices were reflective of students' diverse backgrounds
  - e. Student participation in dual enrollment reflective of the racial mix of the school
5. How do you think the new early college theme impacted students' feelings about school and their sense of connection to the school community?
  - a. Do all students feel welcome?
  - b. Connected? Why or why not?

### **Curriculum and Professional Development**

6. What does students' exposure to the early college theme look like in the classroom, and how does that compare to instruction a few years ago?
  - a. Implementation of the magnet theme over time
  - b. Teacher-reported comfort
  - c. Incorporating the magnet theme in instruction
  - d. Professional Development

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**Academic Excellence**

7. How has the school's dual enrollment program impacted students' academic outcomes?
  - a. Graduation rates
  - b. Standardized tests
  - c. College credits
  - d. Supports offered and how communicated
8. Are academic impacts equitable? Why or why not?
9. What do staff or teachers do that most impacts student outcomes, positively or negatively?
  - a. What barriers have you experienced or seen that have prevented these supports from reaching all students?
  - b. Caring relationships
  - c. High expectations
  - d. Counseling services
  - e. Re-teaching of content

**Family and Community Partnerships**

10. How has the school's magnet theme influenced family engagement?
  - a. Welcoming environment
  - b. Planning for college and career
  - c. Parent involvement
11. What if any barriers are there for families wishing to engage more or differently?
  - a. Has this changed or been impacted since the new magnet theme was implemented?

**Concluding Questions**

12. Based on all that we have discussed, what do you see as the greatest successes and greatest challenges to implementing this school's dual enrollment program?
  13. What advice would you give to someone establishing a new dual enrollment program to achieve that success?
  14. What is one recommendation you would make to overcome or avoid that challenge?
  15. Is there anything else you want me to know? / Have I missed anything?
  16. Do you have any questions for me?
-

## APPENDIX G

## Early College Outcomes

1. INQUIRY: I can ask critical questions in order to analyze and evaluate an issue or problem, considering the evidence before I form a judgment and/or propose a solution

*Competencies:*

- 1) Develop thoughtful questions for investigation and test hypotheses to create evidence-based explanations and conclusions about various issues and phenomena.
- 2) Conduct research to gather, filter, evaluate, analyze and synthesize information, data, and evidence from a variety of authentic sources.
- 3) Clarify thinking, probe others' thinking, and work through ambiguity while seeking to answer questions, solve problems, and create original products.
- 4) Present findings and evidence effectively by establishing the credibility and limitations of sources and by using correct citations.

2. READING AND WRITING: I can acquire knowledge and meaning from print and other media and create written works that communicate understanding of existing ideas and present original thoughts.

*Competencies:*

- 1) Read and comprehend written material critically and effectively, with attention to text structures and context.
- 2) Connect reading to other texts, self, and the world.
- 3) Annotate, summarize, and create images to represent multiple written texts.
- 4) Write with precision, clarity, and coherence to skillfully communicate ideas while considering audience and purpose.
- 5) Engage in various writing processes to address specific situations.
- 6) Apply language fluidly and appropriate to context in order to demonstrate understanding and support thinking.

3. REFLECTION: I can reflect upon how I best learn, when I need additional support, and where I can seek guidance from teachers, mentors, and peers in order to better retain information and produce quality products that give me a sense of pride.

*Competencies:*

- 1) Connect, build, revise, and refine proposals and products to increase quality, individually and with others
- 2) Reflect on performance, growth as a learner, and ability to apply academic, interpersonal, and metacognitive strategies and skills within a variety of contexts
- 3) Seek feedback from, and offer feedback to others using benchmarks, rubrics and models
- 4) Implement action plans, evaluating, adjusting, and overcoming obstacles along the way

4. PRESENTATION: I can prepare, present, and defend my ideas verbally to a variety of audiences.

*Competencies:*

- 1) Defend a perspective verbally to an audience, supporting one's perspective with evidence.
  - 2) Organize a presentation in a way that delivers information accurately and demonstrates a clear line of reasoning to support audience understanding.
  - 3) Use technology and visual media to clarify content and support audience understanding.
  - 4) Listen actively and respond effectively to audience questions .
5. AGENCY: I can grow my intelligence and skills through effort, practice, and challenge; I can learn *how to learn* so I can be successful in projects, school and life

*Competencies:*

- 1) Use effort and practice to improve skills, work quality, and performance.
- 2) Develop meaningful goals, broken down into achievable action steps and monitor progress regularly.
- 3) Identify academic strengths, personal success, and mastered skills in order to confidently work toward identified goals.
- 4) Actively participate in activities, discussions, and meetings by staying focused, listening deeply, and offering original ideas and thoughts to strengthen discussion.
- 5) Reach for all available resources, including role models and mentors, to enhance learning, expand opportunities, and influence values.

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