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Student Perceptions of Dual Enrollment Participation

A Dissertation by

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Irvine, California

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Submitted in partial fulfillment of the requirements for the degree of

Doctor of Education in Organizational Leadership

June 2019

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This dissertation is dedicated to my family and friends as well as my colleagues, staff, faculty, administrators, and students at Mt. San Jacinto College and the wonderful staff and faculty at Brandman University.

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You are my best friend and you understand my crazy. I will never understand why or how you put up with me but thank God every day that we chose each other.

DEDICATION

This research is dedicated to the high school and college partners that believed in the success of their students and those that helped me complete this study. As well as the students of Mt. San Jacinto College that not only participated in dual enrollment but also this research study.

This reserach could not have been completed without the love and support from family. Ryan, Kaci, and Jase this entire journey is dedicated to you three. You withstood so much, for me to achieve my goals. For this I will forever be grateful to you and dedicate the following pages to you.

ABSTRACT

Student Perceptions of Dual Enrollment Participation

by Susan Hochstrat

Purpose: It was the purpose of this study to explore students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college.

Methodology: This was a qualitative research study that utilized a phenomenological approach to explore the impact of dual enrollment participation. Twelve previous dual enrollment students participated in semi-structure interviews.

Findings: The findings from this research study illustrate the impact of dual enrollment participation. Based on the findings students' state that dual enrollment participation exposes them to rigorous coursework. Students expressed that they were prepared for college because dual enrollment allowed them to be exposed to what they needed to expect from college whether it was the change from a formulaic to analytical writing style to understanding that in college students are more responsible for their learning and how to critically think. Dual enrollment participation also provides students the opportunity to complete college requirements while still in high school, which allows them to get ahead in college and complete their goal faster. Students perceived dual enrollment as highly beneficial, as it allowed them to experience college coursework with no tuition cost and understand the expectations of what to expect from college. Dual enrollment participation provides students with exposure to college level coursework and provides a good preparation to what college will be like. It eases transition from high school to college. Participation allowed students to have an ease in anxiety because they understood the college system because of being exposed in dual enrollment.

Conclusion: Based on the literature and findings of this study it is concluded that students who participate in dual enrollment are more prepared for college. Dual enrollment participation decreased time to goal completion. Dual enrollment participation has a positive impact on student understanding of the matriculation process. Dual enrollment participation has a positive impact on student understanding there is a difference in high school and college.

Recommendations: Future research is recommended to further explore the impact of dual enrollment participation.

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CHAPTER I: INTRODUCTION

Introduction

College and Career Readiness is a focal point of secondary and post-secondary education. Federal and state initiatives as well as policies have tried to connect the expectations of colleges with the realities of students. In 2009, President Obama stated at Macomb Community College in Warren, Michigan that community colleges need to produce five million more graduates by the year 2020 in order to make the United States of America an educational world power once again. The Graduation Initiative (GI) that arose from the 2020 vision is supported with federal funds; however, it lacks the methodology of how to positively increase the number of graduates by the year 2020 (American Graduation Initiative, 2009). Within the national movement, Common Core Standards arose in high schools to develop a curriculum that is working towards improving college and career readiness and begin to generate better prepared high school graduate (Haycock, 2010).

There is minimal communication between secondary and post-secondary institutions even though the intention of Common Core is college and career readiness (Haycock, 2010). This communication between the two systems is crucial to ensure that the standards are accomplishing the needs of both institutions and truly making the students college ready (Troumpoucis, 2004). On December 10, 2015 the United States Congress passed the Every Student Achieves Act of 2015 (ESAA); this bill amended the Elementary and Secondary Education Act of 1965 (congress.gov). This bill is in continued support of the GI as a continued strategy to improve college and career readiness. The difference between the ESAA and GI is that the ESAA highlights and

begins to show how dual and concurrent enrollment will improve the effort. However, even with this bipartisan support there is still a need to continue the research on dual and concurrent enrollment as the bills prioritize exam based coursework; like Advanced Placement (AP) and International Baccalaureate (IB) over dual/concurrent enrollment (The National Alliance of Concurrent Enrollment Partnerships [NACEP], 2018).

Strengthening the need of inter-institutional communication and support the effort to graduate an additional five million community college graduates, community colleges and high schools is essential to the collaborative efforts to generate more prepared high school students to transition to college. California alone is responsible for one million college graduates (Community College League of California, 2010). According to the National Center for Educational Statistics (NCES), in 2019, 67% of high school graduated entered college the fall after graduation (NCES, 2018). It continues to become apparent that the partnerships between secondary and post-secondary education needs to be aligned and straightened.

Therefore, alternative credit awarding opportunities are on the rise as the nation is struggling to meet the “American Graduation Initiative” and graduate those five million students by the year 2020 (United States Department of Education, n.d.). Authors suggest the most effective way to increase secondary and post-secondary collaboration is with dual enrollment (M. M. Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Mokher & McLendon, 2009). Dual enrollment, a credit based transition program, is a term that describes a student earning high school and college credit from participation in a college course while still enrolled in high school; programs or offerings may also be referred to as concurrent enrollment, college in high school, dual credit, and joint credit (N.

Hoffman, Vargas, & Santos, 2009; Howley, Howley, Howley & Duncan, 2013). Dual enrollment affords the student the opportunity and exposure to academic and career technical education (CTE) courses, which results in increased college readiness, high school and college retention and persistence, shortened time to degree completion, and overall success (Mokher & McLendon, 2009; Kleiner & Lewis, 2005).

Dual enrollment students are defined as any student who is enrolled in both high school and college to earn the college credit. Dual enrollment programs extends back to the 1970s. However, it can be traced back to the late 1800s where university and community colleges offered opportunities for advanced students to earn college credit while still in high school (Boswell, 2001; Greenberg, 1988). In 1973, New York City became the first to establish a dual enrollment/dual credit program targeting high achieving students to keep them engaged in high school and provide exposure to college at LaGuardia Community College (Boswell, 2001). However, in 1976, California was the first state to adopt a policy on dual enrollment and the state continues to pursue policies regarding dual enrollment (Mokher & McLendon, 2009).

There are different modules or styles of dual enrollment. The courses or programs can be offered on the high school campus or on the college campus; some colleges are even offering the college courses online as distance education (Krueger, 2006). All dual enrollment courses are taught by a qualified community college instructor, whether it be a high school faculty member meeting the minimum qualifications or a community college instructor (H. A. Andrews, 2000).

According to the NCES, during the academic year of 2010-2011, 1,277,100 unduplicated students participated in a dual enrollment course whether it was taught on a

high school campus, college campus or as distance education (as cited in Marken, Gray & Lewis, 2013). In the academic year 2002-2003, a total of 813,000 students participated in a dual enrollment program nationally (Kleiner & Lewis, 2005). This is an increase of nearly half a million students, 464,100 in a decade. During this academic year, 53% of all post-secondary institutions reported that high school students were taking courses for credit in some form on or off campus (Marken et al., 2013). The majority of dual enrollment programs exist at two-year colleges as 96% of the institutions offering dual enrollment programs are public community colleges (Marken et al., 2013).

Furthermore, researchers still suggest there is more data needed on program efficiency since many studies focus on enrollment growth, as well as, student performance measures (Hofmann, 2012; M. M. Karp et al., 2007); this is especially true in California. In support of this a recent study was conducted in 2012 at Santa Barbara City College, which highlighted the impact on dual enrollment participation on student success and persistence (Wintermeyer, 2012). Prior to this, a study was conducted in 2002 at City College of San Francisco to evaluate their dual enrollment student performances; however, this study was not peer reviewed (Spurling & Gabriner, 2002). Additionally, studies throughout the nation concur with the results from Santa Barbara City College and City College of San Francisco that participation in dual enrollment increases persistence, retention, and overall college success rates. However, it is unknown if these studies can be generalized to all institutions offering dual enrollment options to students due to the uniqueness of each institution's program (M. M. Karp et al., 2007). Accordingly, these studies have, however, increased the knowledge that dual enrollment may "help students transition into college" (M. M. Karp et al., 2007, p. 11).

Continuing to yield to the question on college knowledge these researchers have concluded that dual enrollment participation positively increases GPA, persistence rates, credits completed, and participants enrolled in more units than non-dual enrollment participants (Allen & Dadgar, 2012; M. M. Karp et al., 2007; Wintermeyer, 2012).

Even though these studies support the goals of the dual enrollment program in the accelerated time to degree completion, increased college knowledge and cost effectiveness for students, parents and the institutions; researchers are still recommending further research on the benefits of program participation (Hébert, 2001; Howley et al., 2013; J. Kim, Barnett, & Bailey, 2003). Few studies have explored the students' perceptions beyond the motivational factors and the relationship on the self-efficacy of the student on participating in dual enrollment programs (Farrell, 2009; Haley, 2013; Ramos-Sanchez & Nichols, 2007; Robbins et al., 2004). Moreover, a recent study of an Early College High School dual enrollment program completed by Farrell (2009), supported researchers' recommendations that there has not been an emphasis on the student's perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college (Haley, 2013; Howley et al., 2013). Therefore, additional research is needed to better understand the effectiveness and benefits of these individual dual enrollment programs. These studies have identified that dual enrollment programs are quite different throughout the state and nation due to the differing needs of the students and institutions (U.S. Department of Education, Office of Vocational and Adult Education, 2004).

Background

Dual enrollment provides high school students the opportunity to earn college credit by experiencing enhanced curriculum from taking a course that is taught within the parameters of the actual college course on or off their high school campus site (M. M. Karp et al., 2007; K. L. Hughes, 2010). Furthermore this allows a smooth transition from high school achievement to college readiness because the high school students are comping college credits (N. Hoffman, 2013). Moreover, dual enrollment caries from other credit based transition program by following a college schedule, college curriculum, and awarding credit based on student performance versus on an end of program high stakes exam (K. L. Hughes, 2010; M. M. Karp et al., 2007).

Dual enrollment programs, due to the unique differences in the diverse student population needs, will vary in design, structure, management, course offerings as well as the whether the focus is on at-risk students, career technical education or high achieving students (U.S. Department of Education, Office of Vocational and Adult Education, 2004). However it has no bearing on their socioeconomic status or ethnicity (M. M. Karp et al., 2007; Peters & Mann, 2009). It is to be understood that dual enrollment is the terminology that will be used throughout this study as it is synonymous with concurrent enrollment, joint credit or dual credit in research and literature as it relates to high school students earning college credit from a community college or university. However, it is important to understand that the institution awarding the college credit determines the terminology utilized to define their program.

California legislation dictates the funding mechanisms for high school and community colleges offering dual enrollment programs. Senate Bill 292 passed in 1996

which states that high schools can claim full average daily attendance (ADA) on dual enrollment students provided the student attended the minimum high school schedule of 240 minutes (Golan & Hughes, 2008). Therefore, colleges are able to claim apportionment for these students as well as the high school the student attends. However, they cannot claim the same instructional activity time. This allows students the opportunity to continue to enhance their education while in high school.

Students participating in dual enrollment not only have access to college curriculum; they experience the matriculation process of post-secondary institutions, and the rigors of college level coursework. In addition, they experience a decrease in time to degree completion, decrease in college cost, and an increase of college success due to the exposure to the college atmosphere (Kleiner & Lewis, 2005). Researchers state the added benefits to dual enrollment participation include the demystification of college, engaging in an interesting curriculum, an increase of high school engagement and the creation of a college going culture on a high school campus (Bailey & Karp, 2003; Chapman, 2001; Conley, 2009; Mokher & McLendon, 2009). M. M. Karp et al. (2007) study also stated that dual enrollment participation increases the likelihood to enroll at a post-secondary institution as full-time students with their first year of college. Research continues with the fact that dual enrollment participation benefits with students with providing them with not only exposure to college language, coursework, pace and rigor but the opportunity to earn college credit as a high school student. This is especially important for those students that are traditionally underrepresented in college if first generation or minority, because they do not know how to begin the matriculation process (Bailey & Karp, 2003; Roderick, Nagaoka, Coca, Moekher, 2008). Dual enrollment is

assisting in the national problem of students not being ready for college by providing a transitional period in high school to highlight the importance of understanding expectations and student college-level placement (C. Adelman, 2006; Greene & Winter, 2005; N. Hoffman, 2012). Furthermore, dual enrollment is bringing secondary and post-secondary educators together to align their understanding of a “college ready student” and “college-level work” (N. Hoffmann & Voloch, 2012, p. 101).

One of the greatest benefits to dual enrollment besides the obvious increase of college credit to high school students is the increase of college readiness. Conley (2008) defines college readiness as the degree to which a student comprehends the college matriculation process and how personal, social and educational experiences impact the student’s ability to successfully navigate through the post-secondary system. Researchers believe that students are college ready if they can successfully enter college with this understanding as well as the ability to begin their first year of college without remedial courses (Conley, 2008; Edmunds, 2012; Hooker & Brand, 2010; Mokher & Mclendon, 2009).

Researchers believe the major component of college readiness is college knowledge; designed as the understanding of the matriculation process, degree requirements, financial aid opportunities and the difference between high school and college (Edmunds, 2012; Hooker & Brand, 2010). Consequently, college knowledge is best identified qualitatively utilizing student voice. Researchers state that the element of student voice provides the best qualitative data especially those voices of high school students and furthermore, this rich data should be used to drive the research especially in this educational climate (Yonezawa & Jones, 2009). As it compares to dual enrollment,

student's voice will afford the opportunity for researchers to gain insight into how dual enrollment program influences the students' college experiences by gaining an understanding of the students' personal college readiness (B. P. An, 2015).

Statement of the Research Problem

The American secondary education system is not adequately preparing high school graduates for the rigors of college as 70% of entering freshman are not prepared to take college level coursework as identified by readiness assessments (Boswell, 2000; Methvin & Markham, 2015; Spence, 2009). There needs to be an understanding that referencing college ready and college eligible is different. Additionally, research's state that the previous high school educational goal was to have student's eligible for graduation and college admission by referencing the fact that they may have met the requirements for admissions for college however, they are not necessarily ready to be successful in college (Zelkowski, 2011).

Despite the attempts being made, a disconnect remains between secondary and post-secondary education because of a lack of communication between K-12 and institutions of higher education (Methvin & Markham, 2015; Troumpoucis, 2004). Both ends of the educational spectrum often work independently of each other despite the promising practices implemented in each. Methvin and Markham (2015) state that "bridging the gap between high school and college" (p. 52) will not only prepare students for post-secondary education as well save them time and money. Dual enrollment has also been identified as one of the best mechanisms to assist in developing a stronger transition from high school to college (H. A. Andrews, 2001). Dual enrollment has evolved from a method of merely offering an opportunity to high school students to earn

dual credit in high school and college to a strategic effort to achieve and increase the transition from high school to college by better preparing students for the expectations of college. Although the goals of dual enrollment are apparent accelerated time to degree completion, increased college knowledge and cost effectiveness for students, parents and the institutions researchers are still recommending further research on the benefits of program participation (Hébert, 2001; Howley et al., 2013).

National and in California, there has been a tremendous increase in dual enrollment participation (Marken et al., 2013). The literature regarding dual enrollment consistently indicates that students who participate in dual enrollment prior to high school graduation, are statistically better prepared academically than non-participants (Allen et al., 2012; M. M. Karp et al., 2007; Wintermeyer, 2012). However, as dual enrollment programs have expanded, the growth has been met with concerns of the quality and effectiveness of achieving the goals of academic preparedness and degree attainment (Bailey & Karp, 2003) despite the research that supports its effectiveness (Allen & Dadgar, 2012; H. A. Andrews, 2001; M. M. Karp et al., 2007, Wintermeyer, 2012).

Furthermore, a study by Wintermeyer's (2012) evaluated the factors of college enrollment, persistence, and success of dual enrollment students at a California community college enrolled in classes both on and off campus. M. M. Karp et al. (2007) conducted a similar study in New York and Florida and found that students that earn college credit, whether it be academic or career technical education, have higher GPA's and enroll in more units and persist to the next level of coursework. Allen and Dadgar (2012) studied the College Now program at The City University of New York, the largest dual enrollment program in the nation, and concluded that when compared to similarly

prepared students, the dual enrollment students have higher GPA and they complete more credits also supporting the claims of the impact of dual enrollment (Allen & Dadgar, 2012). These researchers have concluded that dual enrollment participation positively increases GPA, persistence rates, credits completed, and participants enrolled in more units than non-dual enrollment participants (Allen & Dadgar, 2012; M. M. Karp et al., 2007; Wintermeyer, 2012).

Although numerous studies have evaluated the effectiveness of dual enrollment programs, few have explored the students' perceptions beyond the motivational factors for participating in dual enrollment and how it relates to students' self-efficacy in college (Farrell, 2009; Haley, 2013; Ramos-Sanchez & Nichols, 2007; Robbins et al., 2004). Consequently, there has not been an emphasis on the student's perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college although it has been recommended by researchers (Haley, 2013; Howley et al., 2013). Additionally, a study completed by Farrell (2009), supported the belief that dual enrollment participation has a positive effect on students' expectations and experiences in college but it was limited to an early college model providing students will a multitude of college credit prior to graduating high school. In a 2015 study conducted by Smith (2015), of a Mississippi dual enrollment program, concluded that participants had more realistic expectations about college after completing dual enrollment courses. The study also recommended the continue research of dual enrollment participation (Smith, 2015).

Therefore, a gap in literature still remains to significantly explore and express the impact of dual enrollment participation on students' academic preparation and college

knowledge prior to their first year of college. Furthermore, it is imperative to continue the research and gain an understanding of the student perspectives of participating in dual enrollment.

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the students' perception of how participating in dual enrollment and completing college level coursework prior to their high school graduation impacted their academic preparation and college knowledge during first year of college.

Research Questions

Answers to the following questions were sought to address the purpose of the study:

1. How do students perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?
2. How do students perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?

Significance of the Problem

This study will add to the literature and research investigating the impact participation in dual enrollment has on a students' first year in college. Specifically, this study will provide data on the impact of participation in dual enrollment that can be used by policy makers, secondary and post-secondary administrators, faculty, parents and high school students. The results of the study will be a benefit to policymakers when determining funding mechanisms and accountability measures for secondary and post-secondary institutions. The data concluded from this research study will also be helpful

to students, parents, and teachers by increasing the awareness of the students' perception of the impact of dual enrollment on the first year of college. The data from this study will also be important for secondary and post-secondary administrators to utilize when implementing or expanding dual enrollment programs to decrease time-to-degree/goal completion, college cost savings and college attainment. Faculty, both secondary and post-secondary, will use the results of this study to increase their understandings of how participation in dual enrollment impacts the first year of college not only their academic preparedness but also by increasing the students' college knowledge. The study will provide information as to how dual enrollment impacts the first year of college and is another avenue to explore the value of participation for high school students, enhance the secondary curriculum, and increase college knowledge. The data provided on dual enrollment will assist high school students in choosing dual enrollment as part of their secondary and post-secondary course offerings.

The qualitative data from this research study will provide useful information on the impact of dual enrollment participation. This study will also provide additional data needed for secondary and post-secondary to determine how to offer dual enrollment programs to their students. High school students and parents can also utilize the data from this study to decide if dual enrollment is the best course of action for them.

Assumptions

Furthermore, it is assumed that through the questionnaire process, it is possible to achieve an increased understanding of the students' perceived impact of participating in dual enrollment and that all participants answered the questions openly and honestly.

Definitions

College knowledge. The degree of the students' understanding of the matriculation progress, academic requirements, financial aid options, and the difference between high school and college (Edmunds, 2012; Hooker & Brand, 2010).

College readiness. The degree to which previous personal and educational experiences have prepared students for the expectations and difficulties encountered in college (Conley, 2008).

Credit-based transition programs. Programs such as dual enrollment, the College Boards AP program, the IB program, and articulated courses that enable high school students the opportunity to earn college credit prior to high school graduation (Bailey & Karp, 2003; K. L. Hughes, 2010). Dual Enrollment a program that offer high school students the opportunity to earn college credit by experiencing enhanced curriculum from taking an course that is taught within the parameters of the actual college course where on or off their high school campus site (H. Andrews, 2004; K. L. Hughes, 2010; M. M. Karp et al, 2007).

Delimitations

The study is delimited to individuals that participated in dual enrollment and registered the completed courses at Mt. San Jacinto College (MSJC) in California after high school graduation. The following delimitations were accounted for in this study:

1. The study was restricted to students that participated in dual enrollment at Mt. San Jacinto College 2013-2018.
2. The study was restricted to students that graduated from high school 2013-2018 and participated in dual enrollment.

Organization of the Study

This dissertation is divided into five chapters. Chapter I included an introduction to the problem, statement of the problem, purpose statement, research questions that guided the study, significance of the study, definitions of terms and the delimitations of the study. Chapter II is a literature review that focuses on the advantages of dual enrollment participants, the impact of dual enrollment on secondary and post-secondary education, how policies and funding support dual enrolment program, an increase understanding of college readiness and college knowledge, as well as the challenges of dual enrollment. Chapter III is the methodology for the study and reviews the purposes of the study, research questions, data collection, and analysis of data. Chapter IV consists of the data analysis and findings of the study. The findings will be guided by the research questions of the study. Chapter V presents a scenario, conclusions, implications and recommendations for further research

Summary

As explained in the aforementioned chapter this phenomenological study was to explore and identify patterns regarding students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college. This chapter provided an introduction to this study as well as an overview of the purpose statement and research questions. This chapter also provided a foundation for the study. The next chapter, Chapter II, presents the review of literature.

CHAPTER II: REVIEW OF THE LITERATURE

Introduction

This review of literature presents a perspective on dual enrollment and explores the benefits, impacts, and challenges of dual enrollment participation. In addition, this review will address student voice regarding educational reform. The researcher utilizes related studies and reports to determine the current state of dual enrollment participation and the impact dual enrollment has on college knowledge and college readiness.

Review of the Literature

Dual enrollment is not a new concept and can be traced back to the late 1800s. Michigan and New York were the first states to build bridges with secondary and post-secondary institutions (Muller, 1988; Stoel, 1988). However, they began to flourish in the 1970s where New York was the first to establish the *City-as-School* that offered the opportunity for high school students to attend college classes. This later became the concept for middle colleges (Greenberg, 1988). Dual enrollment courses can be offered on the high school campus or on the college campus; some colleges are even offering the college courses online as distance education (Krueger, 2006; Muller, 1988). All dual enrollment courses are taught by a qualified community college instructor whether it be a high school faculty member meeting the minimum qualifications or a community college instructor (H. A. Andrews, 2000). Therefore, the terms used for dual enrollment are interchangeable with dual credit, programs or offerings may also be referred to as concurrent enrollment, college in high school, dual credit, and joint credit (N. Hoffman, Vargas, & Santos, 2009; Howley et al., 2013).

Dual enrollment, which was once limited to high achieving students, now provides opportunities to the average-achieving, but it also provides all students the opportunity to participate in a credit based transition program no matter their socio-economic status, race, or culture (M. M. Karp et al., 2007; Peters & Mann, 2009). In the 1980s dual enrollment programs were developed as CTE articulation and have evolved into CTE dual enrollment program model that captures the middle student who have a desire to pursue post-secondary education (Catron, 2001). Eligibility into the program varies depending on the program; although the common theme is a program designed for junior and/or seniors (Catron, 2001).

It has been said that “dual enrollment embodies the college transition agenda from its unique position in the middle space—or gap—between high school achievement and college readiness” (Hofmann, 2012, p. 3). Students who participate in dual enrollment benefit from enhanced curriculum taught in a high school or college setting that is an actual college course where the student will be earning collegiate credit, not just experiencing the college curriculum (K. L. Hughes, 2010; M. M. Karp et al., 2007). However, due to the unique needs of the diverse student populations at the high schools, dual enrollment programs vary in design, management, and focus of course offerings, whether it is designed for at risk or high achieving students (U.S. Department of Education, Office of Vocational and Adult Education, 2004). According to the NCES, during the academic year of 2010-2011; 1,277,100 unduplicated students participated in a dual enrollment course whether it was taught on a high school campus, college campus, or as distance education (as cited in Marken et al., 2013). Also, data reveals that completion of college credit during high school increases high school graduation rates

and transfer rates from high school to college (Chapman, 2001; K. L. Hughes, 2010). Unfortunately, there is relatively little literature discussing the level of college readiness of students after participating in dual enrollment programs (Hofmann, 2012; M. M. Karp et al., 2007). Confusion with the terminology exists throughout the nation; therefore, it is important to understand that the term used for the various programs are those deemed appropriate by the post-secondary institution. Therefore, it is essential that the terminology for this literature review is focused on dual enrollment or dual credit as a credit based transition program.

On the forefront of educational reform is the need for increasing college degree attainments not just the access to college, as apparent with the Obama administrations reform agenda to increase graduate in the year 2020. However, the methodologies vary as how to complete these daunting tasks focusing on changing high school curriculum. “Dual enrollment is different because, at its core it requires high schools and colleges to interact in ways that bring them closer together...” (M. M. Karp, 2015, p. 104) and becomes an effective strategy to increase college completion.

Impact on Post-Secondary Education and/or Secondary Education

Amey, Eddy, and Ozaki (2007) expresses the impacts that result from dual enrollment partnerships between secondary and post-secondary educational institutions, stating that the community needs are met while as a result elevating each institution in the community and the financial stability of the programs (Amey, Eddy, & Ozaki, 2007). According to Spence (2009),

Many states are working on effort to improve student transitions between high school and college or career to ensure that students are graduating from high

school well prepared for college or career training. This is a daunting task. ACT, an independent non-profit organization that provides assessments, research, information, and program management services in the area of education and workforce development, estimate that up to 70 percent of high school graduates are not ready for college or career study as measure by meeting readiness benchmarks in reading, writing, and mathematics. (p. 95)

There is limited literature about the impact of dual enrollment programs on post-secondary institutions (Kinnick, 2012). It is known that dual enrollment provides an opportunity for extensive collaboration between secondary and post-secondary institutions (Chapman, 2001). Dual enrollment has become, whether it is a goal or not, an extensive recruitment mechanism for the post-secondary institutions as well as a way to heighten the exposure for the campus in the community (Chapman, 2001). Moreover, Hugo (2006), concluded that “Dual Enrollment is one strategy for building closer links between schools and colleges. It supports the establishment of long-term dialogue that strengthens the ties between K-16 sectors and leads to more partnerships and stronger collaborations” (p. 72). In addition, N. Hoffman and Voloch (2012) state, that dual enrollment is the “liminal space” (p. 101) that creates the opportunity for secondary and post-secondary educational institutions to communicate and determine their expectations for “college-ready students” (p. 101) and “college-level work” (p. 101). Furthermore, secondary and postsecondary institutions are encouraged to identify diverse models of dual enrollment to provide “increased opportunity for a wider range of students to start their postsecondary studies earlier and achieve success in college and life” (Barnett, Maclusky & Wagonlander, 2015, p. 48).

Dual enrollment provides an opportunity for extensive collaboration between secondary and post-secondary institutions (Chapman, 2001). High schools also benefit from offering dual enrollment programs because they are able to recruit and retain top-notch teachers because they have a greater understanding of pedagogy and possess higher degrees in content areas (Chapman, 2001). Chapman (2001) explains that offering dual enrollment

may better capture the imagination and interest of juniors and seniors, as it helps build the image of the high school as a place where students can take college course, and the curriculum boost student performance as well as graduation and high school-to-college rates. (p. 21)

High schools participating in dual enrollment are also given the opportunity to retain their upper classmen by offering college level coursework and preparing them for the transition to college thus incentivizing the act to stay in school (H. A. Andrews, 2001). Dual enrollment provides high school faculty that are eligible to teach college level coursework the opportunity to gain a better understanding of how to prepare high school students for college curriculum (Bailey & Karp, 2003). This provides students with firsthand experience and expectations of college curriculum while still in the safety net of high school. Researchers also state that participation in dual enrollment courses provide an opportunity to the expose of college curriculum but is also provides minority students the opportunity to become competitive in college admissions (Hugo, 2001). The college offering dual enrollment may reap the greatest rewards as the program increases the college's visibility in the community, recruits a better prepared student, and has an

effective outreach strategy with secondary institutions (Boswell, 2001; Chapman, 2001; N. Hoffman, 2003/2005).

Spence (2009) reports,

While many are concerned that sending clearer signals about academic preparation could diminish community colleges' traditional open-access mission, diagnostic signaling. When done correctly, will not discourage students from attending, in tradition of precollege outreach programs that provide information about and supports for the rigor of postsecondary education providing high school juniors with specific information about their readiness and how to remedy any deficiencies before graduation will improve their success in community colleges. (p. 96)

According to college administrators interviewed, the dual enrollment program offered a strategy to diversify their student population (Kinnick, 2012). "Dual enrollment provides a long-term strategy to improve the preparation of minority students so that they will be competitive for college admissions" (Hugo 2001, p. 69). Gomez (2001) states that "administrators and faculty members are satisfied that they are improving student's educational opportunities and quality of life" (p. 81). As dual enrollment increases a student's college knowledge, the student will understand the importance of the assessment placement and how they differ between admission standards, thus yielding a better prepared student (Edmunds, 2012; Hooker & Brand, 2010; Spence, 2009). Due to the widely differing educational goals of the dual enrollment participants, limited literature exists regarding the persistence and success rate after high school graduation at the granting institution as the students enrolled plan on matriculating straight to a four-year institution (Fowler & Luna, 2009).

Taylor, Borden, and Park (2015), state that “the practice of offering college courses to high school students emerged from local practice in many states and was often initiate between local school and community college districts” (p. 9). Often the partnerships grew without any guidance in relation to policy or regulations; whereas other states such as Minnesota and California began shaping legislation around dual and concurrent enrollment (Taylor, Borden & Park, 2015).

Legislation in California is ever-changing and evolving. California Senate Bill 292 (1996) states that school districts can claim full ADA for dually enrolled students as long as they are enrollment in an attend high school for 240 minutes a day. They can claim three-quarters ADA for dually enrolled 11th and 12th grade students who attend high school for 180 minutes or the appropriate percentage for ADA for the number of minutes between 240 and 180 inclusive.

In 2003, California Senate Bill 338 following suit of California Education Code 7630 stated that a governing hoard of a school district may determine which student might benefit from m “advanced scholastic or vocational work” (n.d.). This allowed high school students to matriculate in a college with the recommendation from both school principal and parent. It continues to state that the community college would have the ability to restrict admissions on the following criteria: (a) age, (b) grade level, or (c) multiple measurements. Continuing that if a college was to claim apportionment the course be available to the general population for registration. It also states that only 5% of each high school can dually enroll in the summer session. Moreover, in an effort to increase dual enrollment California Senate Bill 70 in 2005 provided funding mechanism to improve secondary and higher education partnerships in CTE. In 2006 Senate Bill

1303 the enacted the summer session limitation of 5% to exclude students attempting lower division transfer course, for-credit occupational courses and the California Exit Exam preparatory classes (California Community Colleges Chancellor's Office [CCCCO], n.d.).

In March 2016, California Assembly Bill (AB) 288, AB288, The College and Career Access Pathways (CCAP) bill was put into effect with the objective to increase college access to historically underrepresented high school students. This would allow districts to enter into agreements that would expand the opportunities for students as well as increase funding to the community college (Nguyen, 2016). A CCAP agreement is inclusive to all students as it is not solely focused on the high achieving student; CCAP agreements are focused on expanding dual enrollment opportunities to students that would benefit from taking a college course. This bill allowed for the fiscal and programmatic barriers of California Education Code 76004 Section 2 in an effort to decrease time to degree completion and increase college cost savings. AB 288 agreements essential goal is to increase dual enrollment offerings following a pathway from dual enrollment into the college. The agreements made from the bill would increase the unit limitation previously held at 11.99 units to 15 units and allow for the community college as well as the high school to claim apportionment. This expansion allows for greater student opportunities to include underachieving and underrepresented students seeking both career and transfer pathway completion. The bill still excludes physical educational courses from being offered unless they are necessary for completion of the pathway. It allows for the offering of closed courses on high school campus during regular school hours to the special admit high school students. This legislation provides

structure to dual enrollment as there is annual reporting to the California Community College Chancellors Office (CCCCO); specific requirements for CCAP partnerships as well as identified the terms of the agreement in a Memorandum of Understanding. The agreement has to be approved by each district Board in two open session meetings. Therefore, the community college and high school have to determine to follow a traditional dual enrollment model of an AB 288 model. Recently, in January 2017, AB 2364 was enacted allowing non-resident high school students to participate in dual or concurrent enrollment classes as the classification of resident in regard to the student's enrollment status, thus allowing more access to students (CCCCO, n.d.). Most recently, the California Department of Education (CDE) released the new accountability measurements dashboard to show how secondary schools and local education agencies are meeting the needs of students and their likeliness of being successful after high school graduation. To be prepared on the College/Career Indicator has a heavy emphasis on the students' exposure to rigorous college level coursework whether it be passing 2 or more AP or IB exams or successful completion of two semesters of dual enrollment courses (California Department of Education [CDE], 2019).

The realization that there is a major difference between high school graduation requirements and the expectations of first year college students' is becoming apparent (Boswell, 2001). As many states are moving to improve the high school to college transition as well as career and college readiness, many have deemed it a daunting task because 70% of high school graduates entering college are academically underprepared by readiness benchmarks (Boswell 2001; Spence, 2009). Therefore, innovative policies and programs must be developed to achieve the goal of college and career readiness

(Hooker & Brand, 2010). Spence (2009) states, “greater attention to the college and career readiness problem by state leaders and policy makers could drastically boost the numbers and percentages of students who graduate from high school ready for college and career study” (p. 95). He continues by stating that “improving readiness should be approached on a statewide basis, involving all public high schools, all public community colleges and universities” (Spence, 2009, p. 97).

Policies on dual enrollment allow for clear delineations of funding and credit acceptance at the same time policies decrease flexibility (Hofmann, 2012). Dual enrollment is an appealing mechanism to policymakers and educators because it provides the opportunity for increased and improved secondary and post-secondary collaboration (M. M. Karp, Bailey, Hughes, & Bailey, 2004). Furthermore, M. M. Karp et al. (2007) states that there needs to be systematic tracking for dual enrollment participation data as the policies are seeking accountability. However, M. M. Karp and Hughes (2008) state this is difficult as there is not a strong mechanism to share data throughout the educational systems.

The effort also enhances the high school students’ experience with rigorous academic coursework in high school to better prepare the student for college (M. M. Karp et al., 2004). Kinnick (2012) explains that some high schools stray away from dual enrollment programs because of the loss of full time students as well as their ranking on state scorecards that reward advance placement offerings and not dual enrollment. Therefore, a better understanding of the effectiveness of dual enrollment programs in the preparation of college ready students is needed to create policy and adequate funding sources since dual enrollment is a viable program with the possibility of losing funding

for students enrolled in college courses (Kinnick, 2012). The programs also need to be included on state educational scorecards to ensure that they are continued to be funded especially during tough economic times (Kinnick, 2012).

California legislation dictates the funding mechanisms for high school and community colleges offering dual enrollment programs. Senate Bill 292 passed in 1996 which states that a high school can claim full ADA on dual enrollment students provided the student attended the minimum high school schedule of 240 minutes (Golan & Hughes, 2006). Funding for community colleges increased in 2003 with Senate Bill 338 which affords community colleges the opportunity to claim apportionment of the FTES as long as the course is open and advertised to the public 30 days prior to the start of the course (Golan et al., 2006). Therefore, colleges are able to also claim apportionment for these students as well as the high school the student attends.

There are 47 states that have state policy regarding dual and concurrent enrollment however, they all vary on:

- the definition and/or title of the program
- tuition and fees associated
- where course are offered
- how credits are earned
- whether the courses can be academic, CTE, or remedial
- student access that is provided
- whether students are advanced or underrepresented
- eligibility of registration

- fiscal responsibility of the student, high school, and/or college
- transferability of the course (Pretlow & Wathington, 2014).

Policy does not prohibit or require dual enrollment within the states as many state do so within the institutions with memorandum of understand (Education Commission of the States, 2016).

Policy and legislation is designed to regulate the functionality of programs which is apparent Educational Codes, Senate and ABs; however, how to assess or regulate the quality of dual enrollment program is still being process. A study conducted by Taylor et al. (2015) identified that there are two efforts to begin to ensure dual enrollment quality. The first approach is to seek accreditation status through the voluntary organization of the National Alliance of Concurrent Enrollment Partnerships (NACEP) by meeting standards identified to increase and maintain quality within the program. They supported M. M. Karp et al. (2004, 2005) explanation of how state polices enacting student eligibility and course offerings will ensure quality of programs (Taylor et al., 2015)

Dual Enrollment Benefits

Education in any form is a benefit for the individuals' involved as it is an investment in their future. It will improved annual salary and the opportunity for career movement. Allowing students to invest in their education earlier increases these opportunities. Lukes (2014) states, participating in dual enrollment courses creates a path from high school to college allowing then the time needed to adjust to the rigor of college. Dual enrollment participation affords high school students access to enhanced curriculum to prepare them for the rigors of college in both the academic coursework as well as CTE, expedited time to degree completion, college cost savings, and enhanced

college admissions and therefore overall success in college (Kleiner & Lewis, 2005). Researchers Rodriguez, Hughes, and Belfield (2012) concluded that dual enrollment students have a higher graduation rate compared to non-dual enrollment participants. In addition, high schools that offer dual enrollment programs create a college-going culture around the campus that overall increases the college readiness of all students as it demystifies college and enhances the possibility of matriculation (Conley, 2008). Additionally, the American Association of State Colleges and University (2002) and researchers concluded that participation in dual enrollment is beneficial for students with lower GPA as it helps students with a realistic expectation of college (Edwards & Hughes, 2011; Stransberry, 2013). Furthermore, the high school students, who participate in dual enrollment programs are prepared for the rigors of college, are engaged in interesting curriculum, and their academic needs are met at the high school (Adams, 2014; Bailey & Karp, 2003; Chapman 2001; Mokher & McLendon, 2009). This creates a decrease in “senioritis” because students are completion college courses are less likely to identify with their last year of high school as a “waste of time” because these credits goes towards more than just a high school graduation requirement. H. A. Andrews (2004), identifies that dual enrollment increases course rigor in the senior year of high school. M. M. Karp et al. (2007) study also indicated that students that participate in dual enrollment are most likely to enroll in college full-time after graduating high school. Moreover, researchers (B. P. An, 2013), state that dual enrollment participation increases persistence and degree attainment.

Another benefit to dual enrollment is that the courses adhere to the college’s class size which “offer opportunity to experience college level coursework in a smaller group

setting than traditionally offered in their schools” (Hugo, 2001, p. 68). This provides the students with more faculty interaction, which has proven to improve course completion (Hugo, 2001). It is known that researchers have stated that participation in dual enrollment has not only increased the college going rate of middle class and minority students it also improves the rate for female students as well high-income and high achieving students (Edwards & Hughes, 2011; M. M. Karp et al., 2007; Pretlow & Washington, 2014). M. M. Karp’s (2015) latest study concluded that “Dual enrollment is a powerful college completion strategy” (p. 105). Dual enrollment has now become a structural reform because it creates an intersection between the two systems and it creates a new definition of student success (M. M. Karp, 2015).

Researchers have identified that critics of dual enrollment programs will identify biases that could arise from studies conducted because they do not take into account the motivation or resilience of students; however, Speroni (2010) used a regression discontinuity design as part of the statistical methodology to show how these biases can be overcome.

According to Bailey and Karp (2003), dual enrollment provides traditionally disadvantaged and underrepresented students access to college as well as the opportunity to earn college credit. Moreover, Hugo (2001) states that participation in dual enrollment enhanced the opportunity of minority and first generation students. It provides these students with the opportunity to learn the college process as well as improving their academic skillset. Therefore, dual enrollment is considered the best option as it offers students the ability to not only learn about college but participate in the course which ultimately inspires the students to excel.

Roderick, Nagaoka, Coca, and Moeller (2008) state that high schools with a strong college climate will provide students with the understanding of college expectations and begin assisting them in becoming prepared for college. This is especially important for students who are traditionally underrepresented in college or first generation because they are not aware of the appropriate steps to successfully register for college let alone complete a class and that college is an obtainable goal. They continue that students will pursue enrolling in college if they are strongly supported by the staff at the high school campus to complete the application process (Roderick et al., 2008). Dual enrollment programs also show the communities' educational system has the "commitment to equity of opportunity and access" (Greenberg, 1988, p. 72). Dual enrollment provides the hands-on support students need to complete the matriculation process. There have been multiple initiatives like No Child Left Behind which were designed to close the achievement gap for ethnic groups, low socio-economic status, and underrepresented students but were ultimately unsuccessful (Haycock, 2010).

California and National Evidence

The majority of dual enrollment studies have produced qualitative data regarding expansion and primarily used for establishing dual enrollment policies (Allen & Dadgar, 2012). The primary focus of these studies have been on a single higher education institution; there has not been national data produced besides enrollment statistics and success rate of the participants' while in high school (Allen & Dadgar, 2012; M. M. Karp et al., 2007). There were recent larger quantitative study conducted in Iowa, Florida, and New York City that produced expansive data due to the large population of participants and the length of program establishment (Allen et al., 2012; M. M. Karp et al 2007;

Speroni 2010; Swanson, 2008). The need for more studies on dual enrollment is crucial for program expansion as well as success (M. M. Karp et al., 2007), and the need for studies from California institutions is imperative as there are two current studies conducted on dual enrollment (Spurling & Gabriner, 2002; Wintermeyer, 2010).

A study conducted by Lauren Wintermeyer in 2010 at Santa Barbara City College in California examined dual enrollment and how their successes were related to the location of the dual enrollment course. Her results concluded and were parallel to the outcomes of previous studies that show that students who participate in dual enrollment courses prior to graduation are academically better prepared than non-participants (Wintermeyer, 2010). A non-peer reviewed study conducted at City College of San Francisco paralleled Wintermeyer's data showing that students that have college credit upon entering an institution of higher education have greater successes in college in relation to higher GPA and higher retention and persistence rates (Spurling & Gabriner, 2002).

A recent quantitative study was conducted in 2015 by LaChandra Smith utilizing Descriptive and Spearman Correlation Statistics from a Mississippi Community College's dual enrollment program to investigate 114 students' perception of academic preparation. The researcher utilized a closed-end survey developed by the NACEP. The results were consistent with current research that states that students have a more realistic expectation of college after dual enrollment participation. (M. M. Karp et al., 2007; Smith, 2015). The researcher also concluded that students with lower GPA and participated in dual enrollment found it more beneficial than their peers that participated with higher GPAs (Smith, 2015). However, these studies did not investigate the student

perception of their college readiness after participating in a dual enrollment course or program. A recent qualitative study, in 2018, was conducted as part of doctoral research by Lesley Rankin Gonzalez that explored the how the community colleges dual enrollment programs influenced college readiness, persistence and completion. The researcher utilized semi-structured interviews to explore the role of the community college in relation to college readiness and success of dual enrollment students. The results supported the current literature that showed a correlation between dual enrollment and college readiness.

Possibly the most renowned and sought after research on dual enrollment was conducted by M. M. Karp et al. (2007) that examined the effect that dual enrollment had on participants. The data concluded that dual enrolled CTE students in Florida and New York were more likely to graduate high school, transition to and enroll full-time into a four year university and even persist to the next term compared to non-participants (M. M. Karp et al., 2007). This study yielded literature to support the effectiveness of dual enrollment programs throughout the nation that can be generalized from CTE to high achieving students. This is in line with the literature from the U.S. Department of Education that states that students who are exposed to college and earn actual college credit prior to high school graduation decrease their time to degree completion as well as (as cited in C. Adelman, 2004). “The rationale for this is simple; when students complete the curriculum available to them at their high school, continuing on to college level material is a natural progression” (Peters & Mann, 2009, p. 63).

Alternative Credit-Based Transition Programs

Dual enrollment is different than other credit-based transition programs such as the AP program, the IB program, and articulated courses in that the nature of dual enrollment is actually a college course taken for college credit instead of college curriculum that yields credit after a rigorous end-of level exam (K. L. Hughes, 2010). Unlike college faculty, AP and IB teachers are not required to have undergraduate or advanced degrees in the subjects teach, but they do have to have training on pedagogy and classroom management (Klopfenstein & Lively, 2012). The AP program offers 34 courses for high schools to choose from on an introductory level (College Board, n.d.). The course is taught over a year with a standardized exam culminating the experience (College Board, n.d.). Student exams are scored 1-5, and students gain the opportunity to earn college credit if the score is above 3; however, not every institution grants AP credit for certain majors or even scores higher than a three (College Board, n.d.). Another program for “advanced students” is the IB program, which offers students the opportunity to choose from five groups and complete subscribed curriculum and courses to earn an IB diploma, which in turn prepares them for the rigors of college. The IB program also allows areas of the student’s general education to be certified as completed when they transition to a four year university (International Baccalaureate, n.d.). Concerns about the effectiveness of these programs centers on what happens when the student does not complete the courses to earn the diploma or score high enough on the advanced placement exam. In this case, the student would not earn transferable credit and would have only gained the experience in that introductory course that is not aligned with actual college coursework (K. L. Hughes, 2010). A qualitative study conducted through the

National Research Center on Gifted and Talented students to gain knowledge from the students' perception about whether or not there was a non-academic advantage to AP and IB programs concluded that the students felt great pride in participating in the program, that they did not have much in common with general education students or teachers, and that they enjoyed the challenging coursework of the advanced curriculum (as cited in Foust, Hertberg-Davis, Callahan, 2009). However, there is still a gap in the literature about whether or not the advanced coursework in AP and IB programs prepare students for the academic rigors of college due to the high-stakes testing and introductory level coursework (Foust et al., 2009; K. L. Hughes, 2010).

Challenges and Critics of Dual Enrollment

The limited literature confirming the successful claims of accelerated time to degree completion, increased college knowledge, and cost effectiveness for students, parents and the institutions has become the platform for critics of dual enrollment programs (Hébert, 2001; J. Kim et al., 2003). M. M. Karp et al. (2007) states that the lack of literature on dual enrollment and comprehensive data is lacking. M. M. Karp et al. explains:

Studies that have attempted to look at dual enrollment outcomes tend to suffer from two shortcomings. First, they generally lack comprehensive data to include in their outcomes analyses, as few programs or states have comprehensive K-16 data systems. Second, they often do not use rigorous statistical methods to control for preexisting student characteristics, even when such data are available. Therefore, it remains unclear whether dual enrollment participation increases students' likelihood of entering college, preparedness for college-level work, or

attainment of a college degree. Moreover, no research has focused on its impact for CTE students. (p. 14)

Challenges have also arisen due to the transferability of the college credits earned, as some institutions do not accept college credit earned before high school graduation (H. A. Andrews, 2001; J. Kim et al., 2003) or the college granting the credit is not articulated with the students' transferring institution (Hébert, 2001). Another concern for dual enrollment is the quality of instruction of the college course being offered offsite (Hébert 2001; J. Kim et al., 2003). Critics question whether the integrity and quality of the curriculum is withheld since the courses are typically taught by qualified high school teachers or associate faculty on a high school campus rather than by tenured faculty on a college campus (Hébert 2001; J. Kim et al., 2003). Kanney (2015) began to identify that a drawback of dual enrollment is a lack of professional development for college faculty emphasizing the need to be more receptive to the high school student's needs and learning styles.

There has also been controversy as to the expense that dual enrollment programs have on the post-secondary institutions (Boswell 2001; Mokher & McLendon, 2009). There is also the discussion on policies that are written and how they may affect the secondary institutions' allotment of state funds (Mokher & McLendon, 2009). In addition, the benefit of dual enrollment participation is not apparent to those students that chose institutions with a matriculation process that is highly selective, therefore not yielding the credit for any credit based transition program (B. P. An, 2015). In Ferguson, Baker, and Burnetts (2015) study, they contributed that although the students maybe academically prepared for the coursework faculty tend to perceive that the student may

not have the same level of maturity as traditional community college students. Therefore, these students that are two-years from high school graduation attempting college-level coursework may require significant support to combat the maturity challenges.

Thus emphasizing the ability to perform and be scholastically ready for college was present but the student's emotional intelligence might be lacking thus they are not acting as a traditional college students (Ferguson et al., 2015).

Moreover, the disconnection between high schools, community colleges and university prove to be a problem with dual enrollment accountability these is not a tracking mechanism within the institutions (M. M. Karp & Hughes, 2002). Furthermore, there is difficulty determining the students' successes after matriculation into another institution (M. M. Karp, 2007).

College Readiness

Furthermore, another component of college readiness is college knowledge, which is the students' understanding of the matriculation progress, academic requirements, financial aid options, and the difference between high school and college (Edmunds, 2012; Hooker & Brand, 2010). College knowledge is considered by some authors as the single most importance component for high school students to be college ready (Edmunds, 2012). Students will increase their college readiness by gaining an understanding of the matriculation process as well as the student services offered for college students (Karp et al., 2008). College knowledge not only enhances the possibility of students to matriculate to college and succeed, it also improves the students' high school experience and graduation rates (Hooker, & Brand, 2010). Hooker and Brand (2010) state, that "college knowledge is a critical component in ensuring that young

people, especially first-generation and low income youth are able to progress to college and into careers” (p. 75). Essentially, increasing the awareness of college acknowledge will have a positive impact on the students’ persistence and degree attainment (Hooker & Brand, 2010).

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Student Voice

Researchers state that in this quantitatively data driven educational climate the qualitative element of student voice provides the necessary insight to the strengths and

weaknesses of the researched topic. Furthermore, millennial students will not sit idle while others make decisions that affect them (Yonezawa & Jones, 2009). Moreover, research has found that “student voice and youth engagement provide examples of motivating youth academically through data-driven reform” (Yonezawa & Jones, 2009, p. 206). Student voice represents the utilization of student experience, perceptions and ideas in curriculum design, program development and educational reform (Bron & Veugelers, 2014; Elwood, 2013; Yonezawa & Jones, 2009). Bron and Veugelers (2014) state that the “interest in student voice burgeoned, especially in countries like the United Kingdom, the United States, Canada, New Zealand and Australia” (p. 125). Therefore, emphasizing the importance of understanding the students perceptions of the services provided at the schools since “children are entitled to their views on matters that affect them directly such as their education” (Bron & Veugelers, 2014, p. 126). Researchers believe that student voice is a necessity in our educational systems and reform as a venue to understand the needs of all groups of students. Bron and Veugelers state that “[a]lthough children are often seen as a homogenous group they are not. Student voice initiatives should benefit all student groups and certainly marginalized group” (p. 128). Student voice provides a platform to learn about the perspectives of the clientele of education: students. Researchers believe that teachers and students are prime sources to gather the information needed to improve or reform education (Flutters & Ruddock, 2004). Furthermore, researchers have stated that it is unfortunate in current policy and reform standards that there is no requirement to include student input on their education when considering educational reform. Especially when previous consultation had occurred as part of the decision making process; however many believe it has stalled

(Elwood, 2013). Seale (2010) states student voice-swing focuses on two different platforms. One is that student voice projects that focus on quality enhancement and assurances and professional development. Where the other focus of student voice is within higher education as governance, representation, and rights (Seale, 2010). She explains that student voice is achieved by “asking questions about student experiences; seeing and understanding the students perspective; reflecting on implementations for practice; and hearing or listening to previously inaudible or ignored voices” (Seale, 2010 p. 998).

In regards to dual enrollment participation, B. P. An (2015) expresses how the research of dual enrollment influences academic performance however, “researchers leave the processes through which dual enrollment programs influences a student’s college experiences as a black box” (p. 100). Moreover, this reinforces the need for research on the students’ perspective on the impact of dual enrollment participation on their college experiences.

Summary

This chapter provides a literature review for the research study which provided a foundation for the study. The next chapter, Chapter III presents the methodology for the research by outlining the research design, population, sample, data collection, data analysis as well as the limitations of the study.

CHAPTER III: METHODOLOGY

Overview

This chapter describes the methodology utilized in this study on the perceived impact of dual enrollment participation. Included is the purpose of study, the research questions, the research design, the description of population and sample, the instrumentation, the description of data collection, an explanation of data analysis, delimitations as well as the limitations of the study.

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the students' perception of how participating in dual enrollment and completing college level coursework prior to their high school graduation impacted their academic preparation and college knowledge during first year of college.

Research Questions

Answers to the following questions were sought to address the purpose of the study:

1. How do students perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?
2. How do students perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?

Research Design

A qualitative methodology was chosen for this study due to the fact that qualitative research is “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2014, p. 4). The

researcher determined conducting a qualitative phenomenological study as the most appropriate for this qualitative study as the purpose is to explore students' perceived impact of participating in dual enrollment on their academic preparation and college knowledge prior to entering their first year of college. This was determined because the participants "have directly experienced the phenomenon of inters; that is they have 'lived experiences' as opposed to secondhand experience" (M. Patton, 2002, p. 104).

In qualitative phenomenological studies the researcher is able to obtain rich data on the lived experiences of the participants based on their participation in the phenomenon (McMillan & Schumacher, 2010). The lived experiences of students participating in dual enrollment is that these students are dually enrolled in high school and college within the same semester. A method to achieve this form of data is by utilizing the qualitative method of open-ended questions which allow for data to be gathered from the participated regarding the phenomenon they are living or lived through (Johnson & Christensen, 2008). In the past few years there has been approximately 2.1 million community college students per year (CCCCO, n.d.). MSJC (2018), in California, has an annual enrollment of approximately 15,000 and in Fall 2015 140 of those students participated in dual enrollment making up less than 1% of the colleges full time equivalent students enrollment. Therefore, this research study will explore the phenomenon of students that participated in a dual enrollment program. As a program that offers high school students the opportunity to earn college credit while still in high school (K. L. Hughes, 2010; M. M. Karp et al., 2007).

This study conducted semi-structured interview with open-ended questions to collect data. By utilizing open-ended questions, participants will utilize their own

terminology and recollections to answer the questions versus qualitative data that limits the participants' responses by provided answers to close-ended questions (Creswell, 2008; Johnson & Christensen, 2008). "Qualitative researchers are interested in understanding the meaning people have constructed, which is how people make sense of their world and the experiences they have in the world" (Merriam, 2009, p. 13).

This approach allowed the researchers to collect responses aligned with the research questions and gain an understanding of the perceived impact of dual enrollment participation on a first year student. The researchers collected data through open-ended interview questions. Through the Office of Institutional Research the researcher will have access to the students' MSJC transcripts for review regarding their coursework and grades during their enrollment at MSJC. These transcripts along with all data collected during the interview process will be locked in a cabinet in the researcher's office.

Several other methods were considered for this study including the Delphi method and Grounded theory however, these frameworks would not be suitable for the study as the Delphi method gather expert views and identify consensus whereas this study is exploring the impact of participation from the participants' point of view (Price, 2005). Consequently, Grounded theory "focuses on the process of generating theory rather than a particular theoretical content" (M. Patton, 2002, p. 125) whereas this study explored the impact of participation from the participants' point of view. Additionally, Ethnography was considered and deemed lacking for this study as the focus of study is on the culture not on the individual. Therefore, the theoretical framework of Phenomenology will allow the researcher to explore the perceived impact of participating in dual enrollment because

it “focuses on descriptions of what people experience and how it is that they experience what they experience” (M. Patton, 2002, p. 107).

Population

According to McMillan and Schumacher (2010), a population is defined as a group that “conforms to a certain criteria” (p. 129) from which “results can be generalized” (p. 129). The population for this study consisted of students that participated in dual enrollment. According to NACEP, over 1.4 million high school students participated in dual enrollment during 2010-2011 (NACEP, 2018).

Target Population

A target population is the actual list of the sampling units where the sample was created (Creswell, 2014). For the purpose of this study, the target population consists of students that participated in a dual enrollment program through a California Community College. The target population is currently unknown as there is not sufficient tracking of dual enrollment participation throughout California. The CCCCCO will be drafting a report of dual enrollment participation through the College and Career Pathways in 2021 (Nguyen, 2016).

Sample

A sample population must be identified by the researcher to narrow down the population (McMillan & Schumacher, 2010). This study will use a purposeful sampling of students that attended high school within eight school districts of the college boundaries and participated in the dual enrollment program at MSJC. The use of purposeful sample was chosen because, “in purposeful sampling...the researcher selects particular elements from the population that will be representative or informative about

the topic of interest” (McMillan & Schumacher, 2010, p. 138) which was chosen because of the researchers’ current knowledge of dual enrollment. In qualitative research, purposeful sampling is considered a strength (M. Q. Patton, 2015). The sample will consist of students that participated in dual enrollment during the academic years of 2013-2017 then matriculated to MSJC and maintained enrollment for at least one year (see Table 1).

Table 1

Population Breakdown 2013-2017

Academic Year	2013-2014	2014-2015	2015-2016	2016-2017
Mt. San Jacinto Student population	14,188	14,545	15,044	15,328
Participated in Dual Enrollment through Mt. San Jacinto College	2,639	2,561	3,597	4,136
Matriculated to Mt. San Jacinto College after dual enrollment participation	160	268	204	140

Note. Adapted from Mt. San Jacinto College (n.d.) website. Retrieved from <https://public.tableau.com/profile/msjc#!/vizhome/DualAndConcurrentEnrollment-HighSchoolStudents/HSSstudents>

This timeframe was selected because dual enrollment was instituted at MSJC in 2009 and continued to offer college courses to high school students as the program is designed for junior and seniors. Therefore, this time frame could incorporate participants that participated in dual enrollment, graduated high school and matriculated to MSJC in the subsequent years after participation. This criterion was selected to ensure that the participants were enrolled in college courses. Typical case sampling will be utilized to identify the dual enrolled students that completed their first year of college (McMillan & Schumacher, 2010).

In contrast to quantitative research where there are formulas needed to determine the ideal sample size; qualitative research sample size is determined by identifying the number of participants that provide the ability for the researcher to achieve the research purpose and questions (P. Patton, 2002). Researchers state that the number of participants in the sample is achieved when the data received becomes redundant and new participants are not providing any new relevant information to the research purpose or questions (McMillan & Schumacher, 2010; M. Patton, 2002). For this study, a minimum target sample of 12 participants was established. The researcher did not determine it necessary to identify participants from specific academic years as participants could provide their perceptions and experiences of dual enrollment students regardless of the academic year. After contact and data collect the sample size will be determined.

Sample Procedures

In qualitative research the sample size is established on the exploration of the research question in an effort to gain in-depth descriptions on the experiences of the participants rather than the quantity of respondents (M. Q. Patton, 2015). For this study, exploring the perceptions in the impact of dual enrollment participation on first year students it was determined that a sample size of 20 participants would be interviewed to describe their “lived experiences” (McMillan & Schumacher, 2010).

The participants were selected by the following process. The MSJC Office of Institutional Research approved the ability to research within the district (see Appendix A) and will be contacted to produce a query of students that participated in dual enrollment in the years 2013-2018 and later matriculated and enrolled at MSJC for a least

one year or two semesters. The participants listed on the query were contacted via email from the researcher explaining the purpose of the study and if the student is interested in participating, with a survey monkey link for participation (see Appendix B and C). Participant selection was the choice of the participant who communicated their interest via completion of survey monkey link. Participant name, email addresses, and school/district names were kept confidential throughout the research study duration and is not included in the study. Participant acceptance or denial to participate in the study will be kept confidential.

Those willing to participate completed the survey via survey monkey link, which included the informed consent (see Appendix D), consent for audio recording (see Appendix E), and the Participants' Bill of Rights (see Appendix F) along with the interview schedule. After a time and date was determined, an email was sent to the participant via the email provided in the survey monkey link confirming the date and time of the interview as well as instruction for the interview. On the agreed upon date and time, the researcher logged into ZOOM. Prior to beginning the interview the researcher asked if the participant understood the consent and gave verbal consent for audio recording as well as answered any pre interview questions the participant may have had.

Instrumentation

In qualitative studies, the researcher is considered the essential instrument for data collection (M. Patton, 2002). Therefore, it is essential that the researcher is aware of their own potential biases (M. Q. Patton, 2015). For this study, the researcher is currently employed at MSJC and has an understanding of educational research, statistical analysis, credibility and trustworthiness. To ensure objectivity and strengthen the credibility of the

study, the researcher will utilize a check-coder. The check-coder will be a colleague currently employed at a community college and has the same understanding of educational research and statistical analysis with an educational employment background. Trustworthiness of the study will be gained when consensus of commonalities in the data can be determined through the researcher and check-coder.

Interview Questions

The instrument in this study was interviews; by integrating the qualitative research method of interviewing students, via standardized open-ended interview questions, which can also be referred to as semi structured interviews (Patten, 2015; McMillan & Schumacher, 2012). Furthermore, this will provide a structured process to gather and collect detail-rich data. Researchers state that the utilization of this method allows for the opportunity of replication (McMillan & Schumacher, 2012; Patten, 2015). This instrument was determined to be appropriate for this study as interview participants would yield greater insight into understanding the perceptions of dual enrollment participation as interviews provides the researcher the opportunity to “enter into the other person’s perspective” (M. Patton, 2002, p. 348). Other instruments were excluded due to their limiting focuses as well as lacked the ability to gain perspective.

The interview schedule was developed as a result of the research design and researcher questions (see Appendix G). The interview questions focused on the participants experiences in the participant’s perceptions of the impact dual enrollment participation had on academic preparation and college knowledge. The interview

consisted of standardized open-ended questions that were established prior to conducting the interviews to ensure reliability and validity (McMillan & Schumacher, 2012) (see Table 2).

Table 2

Research and Interview Questions

Questions	Interview Question
Baseline Demographic Questions	Demographic Questions: 1-6
Research Question 1: How do students' perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?	Interview Questions: 1-6
Research Question 2: How do students' perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?	Interview Questions: 7-9

Reliability

In qualitative research, “the researcher is the instrument” and thus the credibility and trustworthiness of the instrument is in the knowledge and competency of the researcher (M. Patton, 2002). In research, reliability exists on the standardization of the data-collection process (McMillan & Schumacher, 2010). The study established reliability with this instrument by ensuring that the same researcher conducted all interviews. All interviews were conducted via telephone conference software and the standardization was established by using the scripted interview questions. To further establish reliability the researcher stayed neutral throughout the process of the study as the researcher explored the perceived impacts of dual enrollment participation and did not allow for any biases or have any preconceived results (M. Patton, 2002).

Inter-Coder Reliability

The term Inter-Coder reliability is commonly used to express the degree of which independent coder evaluate the characteristic of an interview or artifact and draw the same conclusion (Lombard, Snyder-Duch, & Bracken. 2002; Tinsely & Weiss, 2000). Lombard, Snyder-Duch, and Bracken (2002) state, that “intercoder reliability is a critical component of content analysis and (although it does not ensure validity) when it is not established, the data and interpretations of the data can never be considered valid” (p. 589).

To reinforce inter-coder reliability in this study, the researcher utilized a community college full time faculty member to double-code two transcribed interviews performed by the primary researcher to determine parallel codes and will be identified as a code-checker. The comparison codes strived to achieve 80% or above agreement of codes to ensure the accuracy (Lombard et al., 2002).

Validity

McMillan and Schumacher (2010) explain validity as the instrument measuring the intended constructs. The researched ensured validity in this study by selecting a timeline for the interview scheduling and staying within those parameters. The researcher also selected a phenomenological qualitative methodology as the most suitable methodology to explore the perceived impact of dual enrollment participation on first year students. In this study the researcher also utilized the conferencing software with a transcription of the interview to ensure the responses were recorded accurately rather than relying on the researcher solely for the transcription (McMillan & Schumacher, 2010).

Pilot Test

Increased reliability is resulted from conducting pilot test prior to data collection to ensure the interview questions are neutral, aligned to the purpose of the study and research questions (McMillan & Schumacher, 2010). For this study two high school educators and two community college educators reviewed the interview process and interview questions. After review, the educators will provide feedback on the neutrality of the questions, the structure and format of the interview, and the interview questions. The feedback was analyzed then the dissertation chair was consulted and revisions were made. Following this, a student from an earlier academic year that meets the sample criteria was contacted and interviewed explaining that their participation is part of the pilot test for the study. The pilot study interview was conducted as outlined with one of the community college educators observing the interview process. After the interview concluded, the researcher reviewed the observation and discussed the improvements to the process that needed to be made and the dissertation chair was consulted regarding the recommendations.

Data Collection

Qualitative methodology allows for the rich data driven investigation of a phenomenon. Researchers have identified that effective data collection for qualitative methodology is in-depth interviews with the people that have experienced the phenomenon (McMillan & Schumacher, 2010; M. Q. Patton, 2015).

McMillan and Schumacher (2010) state that the demographic characteristics such as gender and ethnicity provide relevant information regarding the population and sample of a study. During research this study also gathered information if the participant was

first generation to attend college. By obtaining this information it provided a complete depiction of the population and sample of the study.

Upon approval by the Brandman University Institutional Review Board (BUIRB) (see Appendix H), which ensures the protection of research participants, the researcher was able to collect the data needed to conduct this study. Additionally, the necessary coursework was taken and a Certificate of Completion was granted by The National Institutes of Health Office of Extramural Research (see Appendix I). These processes are designed to ensure the protection of the participants (McMillian & Schumacher, 2010). The researcher then contacted the Office of Instructional Research at MSJC and submit the “Request to Conduct Research”; once approval was received the Office of Institutional Research will produce a query of the potential participants based on their completion of the abovementioned criteria of participation in dual enrollment program.

Once approval was received from BUIRB and OIR the researcher began to contact participants via the email addresses provided in their MSJC student account. The perspective participants were contacted via email with a formal invitation letter to participate in the study, which outlined the purpose of the study and how informed consent was contained. Within the email is the directions on how to complete the “request to participate” on Survey Monkey. Within the survey monkey link was the informed consent and included the title of the research study, an explanation of the research purpose, a description of the research procedure, and a description of the benefits and risk of participation as well as contact information for the researcher as well as the Research Participant’s Bill of Rights. The consent also included as separate agreement to which permitted audio recording of the interview.

The identity of the participants was only known to the researcher, code-checker and dissertation chair. The query of possible participants, transcripts of the interviews and informed copies of informed consents are stored in a locked file cabinet in the researcher's office and will be destroyed after five years.

Interview Process

Each participant that completed the "request to participate" link within survey monkey and selected their interview availability and acknowledging and consenting that they received the informed consent, consent for audio and the Research Participant's Bill of Rights. Potential participants were contacted via email provided within the survey monkey link by the participant; however no information will be provided to other constituent groups outside of MSJC. Names, email addresses, student ID numbers, courses completed, unit totals, degrees conferred or GPA were not identified or shared with participants, will be stored electronically, and will be kept confidential throughout the duration of the research study. All participant information and record was deleted at the conclusion of the research study. All information or communication was not shared with the group of participants, but was communicated 1:1 with the researcher.

Seidman (2013) states the interviews are crucial for understanding the experience of a participant. Therefore, the following steps were taken to ensure accuracy and continuity of the interviews:

1. The interviews began with the researcher confirming the participant, the researcher then introduced herself.

2. The researcher asked if there were any questions for the researcher in regards to the study then she verified informed consent for the study and consent for audio recording.
3. The researcher stated that recording would begin at this time.
4. Next the researcher initiated the interview questions. Understanding that the interview was recorded the researcher still took notes as this provided the researcher additional information as to the participants interest and focus in certain areas of the interview questions (M. Patton, 2002).
5. The interviews were separated into two sections: demographic questions and dual enrollment participation questions.
6. The research began with the demographic questions then progressed into the dual enrollment participation questions.
7. The researcher asked follow up questions as needed throughout the interview to gain a deeper understanding on the participant's perspective on dual enrollment.
8. At the conclusion of the interview, the participant was thanked and asked if there was anything else that needed to be included.
9. The researcher ended the audio recording.
10. The transcription was saved to be utilized during data analysis.

Data collection was concluded after 12 interviews were completed in February 2019; this timeframe was decided to allow ample time for completion. The researcher was aware that utilizing a telephone conference software to retrieve the students' responses versus interview would hinder the researcher's ability to the nonverbal

communication that it conveyed in an interview (Onwuegbuzie, Leech, & Collins, 2010); however, it was necessary due to the fact that the institution is a community college and the participants were no longer accessible in a face-to-face environment. As a result the researcher understood that this would become a limitation to the study.

Data Analysis

M. Patton (2002) states, “Research texts typically make a hard-and-fast distinction between data collection and analysis” (p. 436). Data collection is the instrumentations used, and in qualitative research the “researcher is the instrument” therefore for qualitative research data collection and analysis must be fluid and almost simultaneous since qualitative research is an interpretative science (M. Patton, 2002). Brantlinger, Jimenez, Klinger, Pugach, and Richardson (2005) states that “*Interpretation* is a necessary stage of all qualitative work. It typically follows, is infused with, or occurs simultaneously with the description of findings and analyses of results” (p. 200).

The research questions focused on exploring the student’s impact of participating a dual enrollment program therefore, the researcher utilized a qualitative methodology to triangulate the data from the study.

Data Coding

As part of the data collection and analysis the researcher began to organize the data into codes. Codes are usually “word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldana, 2016, p. 4). Code development consists of reviewing the data collected, establishing initial themes, evolving those themes into codes, revisiting each code to check for duplication, allowing the codes to evolve and be

refined through the analysis. A code is a mechanism used to label a piece of relevant information (McMillan & Schumacher, 2010). Codes are reviewed to create themes. The themes are aligned to the research questions for data analysis.

The researcher conducted all interviews to ensure unbiased data is collected. The researcher utilized a standardized open-ended interview style with semi-structured questions because the “respondents answer the same questions, thus increasing comparability for each person on the topics addressed in the interview” (M. Patton, 2002, p. 349). This style assisted in the development of codes as well as emerging themes. Since a weakness of this style is the lack of flexibility, the participants will be encouraged to add to the interview (M. Patton, 2002). After the interviews are conducted, the researcher transcribed the interviews via a software system of ZOOM to begin the code and theme development. Once the frequency of codes are established into themes the researcher then evaluated the trends and patterns as they relate to the dual enrollment students experiences.

Themes and codes were not pre-developed to contribute to a grounded theory approach (M. Patton, 2002). As part of the data collection and analysis the researcher began to analyze the data into codes. A code is a mechanism used to label piece of relevant information (McMillan & Schumacher, 2010). Code development consisted of reviewing the data collected, establishing initial ideas, evolving those ideas into codes, revisiting each code to check for duplication, allowing the codes to evolve and be refined through the analysis. A code is a mechanism used to label piece of relevant information (McMillan & Schumacher, 2010).

To reduce researcher bias that may occur in the study an unbiased check-coder was employed to participate in the coding process and assist in triangulation. The researcher and the check-coder would compare their findings from the data received. This method will assist in reducing researcher biases as well as increase the credibility and trustworthiness of a study (M. Patton, 2002).

Limitations

In all research designs there are limitations. In this study several limitations existed. The first is that the study only analyzed students that graduated from the high schools that first participated in the dual enrollment program during the academic school years of 2013-2018 then matriculated to an institution of higher education student. The sample for this study is limited, as the students that were eligible for and participated in dual enrollment were on a university track where many students' educational paths were developed to matriculate straight to a four-year institution rather than a community college. The study will not account for the external factors of economic or societal change. Another limitation is the study only analyzed the perspectives of students that are able to participate in the study to the student's personal schedule as well as students that could participate via a recorded phone interview. Due to the timeliness of this study, students were excluded that participated in dual enrollment from high schools outside MSJC boundaries, the results only applying to the students as described within the parameters of this study.

An additional limitation to the study is the interview process which can create limitations due to the human interaction of interviews (M. Patton, 2002). Therefore the

data collected and analyzed in this study was limited to the perspectives of the interviewed participants.

Summary

As explained in the aforementioned chapter this phenomenological study was to explore and identify patterns regarding students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college. This chapter provided an overview of the purpose statement and research questions. These provide a foundation for the study. The methodology for the research student was outlined by the research design, population, sample, data collection, data analysis as well as the limitations of the study. The next chapter, Chapter IV presents the data collected and analyzed during this research study.

CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Overview

This chapter describes the methodology utilized in this study on the perceived impact of dual enrollment participation. Included is the purpose of study, the research questions, the research design, the description of population and sample, the instrumentation, the description of data collection, an explanation of data analysis, delimitations as well as the limitations of the study.

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the students' perception of how participating in dual enrollment and completing college level coursework prior to their high school graduation impacted their academic preparation and college knowledge during first year of college.

Research Questions

Answers to the following questions were sought to address the purpose of the study:

1. How do students perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?
2. How do students perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?

Research Design

A qualitative methodology was chosen for this study due to the fact that qualitative research is “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2014, p. 4). The

researcher determined conducting a qualitative phenomenological study as the most appropriate for this study as the purpose is to explore students' perceived impact of participating in dual enrollment on their academic preparation and college knowledge prior to entering their first year of college. This was determined because the participants "have directly experienced the phenomenon of interest; that is they have 'lived experiences' as opposed to secondhand experience" (M. Patton, 2002, p. 104).

In qualitative phenomenological studies the researcher is able to obtain rich data on the lived experiences of the participants based on their participation in the phenomenon (McMillan & Schumacher, 2010). The lived experiences of students participating in dual enrollment is that these students were dual enrolled in high school and college within the same semester. A method to achieve this form of data is by utilizing the qualitative method of open-ended questions which allow for data to be gathered from the participated regarding the phenomenon they are living or lived through (Johnson & Christensen, 2008). In the past few years there has been approximately 2.1 million community college students per year (CCCCO, n.d.); MSJC has an annual enrollment of approximately 15,000 and in fall 2015, 140 of those students participated in dual enrollment making up less than 1% of the colleges full time equivalent students enrollment. Therefore, this research study will explore the phenomenon of students that participated in a dual enrollment program. As a program that offers high school students the opportunity to earn college credit while still in high school (K. L. Hughes, 2010; M. M. Karp et al., 2007).

The researcher conducted semi-structured interview with open-ended questions to collect data. By utilizing open-ended questions, participants utilize their own

terminology and recollections to answer the questions versus qualitative data that limits the participants' responses by provided answers to close-ended questions (Creswell, 2014; Johnson & Christensen, 2008). "Qualitative researchers are interested in understanding the meaning people have constructed, which is how people make sense of their world and the experiences they have in the world" (Merriam, 2009, p. 13).

This approach allowed the researchers to collect responses aligned with the research questions and gain an understanding of the perceived impact of dual enrollment participation on a first year student. The researcher collected data through open-ended interview questions. Through the Office of Institutional Research the researcher will have access to the students' MSJC transcripts for review regarding their coursework and grades during their enrollment at MSJC to ensure participation. These transcripts along with all data collected during the interview process will be locked in a cabinet in the researcher's office.

The researcher considered several other methods for this study including the Delphi method and Grounded Theory. However, these frameworks would not be suitable for the study as the Delphi method is used to gather expert views and identify consensus whereas this study is exploring the impact of participation from the participants' point of view (Price, 2005). Consequently, Grounded theory "focuses on the process of generating theory rather than a particular theoretical content" (M. Patton, 2002, p. 125) whereas this study is exploring the impact of participation from the participants' point of view. Additionally, Ethnography was considered and deemed lacking for this study as the focus of study is on the culture not on the individual. Therefore, the theoretical framework of Phenomenology will allow the researcher to explore the perceived impact

of participating in dual enrollment because it “focuses on descriptions of what people experience and how it is that they experience what they experience” (M. Patton, 2002, p. 107).

Research Methods and Data Collection Procedures

This qualitative study used semi-structured open-ended interview questions to determine the impact of dual enrollment participation on academic preparation and college knowledge prior to their participants first year of college. The interviews were conducted utilizing a conferencing software. The interviews consisted of 15 questions. Survey questions 1-6 were related to the participants demographics; questions 7-12 were designed to answer Research Question 1 regarding academic preparation; survey questions 13-14 were designed on answer Research Question 2 regarding college knowledge and survey question 15 allowed for the participant to add anything to the interview. Each participant was given Researcher’s Bill of Rights, details of the purpose of the study, informed consent form, and the consent audio record. Once consent was received, the interview was scheduled. After the students called into the tele-conference software, ZOOM, the Researchers Bill of Rights, Informed Consent and Audio Consent was reviewed and once verbal consent was provided the researcher recorded and conducted the interviews. ZOOM and the researcher transcribed the interviews. The researcher, based on the date of the interview, labeled the transcriptions 1-12 to ensure confidentiality of the participants. The transcriptions were then reviewed and coded by the researcher to identify patterns, codes, and themes. A code-checker was given electronic copies of transcription to review, analyze, and code. The researcher and code-

checker then reviewed the coded transcription to determine biases. Since the researcher and code-checker obtained over an 80% of similar codes it was determined that there was a potential for bias.

Population

According to McMillan and Schumacher (2010), a population is defined as a group that “conforms to a certain criteria” (p. 129) from which “results can be generalized” (p. 129). The population for this study consisted of students that participated in dual enrollment. According to NACEP, over 1.4 million high school students participated in dual enrollment during 2010-2011 (NACEO, 2018).

Target Population

A target population is the actual list of the sampling units where the sample was created (Creswell, 2014). For the purpose of this study, the target population consisted of students that participated in a dual enrollment program through a California Community College. The target population is currently unknown as there is not sufficient tracking of dual enrollment participation throughout California. The CCCCCO will be drafting a report of dual enrollment participation through the College and Career Pathways in 2021 (Nguyen, 2016).

Sample

A sample population must be identified by the researcher to narrow down the population (McMillan & Schumacher, 2010). This study will use a purposeful sampling of students that attended high school within eight school districts of the college boundaries and participated in the dual enrollment program at MSJC. The use of purposeful sample was chosen because, “in purposeful sampling...the researcher selects

particular elements from the population that will be representative or informative about the topic of interest” (McMillan & Schumacher, 2010, p. 138) which was chosen because of the researcher’s current knowledge of dual enrollment. In qualitative research, purposeful sampling is considered a strength (M. Q. Patton, 2015). The sample will consist of students that participated in dual enrollment during the academic years of 2013-2018 then matriculated to Mt. San Jacinto College and maintained enrollment for at least one year.

Table 3

Population Breakdown 2013-2018

Academic Year	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Mt. San Jacinto Student population	14,188	14,545	15,044	15,328	15,917
Participated in Dual Enrollment through Mt. San Jacinto College	2,639	2,561	3,597	4,136	1831
Matriculated to Mt. San Jacinto College after dual enrollment participation	160	268	204	140	267

Note. Adapted from Mt. San Jacinto College (n.d.) website. Retrieved from <https://public.tableau.com/profile/msjc#!/vizhome/DualAndConcurrentEnrollment-HighSchoolStudents/HSSStudents>

This timeframe was selected because dual enrollment was instituted at MSJC in 2009, and the college continued to offer college courses to high school students as the program is designed for junior and seniors. Therefore, this time frame could incorporate participants that participated in dual enrollment, graduated high school and matriculated to MSJC in the subsequent years after participation. This criterion was selected to ensure that the participants were enrolled in college courses. Typical case sampling will be

utilized to identify the dual enrolled students that completed their first year of college (McMillan & Schumacher, 2010).

In contrast to quantitative research where there are formulas needed to determine the ideal sample size; qualitative research sample size is determined by identifying the number of participants that provide the ability for the researcher to achieve the research purpose and questions (M. Patton, 2002). Researchers state that the number of participants in the sample is achieved when the data received becomes redundant and new participants are not providing any new relevant information to the research purpose or questions (McMillan & Schumacher, 2010; M. Patton, 2002). For this study, a minimum target sample of 15 participants was established. The researcher did not determine it necessary to identify participants from specific academic years as participants could provide their perceptions and experiences of dual enrollment students regardless of the academic year. After contact and data collect the sample size will be determined.

Demographic Data

To ensure the confidentiality of the participants, there was not a reference to the participant's names within the transcriptions. Each participate was assigned a number 1-12 based on the order that the interviews were conducted

Findings presented in the study reflect the perceptions and ideas of the college students interviewed by the researcher. While some of the college students conveyed comparable thought process on their views and ideas about their perceptions on dual enrollment impact prior to their first of college, others conveyed unique perceptions yielded from their personal experienced in participating in dual enrollment. There are

several factors in reviewing the demographic data. Understanding that Science, Technology, Engineering and Math (STEM) majors complete an Associate of Science degree and/or transfer on average between three and five years due to the number of major preparation classes that require higher level math courses as prerequisites as well as scheduling due to lab facilities. The type of school is listed out between comprehensive and charter schools. This is not a representative sample of the number of dual enrollment participants from each site as in 2017-2018 there were 1831 students total and only 226 of them participated through a charter school (see Table 4).

Table 4

Participants

Participant	Year Participated in Dual Enrollment	Number of Dual Enrollment Courses	Comprehensive HS/Charter HS	College Major	Completed Associates Degree	First Generation
Participant 1	2016-2017	2	Comprehensive	Biology Business	In Progress	No
Participant 2	2016-2017	4	Charter HS	Admin.	In Progress	No
Participant 3	2014-2016	4	Charter HS	Nursing Liberal	Completed	Yes
Participant 4	2014-2015	2	Comprehensive	Arts Liberal	Completed	No
Participant 5	2013-2014	4	Charter HS	Arts	Completed	No
Participant 6	2013-2014	4	Charter HS	Child and Adolescent Dev. English	In Progress	No
Participant 7	2016-2017	4	Comprehensive	Lit.	Completed	No
Participant 8	2013-2015	3	Comprehensive	Comp. Science Science- Neuro- science	In Progress	No
Participant 9	2017-2018	2	Charter HS	Comp. Science	In Progress	No
Participant 10	2016-2017	3	Charter HS	Nursing	In Progress	No
Participant 11	2017-2018	4	Charter HS	Comp. Science	In Progress	No
Participant 12	2017-2018	2	Charter HS	Science	In Progress	No

Note. Admin. = Administration; Dev. = Development; HS = High School; Lit. = Literature; Comp. = Computer.

Presentation and Analysis of Data

The two research questions guided the questions developed for the interview. Through the interview, the participant answered questions and that data was used to develop the themes to answer the research questions. The data provided in this chapter reflects the lived experiences of the participants interviewed. The data yielded seven major themes:

- Ease into college transition
- Developing skills needed for success
- Exposure to academic college courses work
- Maturity level expected of student
- Reduces time to students goal completion
- Student benefits from participating
- Difference between high school and college

The seven themes emerged from 117 frequencies of coded data.

Identification of Key Themes

In effort to answer the research questions of this study the participants were asked interview questions that would yield results that explored their lived experiences and how they perceive dual enrollment impacted their academic preparation and college knowledge prior to the first year of college. Below is the data organized in themes used to answer the research questions?

Research Question 1

The participants were asked interview questions that would yield data on their academic preparedness to answer the Research Question 1: *How do students' perceive the*

impact of dual enrollment participation on academic preparation prior to their first year of college? Table 5 identifies the themes based on the data collected.

Table 5

Frequency of Codes Exploring Research Question 1

Themes	Codes	Frequency	Research Question	Total Occurrences
Developing Skills Needed for Success	Emails	1	RQ1	7
	Time management	2		
	Developing Skills-Aptitude	3		
	Communication	1		
	Motivation	2		
Exposure to Academic College Coursework	Academic	2	RQ1	13
	Academic Writing	4		
	Rigor	3		
	Serious Learning	2		
	Environment	1		
	Faster Paced	1		
	Teachers Expectations			
Reduces Time to Students' Goal Completion	Fast tracked	2	RQ1	12
	Ahead	6		
	Complete Prerequisites	1		
	Reduced Time	3		

Note. RQ = Research Question.

Developing skills needed for success. This theme is a result of the coded material expressed by seven of the 12 participants. The five coded responses for this theme which included participant's references the students' ability to

- Develop the skills in relation to communication with professor's
- Time management
- Motivation
- Understanding how to use the college's academic technology networks
- Student emails

For example, a participant explained, “I was able to better communicate with my professors as soon as I had gone to the community college fully” (Participant 4) continuing on how learning the email system was beneficial. Another participant explained using their AP class as a comparison with developing their skills.

Here is an example AP tests and getting us to pass those tests instead of the knowledge and sitting there to appreciate what you are learning and to really pick up what you are learning. I was definitely able to pick up a lot more from my dual enrollment English classes than I did with my AP because I was in a setting where I was bettering myself as a writer and in my AP classes I was sitting there, learning how to take a test. (Participant 7)

Continuing in this theme Participant 8 explained, “dual enrollment classes help you will procrastination and it gives you the skills that you’re going to need in college.” Another Participant 3 stated, “I learned how to register and use Canvas” (the college’s Learning Management System). In regards to motivation Participant 10 stated, “I think for high super motivated students to do this and felt a head on the process of starting their college journey.” Additionally a Participant 12 expressed how dual enrollment helps students stay motivated through thorough their academics stating,

It’s more just of a motivational experience because for people like me I think you have trouble being more motivated academically, but with it being also for high school class it’s more motivational because it’s going to the high school credit too. (Participant 12)

Exposure to academic college coursework. This theme is a result of the coded material expressed by nine of the 12 participants. The six coded responses for this theme included participant's references to

- Academic
- Academic Writing
- Rigor
- Serious Learning Environment
- Faster Paced
- Teachers Expectations

A participant explained how participating in dual enrollment prepared them academically by stating,

It helped prepare me academically for college because it put me in a position to where I knew where I was going and how I would need to apply myself. And the rigor that I was going to have to have to on coming in college with that type of coursework. (Participant 7)

The interview continued with expressing the rigor of the dual enrollment courses with “they definitely make it a lot more rigorous for us students because they expect us to give them work of a college level student not a high school student that could care less. They definitely put a different level of standard for the student” (Participant 7).

Continuing on stating the academic exposure Participant 4 stated: “Helped me be more accountable for doing my own work. I had to know I was responsible for knowing all the information for this class to succeed.”

This sentiment continued with another participant when explaining the level of writing.

I think the most important way was giving me the basis for academic writing.

You have to write analytical papers and really use critical thinking skills and much higher caliber writing is expected of you in those classes to do well.

(Participant 5)

Continuing through the interview Participant 5 elaborated:

It's not that it's much harder to success and you have apply yourself a little more and not lean on the five paragraph essay formula as much think for high super motivated students to do this and get ahead on the process of starting their college journey.

Another participant continued by stating:

The coursework and our essay and all of our projects were definitely a lot more demanding of our skills and requirements of length. I was bettering myself as a writer and in my AP classes, I was sitting there, learning how to take a test.

(Participant 7)

As the interview proceeded Participant 7 explained about the academic exposure in regards to rigor.

The course work was rigorous. The professor was giving us information and as students to take on a lot more work to put in note and to create our own way to study and take from the class. The rigor that I was going to have to take on by coming into college with that coursework and how hard the classes were before even starting my actual first year of college. I could see a more serious standard than they were in my other high school courses. But they definitely make it more

rigorous for us students because they expect us to give them the work of a college level student not a high school student who could care less. They definitely put a different level of standard for us. It was definitely a lot more demanding.

In relation to rigor, Participant 8 expressed:

You had to push harder. This is what it is going to be like, you know, you don't get a break. You don't get a, you know, it's not going to be any easier than this. So you better be prepared. I knew it was going to be a big load. I knew it wasn't like the average high school class. It was going to be more like my dual enrollment classes and you know so I'd say it was a good thing. And the challenges and the expectations were held super high.

Reduces time to student's goal completion. This theme is a result of the coded material expressed by eight of the 12 participants. The four coded responses for this theme included participant's references to

- Fast tracked
- Getting Ahead
- Complete Prerequisites
- Reduced Time

An example of this theme was Participant 3 response of "stated that it cut down the amount of time that I needed to be in school, taking the college version instead of the high school version." In addition, "It counted for both (high school and college) but I feel like it put me way ahead. Saves time and stress." Participant 6 expressed their enjoyment for dual enrollment participation and completing prerequisites when stating, "I particularly enjoy dual enrollment because it allowed me to get quite a bit of my

prerequisites out of the way.” Additionally participants stated they were able to finish early and “it fast tracked my requirements” (Participant 5). One participant stated that dual enrollment was the reason why she was able “to go into student leadership at the college because I had 20 units complete” (Participant 1). Participant 3 elaborating on the fact that “that’s why I am going to be able to finish so early. Another participant continued the sentiment by stating:

I was able to get classes done and out of the way at an earlier time. And it lets you get a head start just time wise where you can either get your associates or your certificate or transfer sooner, depending on what you want. (Participant 10)

Which is in conjunction to another participant response of “Besides the whole preparation and everything like that actually I get out of community college faster and therefore spend less money” (Participant 9). Summing up this theme Participant 5 explains, “So it helped me fast track my requirements.”

Research Question 2

The participants were asked interview questions that would yield data on their academic preparedness to answer the Research Question 2: *How do students’ perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?* The following themes are a result of the data collected (see Table 6).

Table 6

Frequency of Codes Exploring Research Question 2

Themes	Codes	Frequency	Research Question	Total Occurrences
Ease into College Transition	Anxiety	11	Research Question 2	24
	Transition	1		
	Familiarized	5		
	Eased into college/Familiar with system	4		
	Helps Prepare	7		
	More comfortable	3		
	Eye Opener	1		
Maturity Level Expected of Student	Independence	4	Research Question 2	11
	Adult Maturity	5		
		2		
Student Benefits from Participating	Benefit	7	Research Question 2	41
	Cost	5		
	Expectations	9		
	Access	1		
	Flexibility	3		
	Empowerment	1		
	Dynamic	1		
	Responsibility	2		
	Opportunity	4		
	Experience	4		
Difference Between High School and College	High School Difference	4	Research Question 2	9
	AP comparison	2		
	Challenges	2		
	Overwhelming	1		

Ease into college transition. This theme is a result of the coded material expressed by 12 of the 12 participants. The seven coded responses for this theme included participant’s references to

- Anxiety
- Transition
- Familiarized
- Eased into college/Familiar with system

- Helps Prepare
- More comfortable
- Eye Opener

Participant 3 explained that “It wasn’t worried at all when I went to my college class because I’d already know what to expect. It was both academically and for mature respect to perspective.” Participant 3 continued to state that participating in dual enrollment was a “real eye-opener to college.” In addition, Participant 9 elaborated how, “it just prepared me a lot too. It prepared me to get A's in college, if that make sense because I kind of got the full experience.” An overarching example of this theme was the responses similar to “I believed it eased my level of anxiety because I had a pretty good idea of what other classes would be” (Participant 6).

Participant 12 explained it as:

You get a good idea of how it’s going to be while being comfortable with your peers and the teacher you have. Before going to college what it’s going to be like well, being comfortable instead of the kind of fear you would have going in with you have no idea what’s going to be like both academic perspective and social perspective. For one, since I’m taking it with classmates that I know I can get help with my college classes that I may not ordinarily be able to get as well as it really familiarizes you with these things.

Another participant expressed that, “I was more ready because I’d already taken classes” (Participant 1). Continuing with the interview stating “It was just preparing me for like getting ready to do it like go to class and then do your homework and then come back to class and bring knowledge that you like research outside.”

Adding to the theme was Participant 1 explained their stress level by stating:

It helped me like I am just not feeling stresses because I already had that done, and I like know how. Yeah it definitely heightened it in high school, but then it kind of eased it when I actually in college and I realized, 'Okay, it's really not that bad.'

Participant 10 concluded stating

I think it gave me a good taste of what a college class would be like while still keeping me in kind of a comfortable environment because obviously it was a classroom that I was used to going into already. I learned how to use canvas and emails as well.

Additionally Participant 5 explained, "It definitely eased it because I was familiar with the campus. That's always something that a big unknown the first few days of the schools, so I kind of, knew my way around campus to a point." The sentiment was continued in the interview as expressing the ease into college by stating:

Gave me a way to ease into the college workload without starting fulltime. And kind of eased into the level of work required to do well in the community college and then once I started full tie in community college, the year after I was able to complete my requirements and honors program in two years. (Participant 5)

Continuing, Participant 11 explained,

It eased my anxiety about college before I was really anxious about college because I had no idea what to expect but since I did dual enrollment in the same college I am going to know. I kind of know like what kind of teachers to expect and what kind of environment to expect so it eased my anxiety towards college.

Additionally in the interview Participant 11 expresses, “It prepared me to know like what kind of workload to expect, I prepared for it now so I’m less overwhelmed.”

In relation to preparedness Participant 7 expresses,

I wasn’t going in blind. Knowing how much work I would have to do, how discussions were to how the essay format needed to be and how we needed to site and prepare for our exams. Dual enrollment helped prepare me for college courses at MSJC because I have the ability to see the course material, how rigorous the courses were and I was prepared for the professors tasks and ability for us to see how much course work that we had in the classes. I felt prepared and my anxiety quickly disappeared. I felt highly prepared, especially my first semester

Continuing through the preparedness theme Participant 4 explained, “I definitely didn’t feel as I didn’t feel as much of a culture shock as it would have been had this been my only experience with college fresh going into the system.” They concluded, “I felt more prepared.” Participant 1 shared an example of their preparedness stating,

I was more ready because I’d already taken one I would just preparing me for like getting ready to do it like go to class and then do your homework and then come back to class and bringing that knowledge that you like research outside of class. That’s how.

Sharing the sentiment another participant expresses, “It kind of teaches them like, okay, you actually have to work at it for it to be beneficial. It really helped me because I was kind of already used to it” (Participant 2).

Maturity level expected of student. This theme is a result of the coded material expressed by seven of the 12 participants. The three coded responses for this theme included participant's responses related to

- Level of Independence
- Treated as an Adult
- Maturity level to be successful

An example was Participant 8 stating, "It definitely gives you some sort of like independence." Echoing that statement Participant 6 expressed "there was a certain level of maturity that I was expected to have." Adding to the maturity theme was a student explaining that they were "expected to be mature because you are here on your own volition" (Participant 12). Participant 12 continued with "this experience is even more independent because you know more of what you have to do." This participant stated later in the interview:

This was a teacher who was expecting us to act like adults and he did tell us this is a college class I expect you to act as you would if you were an adult. So I had already gone in feeling like, 'well, since I've already done it. I know what to expect.' (Participant 12)

A student shared an example of being in a math class where you had to be mature enough to advocate for your education by stating,

My dual enrollment math teacher didn't really explain a lot. You kind of just went over it and if you had questions you could ask him. But other than that, like, he will just keep going through the whole lesson without stopping. And I feel like that's a lot different than in high school because my math teacher in high school

he kind like just explained everything but in college they expect you to act and think like an independent adult. (Participant 7)

Concluding this theme Participant 11 explains the teacher expectations, “They [teachers] treated you like an adult so it was your choice whether to do you work or not. Then that would impact your grade and stuff.” Additionally stating “it was a bit harder but gave us more independence.”

Student benefits from participating. This theme is a result of the coded material expressed by 12 of the 12 participants. The ten coded responses for this theme included participant’s responses of

- Benefit of participating
- Costs
- Expectations of themselves and college
- Access
- Flexibility of offerings
- Empowerment
- Dynamic experience
- Responsibility
- Opportunities available
- Experience of participating

An overarching example of this theme from Participant 7 stating, “I think it’s highly beneficial for students because it allows them to see the coursework and the rigor before they start.” Continuing later that it was “free of cost.” Additionally stating, “It was fluid transition from high school to college. I wasn’t starting from scratch.” In

addition, that “it gave me a better idea of what I was getting myself into.” Another participant explained how it increased their understanding if college was right for students by stating, “They can see if it’s right for them if they want to continue into college” (Participant 5). In relation to the expectations, Participant 12 expressed that “there was a clear expectation, you know because we are here because we want to be. It was very relaxed I wasn’t worried at all when I went to my college classes because I already knew what to expect.” Another student expressed that there was a definite shift in difficulty that helped prepare them by stating, “I knew classes are going to be like because there’s definitely a very sudden jump of difficulty” (Participant 10). Following up, Participant 6 expressed, “It also kind of gave me an idea of the course load that I was going to be expecting.” Explaining, “I had a pretty good idea of what other classes would be expecting, and it wasn’t as bad as I thought it was going to be” (Participant 6). Through the interview Participant 6 added, “It is a benefit to students because it’s definitely a way of college preparedness.”

Participant 7 elaborated:

So then, it kind of takes some pressure off you. You're not really as nervous about how class is going to be how you're going to like expect when you sit down in a college class. You're not doing in blind. You don't have anxiety anymore about what professors expect of you like what you're expected of academically in college. So, I think that the biggest benefit I got that and time management, of course. Because that's very important in college and that kind of helped me a lot.

Continuing on the sentiment of expectations a participant expressed that dual enrollment, Did a really good job of kind of showing us that they don't put up with as much in college. If that makes sense. Um, they don't give you really a lot of leniency that were used to in high school. I think for me personally, I think it would help students get a really good idea of what to expect. (Participant 9)

In relation to opportunities a participant expresses,

It is just a really great opportunity for any student who is struggling to navigate the college system and community colleges in general are just really great resources that dual enrollment can help people take advantage of. Had I not joined dual enrollment, I would not have been exposed to that. I wouldn't have had the opportunity to talk to people about it or talk a professor who had been teaching both college and high school classes. I hadn't know that was an option before so just general exposure, I would say, I felt like I was already kind of making a dent in my associate's degree my education. (Participant 4)

Focusing on the theme of empowerment Participant 3 stated,

It was a lot less intimidating because I had already taken classes with teachers who were you know quote on quote college professors. And so finally after all that I felt better doing into a college campus with other adults.

Additionally Participant 7 expressed dual enrollment,

Definitely gives them the ability to not only have the experience, but also to gain college credit for free. Before going into college. So you're saving yourself a lot of money because I didn't have to pay for any of my books.

A participant expresses the benefit of dual enrollment is the responsibility of your education by stating,

We are here because we want to be, not because it will be enforced by our parent or by the teachers that we are expected to be here as much like you expect to do as well as we want to. (Participant 12)

Elaborating that their education is their responsibility by stating that dual enrollment is a benefit because “it is really good to offer to the student that want to do well and be successful academics” (Participant 12). Concluding, a participant explains how they are able to have more flexibility within their course load, “I wasn’t able to get the classes that I wanted but because I had taken a total of four classes in dual enrollment I wasn’t behind at all” (Participant 10).

Difference between high school and college. This theme is a result of the coded material expressed by six of the 12 participants. The four coded responses for this theme included participant’s responses to

- Traditional high school comparison
- AP Course Comparison
- Challenges
- Sense of being overwhelming

An example of this theme is a participant explaining that dual enrollment is “more independent experience because it’s more that you have to do” (Participant 12).

Another participant reflects how there is a difference by explaining:

It helped me realize college was different that high school as far as like assignments given there’s a lot more reading I was going from even my AP

classes, the longest paper I wrote was about 6-8 pages but in this class I wrote a 15 page research paper that was highly lengthy. It was definitely a lot more requirements than I was used to and definitely on a higher level of coursework, and rigor, and put you in a setting where you knew you were serious about what you were doing and taking your time to be prepared for this work (Participant 7).

The participant continued to elaborate with an example:

Here's an example, AP tests are getting us to pass those tests, instead of gaining that knowledge and sitting there to appreciate what you were learning and really pick up what you were learning. (Participant 7).

Participant 3 concluded with the comparison of dual enrollment and advanced placement as "AP was actually more work. If all these classes are the same, where they give you so much work thinking it equates to college. Dual is less work but it is higher quality work."

Additionally, in an effort to answer Research Question 2 in regards to understanding the matriculation process including financial aid a direct question was asked during the interview questions with follow up regarding if participants understood the registration process as well as how to apply for financial aid because of participating in dual enrollment. Three students stated that their dual enrollment counselor assisted them with the registration. Participant 12 explained, "They did it with us, actually. So, it wasn't something I had to do on my own to figure out." Eight participants stated that they understood how to complete registration as a result of dual with one participant stating that "it was really less confusing" (Participant 2) another elaborated that

I didn't 100% remember every single part of it, but I was at least familiar enough with it to where I was able to figure it out. I was able to navigate the website and everything I needed to do all my requirements and it made it a lot easier.

(Participant 4)

Participant 3 stated "they did not know" how to register because it was done for them. In regards to the financial aid application process the participants referenced the following lack of information. Seven students referenced similar results regarding financial aid that they knew how to apply for the Free Application for Federal Student Aid (FASFA) as result of their high school counselors or FASFA night but did not see a direct relation between participation and knowing how to apply to financial aid. Six stated that they knew about financial aid because of their high school. And one participant explained they knew about financial aid because "I had gotten the knowledge from being in AVID for four years, so I was highly prepared" (Participant 7). Five stated that they did not know about financial aid or did not apply. Participant 11 explained, "No didn't really learn too much about FASFA and that part was confusing to me." Another continued the sentiment about understanding financial aid with, "no I don't think I ever applied for financial aid" (Participant 5). Yielding the result that this dual enrollment program explained the registration process and familiarize the students with it; however, due to the tuition being covered financial aid was not an area that was reviewed with the students the participated in dual enrollment.

Summary

As explained in the aforementioned chapter, this phenomenological study was to explore and identify patterns regarding students' perceptions of the impact of dual

enrollment participation on academic preparation and college knowledge prior to their first year of college. This chapter provided an overview of the purpose statement and research questions. These provided a foundation for the study. The presentation and analysis of the findings from 12 the semi-structured interviews. The next chapter, Chapter V presents the findings, conclusions, and recommendations for action as well as further research.

CHAPTER V: FINDINGS, CONCLUSION, AND RECOMMENDATIONS

Overview

This chapter describes the methodology utilized in this study on the perceived impact of dual enrollment participation. Included is the purpose of study, the research questions, the research design, the description of population and sample, the instrumentation, the description of data collection, an explanation of data analysis, delimitations as well as the limitations of the study.

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the students' perception of how participating in dual enrollment and completing college level coursework prior to their high school graduation impacted their academic preparation and college knowledge during first year of college.

Research Questions

Answers to the following questions will be sought to address the purpose of the study:

1. How do students' perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?
2. How do students' perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?

Research Design

A qualitative methodology was chosen for this study due to the fact qualitative research is "an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2014, p. 4). The researcher

determined that conducting a qualitative phenomenological study as the most appropriate for this qualitative study as the purpose is to explore students' perceived impact of participating in dual enrollment on their academic preparation and college knowledge prior to entering their first year of college because the participants "have directly experienced the phenomenon of interest; that is they have 'lived experiences' as opposed to secondhand experience" (M. Patton, 2002, p. 104).

In qualitative phenomenological studies the researcher is able to obtain rich data on the lived experiences of the participants based on their participation in the phenomenon (McMillan & Schumacher, 2010). The lived experiences of students participating in dual enrollment is that these students are dually enrolled in high school and college within the same semester. One way this is achieved is by utilizing the qualitative method of open-ended questions which allow for data to be gathered from the participant regarding the phenomenon they are living or lived through (Johnson & Christensen, 2008). In the past few years there has been approximately 2.1 million community college students per year (CCCCO, n.d.); MSJC (n.d.) has an annual enrollment of approximately 15,000 and in Fall 2015, 140 of those students participated in dual enrollment making up less than 1% of the colleges full time equivalent students enrollment. Therefore, this research study will explore the phenomenon of students that participated in a dual enrollment program. Dual enrollment is a program that offers high school students the opportunity to earn college credit while still in high school (K. L. Hughes, 2010; Karp et al., 2007). By conducting open-ended questions participants will utilize their own terminology and recollections to answer the questions versus qualitative data that limits the participants' responses by provided answers to close-ended questions

(Creswell, 1994; Johnson & Christensen, 2008). “Qualitative researchers are interested in understanding the meaning people have constructed, which is how people make sense of their world and the experiences they have in the world” (Merriam, 2009, p. 13).

This approach allowed the researchers to collect responses aligned with the research questions and gain an understanding of the perceived impact of dual enrollment participation on a first year student. The researchers collected data through open-ended interview questions.

Research Methods and Data Collection Procedures

This qualitative study used semi-structured open-ended interview questions to determine the impact of dual enrollment participation on academic preparation and college knowledge prior to their participants first year of college. The interviews were conducted utilizing a conferencing software. The interviews consisted of 15 questions. Interview Questions 1-6 were related to the participants demographics; questions 7-12 were designed to answer Research Question 1 regarding academic preparation; questions 13-14 were designed to answer Research Question 2 regarding college knowledge and question 15 allowed for the participant to add anything to the interview. Each participant received the Researcher’s Bill of Rights, details of the purpose of the study, informed consent form and the consent audio record. Once consent was received, the interview was scheduled. After the students called into the tele-conference software, ZOOM, the Bill of Rights, Informed Consent and Audio Consent was reviewed and once verbal consent was provided the researcher recorded and conducted the interviews. ZOOM and the researcher transcribed the interviews. The researcher, based on the date of the

interview, labeled the transcriptions 1-12 to ensure confidentiality of the participants. The transcriptions were then reviewed and coded by the researcher to identify patterns, codes and themes.

Population

According to McMillan and Schumacher (2010), a population is defined as a group that “conforms to a certain criteria” (p. 129) from which “results can be generalized” (p. 129). The population for this study consisted of students that participated in dual enrollment. According to NACEP, over 1.4 million high school students participated in dual enrollment during 2010-2011 (NACEP, 2018).

Target Population

A target population is the actual list of the sampling units where the sample was created (Creswell, 2014). For the purpose of this study, the target population consists of students that participated in a dual enrollment program through a California Community College. The target population is currently unknown as there is not sufficient tracking of dual enrollment participation throughout California. The CCCCCO will be drafting a report of dual enrollment participation through the College and Career Pathways in 2021 (Nguyen, 2016).

Sample

A sample population must be identified by the researcher to narrow down the population (McMillan & Schumacher, 2010). This study will use a purposeful sampling of students that attended high school within eight school districts of the college boundaries and participated in the dual enrollment program at MSJC. The use of purposeful sample was chosen because, “in purposeful sampling...the researcher selects

particular elements from the population that will be representative or informative about the topic of interest” (McMillan & Schumacher, 2010, p. 138) which was chosen because of the researcher’s current knowledge of dual enrollment. In qualitative research, purposeful sampling is considered a strength (M. Q. Patton, 2015). The sample will consist of students that participated in dual enrollment during the academic years of 2013-2018 then matriculated to MSJC and maintained enrollment for at least one year.

This timeframe was selected because dual enrollment was instituted at MSJC in 2009 and continued to offer college courses to high school students as the program is designed for junior and seniors. Therefore, this time frame could incorporate participants that participated in dual enrollment, graduated high school and matriculated to MSJC in the subsequent years after participation. This criterion was selected to ensure that the participants were enrolled in college courses. Typical case sampling will be utilized to identify the dual enrolled students that completed their first year of college (McMillan & Schumacher, 2010).

Major Findings

The purpose of this phenomenological research study was to explore the perceived impact of dual enrollment participation that attended MSJC after dual enrollment participation. The data collection and analysis was identifying themes that emerged from the student’s perceptions regarding their academic preparation and college knowledge. Frequencies were grouped together into codes that became themes. These themes were used to answer the research questions. The major findings emerged from four themes that answered the guiding research questions. The themes of Exposure to Academic College Coursework and Reduces Time to Students’ Goal Completion are

identified as major findings to Research Question 1. The themes of Student Benefits from Participating and Ease into College are identified as major findings to Research Question 2.

Research Question 1

Research Question 1 asked: *How do students' perceive the impact of dual enrollment participation on academic preparation prior to their first year of college?*

The two themes, Exposure to Academic College Coursework and Reduces Time to Students' Goal Completion are identified as major findings.

Major finding: Exposure to academic college coursework. This theme represented the coded data expressed by nine out of the 12 participants explaining that dual enrollment participation exposed them to rigorous coursework. The coded data surrounded frequencies regarding academics, academic writing, rigor, serious learning environment, face paced and teacher expectations. Participants were expected to meet the instructor's expectations in a fast paced and serious environment. Participants expressed that they were prepared for college because dual enrollment allowed them to be exposed to what they needed to expect from college whether it was the change from a formulaic to analytical writing style to understanding that in college students are more responsible for their learning as well as use critical thinking.

Major finding: Reduces time to student's goal completion. This theme represented the data coded expressed by eight of the 12 participants that dual enrollment participation fast tracks goal completion. The coded data surrounded frequencies regarding fast tracked, getting ahead, complete my prerequisites, and reduced time. Dual

enrollment participation provides students the opportunity to complete college requirements while still in high school, which allows them to get ahead in college.

Participation allows student to complete their goal faster.

Research Question 2

Research Question 2 asked: *How do students' perceive the impact of dual enrollment participation on college knowledge prior to entering their first year of college?* The themes two themes of Student Benefits from Participating and Ease into College are identified as major findings.

Major findings: Student benefits from participating. This theme represents the coded data expressed by all 12 participants. The coded data surrounded frequencies regarding benefits, cost, expectations, access, flexibility, empowerment, dynamic experience, responsibility, opportunity, and experience. Dual enrollment participation provides students with the experience to understand the expectation of college while being free of tuition costs and allowing students to have flexibility in the course load. Participants perceived dual enrollment as highly beneficial as it allowed students to experience college coursework with no tuition cost and understand the expectations of what to expect from college.

Major finding: Ease into college transition. This theme represented the coded data expressed by all 12 participants. The coded data surrounded frequencies regarding anxiety, transition, familiarized with system, eased into college/familiar with system, helps prepare, more comfortable and eye opener. Dual enrollment participation provides students with exposure to college level coursework and provides a good preparation to

what college will be like. It eases transition from high school to college. Participation allowed participants to have an ease in anxiety because they understood the college system because of being exposed in dual enrollment.

Unexpected Findings

The researcher identified two unexpected findings because of the qualitative data in this study. The unexpected findings are a reflection of the student responses related to exploring the impact of dual enrollment participation.

Unexpected Finding 1

Participants stated that a major contribution to their academic preparation was the exposure to college level writing. The participants stated that dual enrollment participation prepared them for the rigors of college, which was expected; however, participants specifically stating that learning to write made them more prepared was unexpected. They continued to state that in comparison to their other classes they were used to writing formulaic essays that just regurgitated the information; however, in their dual enrollment courses they were exposed to and required to critically think. Their writing style change to an analytic style that was a higher caliber of writing, which they felt, increased their academic preparation and success.

Unexpected Finding 2

Only one participant stated that dual enrollment was overwhelming. All participants expressed the benefits of dual enrollment being a way to prepare academically, increase their time to degree completion and understanding their expectations among others. Only one participant expressed that they felt dual enrollment was overwhelming. This comes as an unexpected finding given the fact that these

students are completing at least four regular high school classes, possibly competing in high school sports, working, not to mention high school clubs/activities and their extracurricular activities. Yet, students highlighted that it eased anxiety and showed expectations of what they were getting themselves into.

Conclusions

The data collected in this study was used to explore how students perceive the impact of dual enrollment participation prior to entering their first year of college. Based on the qualitative data presented in this study four conclusion were determined from the two research questions that guided this study.

Conclusion 1: Students who participate in dual enrollment are more prepared for college

Based on the findings in this research study, it was concluded that students were more prepared academically for college based on their participation in dual enrollment. Students were exposed to rigorous coursework and an interesting curriculum that allowed them to experience the expectation of college while still in high school. Students learned to write at a higher caliber and standard which prepared them for their college work after participation. Students identified the most important factor to participating in dual enrollment was the exposure and expectation to analytical writing and critical thinking that greatly impacted their expectation of college after dual enrollment participation. They knew the expectations of college level coursework as a result. This is in agreement to researchers stating that dual enrollment affords high school students access to invest in their education by preparing them to the rigors of college and allowing them to

experience and understand the expectations of college (Adams, 2014; Bailey & Karp, 2003; Chapman 2001; Kleiner & Lewis, 2005; Lukes, 2014; Mokher & McLendon, 2009).

Conclusion 2: Dual enrollment participation decreased time to goal completion

Based on the findings in this study it was concluded that dual enrollment participation decreases time to goal completion as students are completing general education and/or prerequisite classes prior to their first year of college which puts them at least one semester ahead and closer to achieving their goal. Students are able to accelerate their education because they are not waiting to complete the prerequisite courses needed for their major and the students do not have to wait to enroll in specific courses because their general education courses are completed as well. This supports Kleiner and Lewis (2005) who agreed with this conclusion stating that dual enrollment can expedite time to degree completion.

Conclusion 3: Dual enrollment participation has a positive impact on student understanding the matriculation process

Based on the findings of this study it was concluded that dual enrollment participation resulted in the student having college knowledge prior to the first year of college as students identified that they either understood the registration process or knew enough to navigate the system. However, they did not know financial aid requirements as a result their high schools had a college-going culture that exposed students to the financial aid requirements. Edmunds (2012) states that college knowledge is the most important concept for students to be college ready.

For a student to have college knowledge a student needs to have the understanding of the matriculation process, know the academic requirements, financial aid options, and be able to realize there a difference between high school and college (Edmunds, 2012; Hooker & Brand, 2010).

Conclusion 4: Dual enrollment participation has a positive impact on student understanding how to synthesize the difference between high school and college

Based on the findings of this study it was concluded that dual enrollment participation resulted in the student having college knowledge prior to the first year of college as students understand the difference between high school and college; which is what researcher's state to be one of the factors of college knowledge prior to their first year of college (Edmunds, 2012; Hooker & Brand, 2010). Students who participated in dual enrollment identified that there was a difference in high school and college as they understood that there was a higher quality of work expected from their dual enrollment courses.

Implications for Actions

Based on the qualitative data within this study and the supporting literature it is concluded that dual enrollment participation has a positive impact on the academic preparation and improves college knowledge; it is recommended that secondary and higher education institutions work collaboratively to increase the dual enrollment opportunities for students. Secondary education institutions should especially be interested in the increased opportunities for dual enrollment as a result of recent accountability measures of the College/Career Indicators (CCI) from the State of California that states high schools sites will be measured on the number of students that

are deemed college or career ready (CDE, 2019). Similar to how high schools are measured by (CCI); colleges should have a state measurement for the volume of dual enrollment courses offered to high school students. This should be in comparison to the secondary feeder schools within the school district as well as the high school headcount. Therefore, colleges are measured on a percentages of courses and students not just on the sheer number of students since a rural college should be measured differently than an urban college.

Community colleges and high schools should also seek alternative teaching strategies for offering courses. If a high school does not have a qualified high school teacher to teach a certain discipline, the college should offer the course as distance education or a similar course if there is not an online addendum to the course until the high school can produce a qualified instructor. The community college courses should be identifying more general education courses that could utilize online education resources that provide zero cost textbooks to allow more access to students. Inversely, high schools should adjust their bell schedules to align with the community college schedule if the previous concept of distance education does not work out for that site; a college faculty member could absorb the college class on the high school campus within their load. Anyone teaching a dual enrollment class should be required to attend college faculty meetings during the academic school year to stay abreast of changes within the department as well as college. To counter that department chairs and discipline deans at the community college should observe or meet with the dual enrollment faculty on the high school at least once a year. To ensure quality of rigor all dual enrollment faculty should attend a mentoring program offered through the college whether it be teaching for

the college at least one semester to immerse themselves in the college environment or have several day training to build trust and relationships between the faculty. Secondary institutions need to ensure that the faculty teaching dual enrollment courses for the high school are the most qualified and best suited to teach. This will mean the high schools need to prioritize between programs and determine what is important for their sites whether it be AP, IB, or Dual Enrollment. It may also mean that high school administrators have to change their scheduling practices to allow for those qualified and best suited to teach dual enrollment teach those sections over more senior teachers.

As the data shows in this study, dual enrollment shows a positive impact on academic preparation and college knowledge, it is recommended that all students who could benefit from taking a college course regardless of their educational goal or grade level should be provided the opportunity to begin taking college courses. Students should be exposed to classes that are transferable or complete a career pathway even if they do not line up with their high school graduation requirements. Every student should be offered the opportunity to take at least one dual enrollment course throughout their high school tenure allowing the student to being exposed to college level rigor as well as additional career education courses that could peak a student's career interest. As this could inspire more students to step outside their academic comfort zone. It is also recommend that all students have the opportunity to complete a career exploration course that focuses on the current career trends prior to dual enrollment to expose students to other careers and majors. High school districts and the community colleges need to have broader discussions regarding career education classes that could be offered to students. Using the data from the career exploration courses the institutions would know what

courses need to be offered for the next three years. Pathways need to be developed with students starting in career education articulated classes in their freshman and sophomore year leading in dual enrollment courses during their junior and senior year. Allowing students to have the opportunity to complete career education certificates faster and joining the workforce more prepared. Dual enrollment courses need to be assessed regarding their ability to fulfill the student populations' educational goals. If there is low enrollment in certain sections both institutions need to meet to determine the various factors that could yield such a result. Also, using market trends to determine specific needs for the geographical region.

Furthermore, based on the qualitative data presented in the study, there was a significant lack of information provided to students regarding financial aid as a result of participating in dual enrollment as the participated stated that they did not hear about financial aid as a result of dual enrollment participation. It is recommended that high school sites that offer dual enrollment programs provide more opportunities to educate students in the financial aid process. This would improve the students understanding of financial aid programs and process as well as have more students complete the FASFA. Moreover, it is recommended that as part of participations student complete the FAFSA following the appropriate deadlines.

Additionally, in this study participants responded that a major factor regarding their academic preparation was the analytical writing skills they learned and how that improved their college level writing skills as a result of their dual enrollment participation. Therefore, it is recommended that all graduating high school seniors attend

workshops regarding expectations of college emphasizing the critical thinking skills needed to be successful in college and career education courses.

Recommendations for Further Research

This qualitative research study resulted in the perceived impact of dual enrollment participation based on the lived experiences of the 12 previous dual enrollment students. The study is representative of the students and the specific dual enrollment program offered at MSJC. Due to the timeliness of this research study several recommendations for future research are identified.

- Future research is recommended with an expanded geographic sample from several community colleges and four-year institutions with various social economical groups regarding the student perspectives on dual enrollment participation.
- It is also recommended that future research be conducted on the students that completed an associate's degree and transfer to a four-year institution to complete a bachelor's degree to determine if there is a decrease in goal completion.
- The researcher did not explore the impact due to the type of high school; therefore, it is recommended that future researchers investigate the difference between participation at a comprehensive and charter high schools.
- It is recommended that future researchers explore the correlation between the student majors and the impact of dual enrollment participation.
- The study focused on students that completed courses at the community college; therefore, it did not take into account other factors as to why students

did not complete their first year of college outside of academic preparation and college knowledge. The researcher focused on the college knowledge after attending college; therefore, future research could explore the student's comfortability with going into college prior to attending their first year of college.

- The study focused on dual enrollment student perceptions after participation, thus it is recommended to explore the type of students that participate in dual enrollment. By evaluating their high school schedules and extracurricular activities, researchers could gain an understanding on how to increase dual enrollment opportunities to more students.
- It is also recommended to study dual enrollment participants that are English Language Learners and determine if there are similar impacts to native speakers.
- It is recommended that additional research is conducted on the perception of high school principals regarding dual enrollment participation and how their sites are impacted
- Additionally, this study focused on the student; however, additional research could investigate the parental involvement and the parent's perception on dual enrollment impact.
- In an effort to strengthen the data it is recommended that a mix methods study is conducted to determine the effectiveness of dual enrollment participation combined with the perception of college readiness of the student.

Concluding Remarks and Reflections

The findings in this study are significant because they add to the literature on the impact of dual enrollment participated. The study explored the value in providing students with an opportunity to complete college level coursework prior to graduating high school without the cost of tuition. The students were exposed to not only the coursework to prepare them academically for college, as well as, learning to navigate a college system. Students expressed that dual enrollment was a positive and worthwhile experience and recommended more students to participate. The findings could be used with educational institutions, parents, student's legislative bodies to increase the support and increase the offering of dual enrolment programs. Based on the data provided in this study I believe dual enrollment is a mechanism that has increased college readiness by exposing student to the expectations and rigor of college. Dual enrollment also opens up the opportunity for more dialogue between the two systems thus strengthening the relationships between high school and college.

As a student that completed college credit prior to high school graduation, I believe there is a great need for enrollment for not only students but also the higher education instruction. Dual enrollment was not established when I was in high school. I was also a first generation college student. Therefore, I had to find my own way. I took classes that I thought met high school graduation requirements and never thought about if they fulfilled college graduation or transfer requirements. I was taking seven high school classes including work experience and two college classes my junior year of high school. I did not have the ability of taking the college classes within my school day. I was taking them after a full day of class and several hours of work a day. Due to the

competitiveness of high school and college admissions, many students have to choose their classes and extra-curricular activities wisely and many times have to sacrifice one for the other and to add on those that have work as well add even more to a high school student. Dual enrollment is not only for highly motivated or achieving students it should be accessible for all students that need something more out of their high school education or need to the extra push to show that they can be successful outside of high school. I had the opportunity to attend a four-year university straight after high school but chose to stay at the community college because I was familiar with the campus and had a greater understanding of my expectations. This was a great marketing tool for my community college as well. Therefore, I wholeheartedly believe that dual enrollment can create the transitional space for high school students to begin their college coursework with the support of both the high school and college which I only had the support of the college.

Summary

As explained in the aforementioned chapter, this phenomenological study was to explore and identify patterns regarding students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college. This chapter provided a description of the findings and conclusion along with the limitations and recommendations for further research.

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APPENDICES

APPENDIX A

Authorization to Research within Mt. San Jacinto College



Mt. San Jacinto Community College District
1499 N. State Street, San Jacinto, CA 92583

Roger W. Schultz, Ph.D.
Superintendent/President

Board of Trustees
Tom Ashley
Sherrie Guerrero, Ed.D.
Dorothy McGargill
Ann Motte
Bill Zimmerman

November 26, 2018

To whom it may concern,

The following is to acknowledge that the Mt. San Jacinto College Institutional Research Committee reviewed and approved Susan Hochstrat's human research project, "Organizational Leadership".

The project was evaluated in light of the federal regulations that govern the protection of human subjects. Specifically, 45 CFR 46.101(b)(2) identifies studies that are exempt from IRB review, including:

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

(b) Unless otherwise required by department or agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

The MSJC IRB has determined that the project employs surveys that pose no more than minimal risk to the participants. For these reasons, the IRB has determined that the proposed study is exempt from further IRB review.

If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the MSJC IRB before implementation. For *any* proposed changes in research protocol, please submit a Request for Modification form to the MSJC IRB.

Sincerely,

N. Mesaris

Nikilos Mesaris
Office of Institutional Effectiveness
Associate Dean of Institutional Research
Mt. San Jacinto College District
(951) 487-3074

San Jacinto Campus
1499 N. State Street
San Jacinto, CA 92583
951.487.6752

Menifee Valley Campus
28237 La Piedra Road
Menifee, CA 92584
951.672.6752

San Geronimo Pass Campus
3144 W. Westward Avenue
Banning, CA 92220
951-922-1327

Temecula Education Complex
27447 Enterprise Circle West
Temecula, CA 92590
951.308.1059

APPENDIX B

Introduction and Informational Letter to Participants

Dear Former Dual Enrollment Student,

My name is Susan Hochstrat, and I am a doctoral candidate in Organizational Leadership at Brandman University. I request your important help with this research student about the impact of dual enrollment participation on first-year college expectations and experience. I am requesting your assistance in the study by participating in a phone interview which will take from 30-45 minutes and will be set up at a time convenient for you. If you agree to participate in an interview, you may be assured that it will be completely confidential. My advisor is Tamerin Capellino, Ed.D at Brandman University.

The purpose of this study is to explore regarding students' perception of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college.

Participation in this research student is intended only for individuals meeting specific criteria. The participation should only complete the interview if all of the following criteria are met:

- 1) The participant has completed two or more dual enrollment courses during high school.
- 2) The participant attended Mt. San Jacinto College two or more semesters after graduating high school.

Participants will be asked nine interview questions. The interviews will be via phone call and recorded. Students will be asked the high school they graduated from, gender, Mt. San Jacinto Major identified, current major and transfer institution, if applicable. No other identifying information will be collected. Further, all data and interview transcripts will be held in strict confidence.

Your choice to participate in complete this interview is voluntary and your informed consent is required to prior to participation. If you choose to participate in the interview, you will be free to stop the interview and withdraw from the study at any time.

If you have any questions, please contact, Susan Hochstrat at [redacted]. Your participation would be greatly appreciated.

Susan Hochstrat, Brandman University Doctoral Candidate

APPENDIX C

Email of Interest from Researcher

Date: November 2018

Dear Student:

You have been selected to participate in a research study based on your participation in Mt. San Jacinto College's dual enrollment program from 2013-2016, where you later enrolled at MSJC for one or more years. The purpose of the study is to gain an understanding about how participating in dual enrollment impacted students' academic preparation and college knowledge during their first year of college. If you are willing to participate in a 35-45 minute recorded phone interview in December 2018 please click the link to schedule your phone interview time.

<https://www.surveymonkey.com/r/WHK2VNW>

The survey link will have an Introduction to the study, an Audio Recording release form, an Informed Consent form and the schedule to interview.

If you have any questions please contact, Susan Hochstrat at, [redacted].

Your participation would be greatly appreciated.

Thank You,

Susan Hochstrat
Doctoral Student

APPENDIX D

Informed Consent Form

Date: November 2018

Information about: exploring the students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college: a phenomenological study.

Responsible Investigator: Susan Hochstrat, M.A.

Purpose of study: You are being asked to participate in a research study conducted by Susan Hochstrat, a doctoral student from Brandman University School of Education Organizational Leadership program. The purpose of this qualitative phenomenological study is to explore students' perceptions of the impact of dual enrollment participation on academic preparation and college knowledge prior to their first year of college.

By participating in this study, I agree to participate in a one-on-one audio with the researcher. The interview will last approximately: 30 minutes. Completion of the interview will take place in December 2018.

I understand that:

- There are minimal risks associated with participating in this research. I understand that the researcher will protect my confidentiality by storing all data in a locked file drawer that is only accessible by the researcher.
- The possible benefit of this study to me is that my input to this study will help add to the understanding of the experience of participating in dual enrollment. The findings will be available to me at the conclusion of the study.
- I understand that I will not be compensated for my participation in this study.
- Any questions I have concerning my participation in this study will be answered by Susan Hochstrat, M.A. who can be reached by email at [redacted] or by phone at [redacted]. Also, the committee chair for this study is Dr. Capellino. She can be reached via email at [redacted]@brandman.edu or by phone at [redacted].
- I understand that the interview will be audio taped using an audio recording device on CCC Confer®. The recordings will be available only to the researcher and the professional transcriptionist. The audio recordings will be used to capture the interview dialogue and to ensure the accuracy of the information collected during the interview. Upon completion of the study all transcripts and notes taken by the researcher and transcriptionist from the interview will be shredded and destroyed.

My participation in this research study is voluntary. I understand that I may refuse to participate in or I may withdraw from this study at any time without negative consequences. Also, the researcher may stop the interview at any time. I also understand that no information that identifies me will be released without my separate consent and that all identifiable information be protected to the limits allowed by law. If the study design or the use of data is to be changed I will be so informed and my consent obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the office of the executive Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618. Telephone (949) 341-7641

I acknowledge that I have received a copy of this form and the “Research Participant’s Bill of Rights” BUIRB written informed consent.

I have read the above and understand it and hereby consent to the procedure(s) set forth.

Signature of Participant or Responsible Party

date

Signature of Principal Investigator

date

APPENDIX E

Audio Recording Release Form

RESEARCH TITLE: Student Perceptions of Dual Enrollment Participation

BRANDMAN UNIVERSITY
16355 LAGUNA CANYON ROAD
IRVINE, CA 92618

RESPONSIBLE INVESTIGATOR: Susan Hochstrat, M.A.

I understand that the interview will be audio recorded per the granting of my permission. I do not have to agree to have the interview be audio recorded. In the event that I do agree to have myself audio recorded, the sole purpose will be for video analysis to support data collection related to Student Perceptions of Dual Enrollment Participation.

I hereby give my permission to Susan Hochstrat, M.A., to use audio recording material taken of myself during her research on Student Perceptions of Dual Enrollment Participation. The audio recording material will only be used for this research and the audio recording will be destroyed at the end of the study. As with all research consent, I may at any time withdraw permission for audio footage of me to be used in this research project.

ELECTRONIC CONSENT:

Please select your choice below. Clicking on the “agree” button indicates that you have read the Audio Recording Release form and the information in this document and that you voluntarily agree to participate in the audio recording. If you do not wish to participate in the audio recording and thus study, you may decline participation by clicking on the “disagree” button.

AGREE: I agree to Audio Recording

DISAGREE: I do not agree to Audio Recording, therefore, I will not participate in the study

APPENDIX F

Participant Bill of Rights

Brandman University IRB

Adopted November 2013

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

Research Participant's Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.
3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.
4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.
5. To be told what other choices he/she has and how they may be better or worse than being in the study.
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.
7. To be told what sort of medical treatment is available if any complications arise.
8. To refuse to participate at all before or after the study is started without any adverse effects.
9. To receive a copy of the signed and dated consent form.
10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92618.

APPENDIX G

Interview Script and Schedule

Researcher: Susan Hochstrat

Participant# _____

Date: _____

Hello, my name is Susan Hochstrat, I am a doctoral candidate in Organizational Leadership at Brandman University. Again, I want to thank you for taking the time to participate in this interview. I thoroughly understand the time constraints and demands of college students; and greatly appreciate your willingness to participant in this interview.

As we begin, I need to review the Informed Consent form that was proved to you when you scheduled the interview and confirm that we received your electronic approval based on your approval of the information provided in the surveymonkey.com® link and the scheduling of this interview from the link. Again, you can stop the interview at any time and withdraw from the study. After reading the form online do you have any questions? (At this time the researcher will answer any of the participant's questions)

Moving forward, as explained in the consent forms, I will be recording all interviews to accurately record your responses. All recordings will be destroyed after the interviews have been transcribed. You are assigned a participant number so that no names will be attached to anything pertaining to this interview or notes, or transcriptions. At this time, with your consent I will be turn on the recorder and begin recording. Do you consent? (wait to obtain verbal consent). The recorded is on and I will be recording the interview until the conclusion. Before continuing can I please have your verbal person to conduct and record the interview? (wait to obtain verbal consent)

This study is part of my dissertation which is exploring the impact of dual enrollment participation on college experience and college knowledge prior to the first year of college.

Again, I want to thank you for your time and perspective. Before we begin, do you have any questions or concerns? (Wait for a response, and answer any questions or clarify concerns)

Fantastic, let's get started. As a reminder, we can stop and terminate the interview at any time and you have the ability to decline to answer any question. Please let me know if you wish to stop the interview and I will do so immediately.

I want to start with six demographic based questions then we will proceed into the questions regarding your perspectives on dual enrollment participation. For any question you can choose to answer as "not applicable" if it does not apply to you.

We will now begin the interview questions.

Interview Questions

Demographic Questions:

1. Are you the first in your family to attend college?
2. What year did you participate in dual enrollment?
3. What high school did you attend while participating in dual enrollment?
4. What courses did you complete within the dual enrollment program?
5. What is/was your major identified at Mt. San Jacinto College?
6. Did you complete an Associate's degree at Mt. San Jacinto College?

Dual Enrollment Participation Questions:

Background Experience

1. Please share your experiences about participating in dual enrollment?

Academic Preparation

2. From your perspective, how do you feel participating in dual enrollment prepared you academically for college?
3. Can you explain how dual enrollment participation either eased or heightened your level of anxiety or fear of completing your first semester of college?
 - Probing questions:
 - Are you able to provide certain factors that lead to this?
4. From your perspective, how do you see dual enrollment as a benefit to students?
 - Probing questions:
 - What experienced influenced your answer.
5. How did your experience in participating in dual enrollment differ from our traditional high school courses?
 - Probing question:
 - Can you please tell me more about this?
 - Can you please elaborate on an example or examples of these experiences?
6. Did you complete another credit based-transition program like the international baccalaureate or Advanced Placement and/or CTE Articulation while participating in dual enrollment?
 - Follow up question; if yes, how many courses did you courses or tests did you receive a passing score of?
 - Follow up question, what was your perspective of the difference between the programs?
 - Can you please tell me more about this?
 - Can you please elaborate on an example or examples of these experiences?

College Knowledge

7. Follow up question, please explain how your felt when attending college as a student that has already completed college coursework and received college units.
 - Probing questions:
 - Can you please tell me more about this?
 - Can you please elaborate on an example or examples of these experiences?

8. Please explain how your experiences in dual enrollment prepared you for the enrollment and registration process at a community college or 4 year university?
 - Probing questions:
 - Can you please tell me more about this?
 - Can you please elaborate on an example or examples of these experiences?
 - Did you understand how to register for classes?
 - Did you understand how to apply for financial aid?
9. At this time I have finished my interview questions, do you have anything you would like to add or say regarding dual enrollment and/or dual enrollment participation.

Thank you again for your time and participation in this interview. Your perspective is greatly appreciated and will provide the needed information to conduct this research study. At, this time I am going to conclude the interview and stop recording.

APPENDIX H

BUIRB Approval

From: MyBrandman <my@brandman.edu>
Date: November 20, 2018 at 10:22:23 AM PST
To: [REDACTED]
Cc: "Devore, Douglas" <ddevore@brandman.edu>, "Capellino, Tami" <capellin@brandman.edu>
Subject: BUIRB Application Approved: Susan Hochstrat
Reply-To: webmaster <webmaster@brandman.edu>

Dear Susan Hochstrat,

Congratulations! Your IRB application to conduct research has been approved by the Brandman University Institutional Review Board. Please keep this email for your records, as it will need to be included in your research appendix.

If you need to modify your BUIRB application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at IRB.Brandman.edu

Best wishes for a successful completion of your study.

Thank You,

BUIRB
Academic Affairs
Brandman University
16355 Laguna Canyon Road
Irvine, CA 92618
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www.brandman.edu
A Member of the Chapman University System

APPENDIX I

National Institutes of Health Office of Extramural Research Certificate

