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The Impact of Dual Credit on Idaho Students Through the Advanced Opportunities Act of 2016: A Qualitative Case Study

by

J. Mark Browning

A dissertation

submitted in partial fulfillment

of the requirements for the degree of

Doctor of Education in Educational Leadership

Idaho State University

Spring 2022

To the Graduate Faculty:

The members of the committee appointed to examine the dissertation of J. Mark Browning find it satisfactory and recommend that it be accepted.

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IRB-FY2021-188 - Initial: Exempt (Letter of Approval after response)

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RE: Study Number IRB-FY2021-188: The Impact of Dual Credit on Idaho Students Through the Advanced Opportunities Act of 2016: A Qualitative Case Study

Dear Mr. Browning:

Thank you for your responses to a previous review of the study listed above. I agree that this study qualifies as exempt from review under the following guideline: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
This letter is your approval, please, keep this document in a safe place.

Notify the HSC of any adverse events. Serious, unexpected adverse events must be reported in writing within 10 business days.

You are granted permission to conduct your study effective immediately. The study is not subject to renewal.

Please note that any changes to the study as approved must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. Contact Tom Bailey (208-282-2179; fax 208-282-4723; email: humsubj@isu.edu) if you have any questions or require further information.

Sincerely,

Ralph Baergen, PhD, MPH, CIP
Human Subjects Chair

Dedication

This dissertation is dedicated to my amazing wife, Astrid Kym, to my three sons, Jakob, Austin, and Samuel. It is also dedicated to my family including mother Julie, my father Gary, and my siblings Belinda Jayne, Ronda, Luci, and David Jack. This self-proclaimed Wacko Family is fiercely supportive and I am forever grateful for them.

My academic journey began in the fall of 2001 right where it finds itself now—at Idaho State University. This is almost exclusively the result of an amazing wife who encouraged me to enroll as a nontraditional freshman of 39 years of age. Kym, your belief in me, in my deeply dormant ability to apply myself academically and for a better future for us as a result of the doors that would open thanks to education simply cannot be understated or over-appreciated. Your relentless support to finish my assignments, to enroll in the next semester, to keep going—despite the exhaustion it rendered upon both of us—is the stuff of legends. I love you always Curly and your name should be listed on both this dissertation and the ensuing degree it will complete.

My three sons have always been my inspiration and my joy. Each of you are brilliant individuals and collectively are the best of me that I might ever imagine. You are doing amazing things in your lives and your support of me in this endeavor kept me going on many a late night.

Finally, to my parents: My mom Julie. Mom—you gave up your scholarly path to marry Dad and start a family and life together. But your desire to learn, to read and understand more about things around you never ceased. I love you, Mom. This is also for my father Gary who passed from this life in 2011, but his influence remains with me—giving me a deep and unwavering strength from which I draw daily. Despite the fact he told me in my formative high school years that “those who can—do, and those who can’t, go to school”—his example of

humility and adaptability to change later in life spurs me to keep on going each day. To his credit, he told me after I completed my undergraduate degree at ISU, just how proud he was of me, how wrong it was of him to say those things about education previously now that he saw a bigger picture and the future that was only obtainable through the refinement of thought and approach that comes from learning and critical thinking. I love you Dad and hope you know a piece of this is for you.

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There are so many who have contributed to my success along this journey. To Joe Dunlap and Bert Glandon, both amazing college presidents with whom I had the very real honor of learning and being mentored. Their encouragement to pursue a doctoral degree as the path through which I might serve students and communities stays with me. Idaho has been so very fortunate to have leaders such as Joe and Bert and I will forever be grateful for my experience and time with them and the lessons I draw upon now as I navigate that presidential path myself. I would not be here without them, their support and their mentorship.

I am grateful for the friendship of many colleagues in education both in Idaho and around the country who have been so very supportive. These are friends and colleagues who coaxed me back into reality when stress, frustration, and exhaustion pushed me to a point of abandoning this monstrous pursuit.

I have always been so very blessed to have dear friends in my life. In particular, I am so fortunate to have friends who have completed this journey themselves and friends who are on the path currently. Chris Martin, whose sense of humor, notes of encouragement and belief in me to be something more—Farmer Martin—you are the best. And to my true brother, Dr. Graydon A. Stanley. We began this journey together. Your unwavering love and dedication to serving those around you, especially students, is truly a gift. Dr. Stanley—you wouldn't let me slip. You showed me the way!

You have the family you are born into and you have the family you choose when you start a life with another. To my vanBueren family—I thank you. Tonya, your example of earning a degree in your homeland and then using that degree to put three wonderful children through college as a single parent will always stand as an example of commitment to life that awaits each

of us through learning. Brent, Kevin—you are my brothers in every sense. I marvel at what you do for your families and communities and the example you are as fathers and just the best people I know.

I would be remiss if I did not thank the faculty at Idaho State University. From a part-time adjunct remedial math instructor in 2001 who simply refused to let me fall away despite missing significant class time due to the events of September 11, 2001 and my job as working journalist at the time. To Dr. Ron Hatzenbuelher whose courses in history inspired me to learn to ask meaningful questions rather than just recite dates/facts/events, to Dr. Earl Phippen who guided me through many discussions with a perspective that fueled my desire to know more, to understand deeper, and to take courses like European Politics and Vietnam War as electives versus intramural basketball! To the graduate faculty at ISU, thank you. To those who helped shepherd me through those early courses and those who now who are here to help me complete this journey—thank you.

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The Impact of Dual Credit on Idaho Students Through the Advanced Opportunities Act of 2016: A Qualitative Case Study

Dissertation Abstract – Idaho State University (2022)

Dual credit is changing the landscape of education in Idaho and most states in this country. The desire to keep high school students engaged academically throughout the entirety of their high school careers coupled with a desire by parents, state education policy makers, and funders to accelerate degree and certificate attainment makes dual credit a popular tool for all involved. The state of Idaho's approach to increase degree and certificate attainment to better address a growing need for a skilled workforce resulted in the adoption of the 2016 Idaho Advanced Opportunities Act. This act established a program through which the state of Idaho provides $4,125 for dual credit courses along with other activities designed to help students advance their postsecondary learning while still in high school. The program pays 100% of the student cost for their dual credit courses. This qualitative case study looked at the Idaho Advanced Opportunities Program (IAOP) through a conceptual framework of rationale choice theory, as students will make decisions based on what is in their best economic interest. Students, faculty, program administrators, and policy makers were interviewed for this case study. Dual credit students who participated in the IAOP also provided valuable data through survey responses to help provide context for the entirety of the program.

Keywords: dual credit, Idaho, Advanced Opportunities, qualitative case study, rational choice theory, high school rigor, advanced placement.

Chapter I: Introduction

Dual credit has been defined by research scholars in recent works as the ability of a secondary student to earn postsecondary and secondary credit simultaneously through a single course offered by a college or university (Andrews, 2000; Giani et al., 2014; Hofmann, 2012; Idaho State Board of Education [ISBOE], 2020; Mansell & Justice, 2014; Piontek et al., 2016; Taylor, 2015; Taylor et al., 2015). Dual credit has been touted as having three main benefits: (a) easing the college transition process, (b) motivating students to take more rigorous coursework in high school, and (c) increasing college retention rates (Duncheon, 2020; Giani et al., 2014; Hofmann, 2012; Hughes et al., 2005). Dual credit has been identified as a major tool through which policy makers, legislators, and educators believe they will realize significant gains in go-to-college rates, completion, time to completion, and a reduction in costs to the student and the state. Although dual credit has a relatively short history in Idaho, officially recognized in 1997, there have been recorded efforts in other states back to the 1950s to address rigor, academic engagement, and college preparedness. Some of the earliest formalized efforts were found in Illinois in the 1970s, California in 1976, Virginia in 1988, and Texas in 1999 (Young et al., 2014). One of the earliest statewide comprehensive efforts to coordinate and expand dual credit began in Minnesota in 1985 (Borden et al., 2013).

In 2010, the ISBOE adopted a goal stating 60% of the state's citizens between the ages of 25–54 would hold some sort of credential of value such as a degree or 9-month certificate by 2020 (ISBOE, 2010). Adoption of this goal addressed several major issues in education as the time. In 2010, the rate of graduating high school seniors moving on to college directly was just 37% (ISBOE, 2010). Dual credit was one of the main mechanisms through which ISBOE members, policy experts on staff, Idaho legislators, and other educational leaders in Idaho

believed would improve the go-on rate (ISBOE, 2019). A report from Georgetown University's Center on Education and the Workforce highlighted a second major concern. The authors stated 67% of all jobs in Idaho would require some sort of postsecondary credential such as a certificate, associate degree, bachelor's degree, master's degree, or higher by 2020 (Carnevale et al., 2010). With a go to college rate of just 37% and a degree/certificate holding percentage of just 42%, the ISBOE turned to dual credit as a solution to help more students gain earlier exposure to college, go on at a higher rate, and finish in less time (M. Freeman, personal communication, March 13, 2020). Idaho had already found numerous challenges with delivery, quality, and transferability of dual credit courses. Many states had also experienced similar scenarios implementing a new program as comprehensive as dual credit with challenges for students, faculty, and administrators (Piontek et al., 2016; Wilkinson, 2019).

Various adjustments were made to the Idaho dual credit program between 1997 and 2015. One of the major efforts was designed to address difficulty in transferring courses transcripted at one participating institution to another due to differences between institutions in curricular approaches. This often resulted in awarding the student elective course credit but then they would have to repeat the core course, in turn leading to complicated issues with scheduling and failure to decrease time to completion. Additional concerns about teacher certification, program accreditation, coursework alignment in career technical education (CTE), and duplication of effort between institutions caused confusion and delay for students, administrators, and policy makers (M. Freeman, personal communication, March 13, 2020). These frustrations, combined with confusion about payment methods and procedures and the wide variance between postsecondary institutions, led parents, school administrators, and policymakers to address these challenges.

In the 2016 legislative session, the Idaho legislature approved House Bill 458 in an attempt to address these obstacles through the passage of the Idaho Advanced Opportunities Act (IAOA; ISBOE, 2018a). The IAOA provided $4,125 of state general fund monies for each high school student to use on dual credit courses, advanced placement (AP), and CTE courses during their secondary education. Early college model schools widely using international baccalaureate (IB) were also included. College placement tests such as the ACT or SAT were included in the IAOA. Monies would be paid by the Idaho State Department of Education (SDE) to the college or universities directly on behalf of the student. Payment to faculty members for their work would remain at the discretion of the district employing the faculty and would be on an institution-by-institution basis. In addition to these declarations, work ensured on common course numbering for all 100 and 200 level courses, resulting in the 2018 ISBOE general education common course listing (ISBOE, 2018a). In essence, passage of the IAOA created the Idaho Advanced Opportunities Program (IAOP). Collection of these efforts, now addressed in board policy and state statute, gave hope for realizing goals of more degree attainment and faster time to completion through dual credit (D. Critchfield, personal communication, February 8, 2021).

Statement of the Problem

Although many scholars, administrators, lawmakers, and students have praised dual credit, some areas of the program have drawn criticism and attention to the need for revision, oversight, and further scholarly study. Krueger (2006) reported "some policymakers and researchers see dual enrollment as diluting quality, and others see a system that shuts out low-income and low-achieving students" (p. 2). Nationally, people have expressed concern about the difficulty of gathering data effectively through the course evaluation methods and tracking

completion of students' years removed from their dual credit experience (Sheffel, 2016). Fink et al.'s (2017) work has been important in this area as they completed a case study to examine "what happens to students who take community college dual enrollment courses in high school?" (p. 1). The report tracked more than 200,000 high school students who took college level coursework through a community college from 2010 through the summer of 2016. The report provided several salient points, as one would expect given the growth of dual credit. However, they also identified challenges, including "why students in some states do substantially better in college than those in others and why there are large achievement gaps between different income groups in some states?" (Fink et al., 2017, p. 2). The report encouraged states to examine dual credit programs further on an institutional level with demographic breakdowns and to "monitor their dual enrollment students more closely, both while they are in high school and after they graduate (Fink et al., 2017). The report, combined with Sheffel's (2016) findings, suggested the need for further research on dual enrollment students in Idaho.

Purpose of the Study

The purpose of this qualitative case study was to provide a descriptive lens of the IAOP student experience, specifically for students who took dual credit courses while enrolled in high school in Idaho. With the passage of HB0458a by the 2016 Idaho legislature, the IAOP was defined in statute as Idaho Code §33-4602 (Idaho Legislature, 2016). As of July 1, 2016, each participating public and private postsecondary institution were subject to comply with the new parameters and policies in the IAOP. The IAOA required the SDE provide an annual report to the ISBOE on the progress and use of the program. Idaho has seen a significant growth in the number of dual credit courses attempted and completed, as 33% of students earned some dual credit and 67% of students did not earn any credit in 2014 and 58% of all students earned dual

credit and 42% did not attempt any in 2020 (ISBOE, 2021). The growth in dual credit has been so substantial that just 521 students statewide attempted 20 or more dual credits in 2014. By comparison, nearly 5 times that amount (i.e., 2,407 students) attempted dual credits courses in 2020 (ISBOE, 2021). Although the generated reports contained valuable data and results related to overall program participation and credit attainment, there was a glaring lack of direct student voice and perspective.

This qualitative case study collected data through interviews, online surveys, and document review of students at a comprehensive community college providing dual credit through the IAOP in Idaho. Given the ISBOE's stated intent of dual credit to improve the go-to college rate and raise the total number of degree/certificate holding citizens, the purpose of this study was to examine whether the IAOA accomplished these objectives based on students' perspectives. The results provide a more comprehensive picture of the dual credit landscape in Idaho when paired with available statistical data from the SDE, thus helping to inform lawmakers, policy makers, and dual credit program managers from Idaho campuses and high schools.

Research Questions

Research questions for this study were focused on students' perspectives about dual credit in Idaho with the intent to learn more about course taking, persistence, and completion. Primary research questions included:

- Research Question 1: Why do students take, or not take dual credit courses through the IAOP?
- Research Question 2: For those students who took dual credit courses as part of the IAOP, why did they not attend college?

- Research Question 3: Do those dual credit students who go on to college, complete degrees and certificates in less time than non-dual students? If so, what facilitated their completion and if not, what obstacles did they face?

To answer these research questions, the case study protocol involved 30 student interviews, ranging from interviews with graduated high school students enrolled at a postsecondary institution who took dual credit (i.e., 24 interviews) to graduated students enrolled at a postsecondary institution who did not take dual credit (i.e., six interviews).
I conducted interviews with three postsecondary dual credit program officials and three high school dual credit faculty to gain insight on outcomes and challenges of the dual credit experience. This made for a total of 36 interviews.

Clarification of Common Terms

Higher education, secondary education, policy makers, and educators use terms and acronyms lending to a general understanding of the discourse and discussion enclosed in this study:

American College Testing (ACT): Referred to in the context of a postsecondary (college) placement exam for purposes of admission, placement, and determination of academic standing (ACT, 2020).

Advanced placement courses (AP): A program in the United States and Canada created by the College Board which offers college-level curricula and examinations to high school students. U.S. colleges and universities grant placement and course credit to students who obtain high scores on the examinations (College Board, 2020).

Career technical education (CTE): Defined early in U.S. education as vocational education, later as professional-technical education; primarily encompassing programs of study

addressing a wide variety of career paths, often changing due to market demands and influence (Glossary of Education Reform, n.d.).

Dual credit: Generally defined as the ability of a secondary student to earn both postsecondary and secondary credit simultaneously through a single course offered by the college or university (Andrews, 2000; Giani et al., 2014; Hoffman, 2012; ISBOE, 2020; Mansell & Justice, 2014; Piontek et al., 2016; Taylor, 2015; Taylor et al., 2015).

Early college high schools: A model using partnerships between school districts and institutions of higher education, typically community colleges, to expose high school students to course work. Early college high schools differ from dual credit or advanced placement programs as they target historically underrepresented populations and dual credit and/or AP generally see more academically higher achieving students, which can widen the gap between populations in some cases (Duncheon, 2020).

Idaho Advanced Opportunities Program (IAOP): A section of Idaho Code Chapter 33: 4601-4605 which provides funding, parameters for taking courses, payment on behalf of the student, rule-making authority, and other guidelines relative to dual credit, advanced placement, and international baccalaureate programs. The program is targeted toward Idaho students in Grades 7–12 providing up to $4,125 to use for advanced opportunities including overload courses, dual credit, exams (college credit-bearing or career-technical), or workforce training. The program is administered through the State Department of Education. Also referred to in context as the Idaho Advanced Opportunities Act (IAOA; Idaho Legislature, 2016).

Idaho State Board of Education (ISBOE): The single governing body for education in Idaho, Grades K–20, authorized by the Idaho Constitution Article IX, Section 2 (Idaho Constitution, 1889).

Idaho State Department of Education (SDE): An agency of the Idaho State Board of Education (ISBOE) charged with the operation and supervision of Idaho's K–12 education system (Idaho Legislature, 1972).

National Alliance of Concurrent Credit Education Partnerships (NACEP): An organization designed to ensure that college courses offered by high school teachers are as rigorous as courses offered on the sponsoring college campus. As the sole accrediting body for concurrent enrollment partnerships, NACEP helps these programs adhere to the highest standards so students experience a seamless transition to college and teachers benefit from meaningful, ongoing professional development (NACEP, 2020).

Northwest Commission on Colleges and Universities (2020): A regional accrediting body recognized and authorized by the United States Department of Education (USDOE) to certify academic programs, operational viability, and general compliance in USDOE rules and regulations to ensure quality and transferability of credential and credit.

SAT: Formerly known as the Scholastic Aptitude Test or later the Scholastic Assessment Test, the SAT is owned and operated by the College Board, a company that administers the test used by colleges and universities to determine admissions and academic placement. The fee (in 2020) to take the test is $49.50 and paid for eligible Idaho students by the Advanced Opportunities Act in Idaho (College Board, 2020; ISBOE 2020).

Limitations

Limitations are defined as factors influencing the direction of the study but are beyond direct control of the researcher (Creswell & Creswell, 2018; Joyner et al., 2018). Major limitations acknowledged in the study included availability of data and impacted personnel at the high school, district, and postsecondary level. Prior relationships have existed between school

districts, the state of Idaho, and the postsecondary institutions providing the course and as such, were declared a limitation. Additionally, a limitation existed as students had the choice to attend the comprehensive community college used in the study.

From the lens a qualitative case study, the restricted sample size was a limitation as it made the findings nearly impossible to extrapolate to more general application and assumption (Allen, 2010; Karp et al., 2007). For example, the selected state provided the needed number of participants and respondents, but the number did not give enough statistical strength and significance to be valid in a larger, wider context, such as a national perspective.

Delimitations

Delimitations help to narrow and focus the study. They are intentionally chosen by the researcher and can influence the external impact and application of the study results (Creswell & Creswell, 2018; Joyner et al., 2018). This qualitative descriptive case study declared the following delimitations:

- The proposed case study focused on the Idaho Advanced Opportunities Act. Specifically, it examined the outcomes of the act related to experience of students who took dual credit through IAOP.
- The results of this case study were not generalizable, as it was a qualitative, single case study and delimited to a single institution in Idaho. The primary rationale behind this delimiting was to control for the number of students without having to factor for variances in state, district, and individual high school policies and approaches to dual credit.

- A single comprehensive community college, the College of Western Idaho (CWI), was the sole institution involved in the study. This intentional delimitation controlled for variance in policies, delivery approaches, and transfer of credit.
- The study was delimited to purposely selected high school faculty, district administrators, and selected higher education administrators involved in the development, delivery, and oversight of dual credit.
- The proposed study only addressed student experiences and perspectives with dual credit, excluding AP and IB coursework.

Assumptions

Several assumptions were established as part of this case study:

- First, reasonable access to data and necessary individuals from participating public school districts, CWI, and the SBOE was assumed.
- Realization of the operational challenges as part of a dual credit partnership was assumed. School district and college leaders each face several challenges when attempting to implement and manage an academic program with presence in both entities. Better understanding of the challenges through exploration of relevant research could have been valuable to administrators, policy makers, and funding agencies.
- This study did not address specific challenges related to curriculum development, faculty mentoring, dual credit oversight, adequacy of faculty compensation levels provided by the IAOP, method of distribution, or comparison between AP and dual credit other than expressed by students through interviews.

- It was assumed interview participants and survey respondents exercised honesty in their answers and participation.
- All records, policies, and relevant documents reviewed as part of the study were assumed accurate.

Significance of the Study

Dual credit has been a major component of secondary students' experiences as they relate to college preparation (Duncheon, 2020; ISBOE, 2020; Sheffel, 2016). Dual credit has been identified as a tool through which policy makers, legislators, and educators believe they can leverage the student experience and realize significant gains in go-to-college rates, completion, time to completion, and costs for the student and the state (Mansell & Justice, 2014; Taylor et al., 2015). There has been limited scholarly research related to Idaho dual credit experiences. Except for the annual IAOP report, a report from Eden (2020), and a report authored by Holten and Pierson (2016), there has been very little research specific to Idaho about dual credit, thus, lending more significance to this case study.

Lastly, IAOP program participation and subsequent expenditures have grown each year substantially. According to the ISBOE, the number of dual credits taken by Idaho high school students has more than doubled between 2015 and 2019, from 87,684 credits in 2015 to 65,843 dual credit classes in 2019–2020 academic year (ISBOE, 2020). This represents a sum of $17,419,573 spent on dual credit in the most recent fiscal year, a substantial expenditure by Idaho taxpayers (ISBOE, 2020). Given the investment and importance of improving Idaho's go-on college rate and time to degree/certificate completion, this study could have a major impact on future policy decisions impacting student participation.

Study Organization

The qualitative case study has been organized into five essential chapters. Chapter I includes an introduction including background, statement of the problem, purpose of the study, research questions, commonly used terms defined, limitations, delimitations, assumptions, significance of the study, study organization, research context, and summary. Chapter II encompasses relevant literature review on five main areas: topicality, synthesis, methodology, significance, and rhetoric. Chapter III details the qualitative case study methodology employed to complete the study. This includes the purpose of the study, the research questions used, survey questions, an analysis of the rationale for the study, and how the data were collected, analyzed, and triangulated.

Research Context

In qualitative research, the researcher must factor in personal experiences and professional status as part of the context of the research. At the time I was the researcher conducting this work, I was a senior level member of executive leadership (i.e., president's cabinet) at a comprehensive community college with extensive experience in administration, internal and external policy, communications, and government relations at the local, state, and federal levels. This experience provided me with background at a state policy level where dual credit was impacted directly, thus providing insight into how policy changes have impacted students, secondary and postsecondary faculty, and administrators. Addressing the changing needs of students, institutions, and policy makers, were well served by having a researcher with a deep history in the field. Scholars have suggested research shows a need for states to address dual credit programs continually to better serve students, their intended outcomes, and taxpayers'

investments for both students and postsecondary institutions providing dual credit courses, developing the curriculum, mentoring faculty, and transcripting credits (Andrews, 2000).

Summary

The introduction provided a reminder of the substantial need for rigor in secondary academic engagement. Administrators, educators, and policy makers are turning to dual credit increasingly to keep high school students engaged in meaningful coursework. Research has suggested dual credit has not only increased rigor and engagement for high school students, but also has better prepared students for postsecondary academics and reduced their time and cost to degree completion (Andrews, 2000; Giani et al., 2014; Hoffman, 2012; ISBOE, 2020; Mansell & Justice, 2014; Piontek et al., 2016; Taylor, 2015; Taylor et al., 2015).

Idaho has a significant need to increase the number of students moving on to postsecondary study, defined as the go-on rate. Also, Idaho must improve its degree attainment, measured across populations, to better serve its citizens and economic development efforts through a skilled and ready workforce (Carnevale et al., 2010). Idaho has taken steps to increase dual credit participation to improve both college go-on rate and degree attainment percentage through adoption and implementation of the IAOA.

There are challenges in the dual credit sphere with course coordination, transferability, inequities between traditional academic credit/transfer courses, and career-technical courses. Many questions remain, but the state of Idaho needs to better understand dual credit through perspectives of students who have participated in the IAOP.

Chapter II: Review of Literature

The purpose of this case study was to examine dual credit experiences of students attending a single comprehensive community college in Idaho. The amount of available literature related to this topic was very limited to nonexistent. However, sufficient literature existed to provide a comprehensive review of the dual credit topic, its national history, and perspective. I also found existing published work to address differing views of the benefits of dual credit. This review contains a summary of work attempting to address Idaho specific policies and history related to dual credit. Additionally, the chapter reviews faculty perspectives, existing work detailing student experiences with dual credit, and work outlining financial benefits of dual credit programs. Lastly, an analysis and review of available literature surrounding case study methodology and conceptual frameworks used in existing published work on dual credit has been provided.

Background: Why Dual Credit Exists and Its Importance

The basic intent of dual credit program is to provide rigorous academic work for high school students. Administrators at the secondary and postsecondary level have identified the need to keep higher performing students engaged and working toward college preparation (Adelman, 2006; Duncheon, 2020; Giani et al., 2014; Hoffman, 2012; Hughes et al., 2005).

There are numerous outcomes from participation in dual credit, as they: (a) provide a meaningful way to engage high-performing students, (b) provide opportunity for early exposure to college level academics, and (c) build pathways from high school to college (Adelman, 2006; Pretlow & Wathington, 2014). As such, the positive relationship between dual credit participation and postsecondary degree attainment seems evident and needs to be duly considered in funding and performance equations (An, 2013).

Much of what is known about motivations to create and implement a sustainable and rigorous system to deliver college-level academic coursework to high school students stems from data indicating a positive correlation between a person's educational attainment level and their life-long earning potential. Studies at both the state and national level have repeatedly demonstrated earnings have been significantly enhanced by a person's progress and completion of certificates and degrees beyond a high school diploma (U.S. Bureau of Labor Statistics, 2020; U.S. Department of Commerce, 2002; Winters, 2020). This comparative gap can be nearly 40% of a weekly compensation rate (U.S. Bureau of Labor Statistics, 2020). However, translating this economic good fortune to high school students to encourage them to start earlier in their academic pursuits has been a more challenging proposition. Scholars have described various factors discouraging students from embracing these advantages of earlier enrollment in and completion of postsecondary education. Hahn and Price (2008) cited contributing factors including, "highly detailed and confusing admissions process(es), high tuition costs, and the lack of availability of aid and opportunity cost" (p. 4). This makes the importance of effective dual credit programs even more paramount as tuition inflation has outpaced consumer inflation nearly sevenfold (Bundick & Pollard, 2019).

Transition from high school to postsecondary education has been eased through dual credit programs where students learn they are capable of college-level academic work, thus helping to calm some anxieties (Bailey et al., 2002; Mansell & Justice, 2014; O'Connor & Justice, 2008; Stancliff et al., 2017). This effort goes back as far as the 1950s with the creation of advanced placement courses, commonly known as AP. The intent of dual credit, AP, and other efforts was to provide more rigorous academic challenges to high school students to better prepare them for college. Conversations between secondary and postsecondary policy leaders

related to about the importance of matriculation date back to the 1920s (Tobolowsky & Allen, 2016). This effort lacked cohesion and languished for several decades before reemerging in the early 1970s. The first established dual credit programs have not been delineated clearly. Several scholars have conceded Illinois was the first to embark into the world of dual credit, but the exact year varies depending on the institution involved (Young et al., 2014). Greenberg (1989) reported Syracuse University established a dual-credit effort entitled project advance in 1973. Faculty from both secondary and postsecondary schools took 1-semester introductory courses in English, computer sciences, sociology, psychology, biology, calculus, and chemistry and adapted them into two-term courses (Tobolowsky & Allen, 2016).

One of the first formal implementations of a comprehensive statewide dual-credit effort started in 1985 in Minnesota. Lawmakers approved high-achieving secondary (i.e., high school) students to take courses at Minnesota community and technical colleges, state universities, and the University of Minnesota (Gerber, 1987). Other states followed shortly. In the Northwest, Washington state provided a pilot program to address the dual-credit effort with the creation of the Washington Running Start program in 1990. The pilot program had five participating colleges initially but expanded statewide during the 1992–1993 academic year, with 3,528 students enrolled in Washington state community colleges. Florida, Illinois, Massachusetts, Missouri, New Mexico, Michigan, North Dakota, and Virginia adopted state specific approaches before the end of the 1990s (Andrews & Olney, 2000). States have seen a significant increase in participation in dual credit courses. In Kentucky, "Senate Bill 1, in 2009, charged the Kentucky Department of Education and the Kentucky Council on Postsecondary Education with developing a unified strategy to reduce the need for college remediation and increase the rate at which students obtain postsecondary degree(s)" (Piontek et al., 2016, p. I). This legislation

mirrored recognition of student count rising from 9,321 in 2001–2002 to 19,045 in 2008–2009 in the wake of dual credit as a result of the coordinated approach involving policy implementation, strategies for seamless credit transfer, and reduction in programmatic duplication (Lochmiller et al., 2016). Mokher and McLendon (2009) claimed "states with policies dealing with dual credit were recorded in 1976" (p. 21). Mokher and McLendon further stated, "unified Republican control of (the) state legislative bodies increased the likelihood of adopting a dual credit policy" (p. 254).

Simultaneously, similar results regarding interest and participation took place across the country. Taylor and Lichtenberger (2013) noted, *"*the proportion of U.S. high schools whose students participate in dual credit programs has increased from 71% in 2002–2003 (U.S. Department of Education, 2003) to 82% in 2010–2011" (Thomas et al., 2013). Impressively, not only did the percentage of high school students taking dual credit rise substantially, but the total number of high school students increased substantially during the same period, from an estimated 1.2 million students in 2002–2003 to over 2.0 million in 2010–2011 (Taylor & Lichtenberger, 2013).

Even though dual credit was in its infancy in the 1980s and 1990s, administrators were active in implementing efforts to increase rigor. In 1982, only 14% of U.S. high school students took the recommended coursework for postsecondary preparatory success: 4 years of English, 3 years each of science, math, and social studies. That figure increased to a robust 51% by 1994, mostly due to increased offerings and subsequent enrollments in more rigorous courses (Bailey et al., 2002).

Several programs have described the approaches used in the overarching theme of accelerated learning options or credit-based transition courses, including AP, IB, and concurrent

or dual credit. Middle college high schools were also included in this area, sometimes referred to as early college high schools (Bailey & Karp, 2003). Although there are discernable differences between the approaches, the intention to help students earn postsecondary credit in high school binds them together as a common thread.

It is important to note IB courses require standardized exams, like AP courses, and are offered at the high school by the high school faculty, but the courses are not placed automatically on a postsecondary transcript upon completion. Students must take and pass the end-of-course exam and then await an award of transfer credit from the receiving institution before the class can be counted for both high school and postsecondary academic progress (Tobolowsky & Allen, 2016).

Bailey and Karp (2003) defined three essential types of dual credit programs: "singleton, comprehensive, and enhanced comprehensive" (pp. viii-xi). A singleton was described as a program through which students could take a course resulting in credit for both secondary (i.e., high school) and postsecondary (i.e., college) credit. Singletons can be core or elective courses, but are not the student's entire schedule and as such are not replicating the postsecondary experience. Rather, these courses introduce students to their postsecondary academic journey. AP courses, dual credit courses, and some tech-prep (i.e., CTE based curriculum) courses fall into this distinction.

A dual credit program is defined as comprehensive when *"*the majority, if not all, of the courses a student takes earns both high school and college credit, simultaneously" (Bailey & Karp, 2003, p. ix). These programs concentrate on the final 2 years of high school, increasing in rigor and expected outcomes. IB programs also fall into this category. Lastly, Bailey and Karp (2003) detailed enhanced comprehensive programs as consuming nearly the entirety of a

student's high school career. Not only do comprehensive programs define the academic pathway, but mentoring, counseling, and general student support services commonly found on a college campus are integrated into this model. Early college high schools and middle college high schools have occupied this space primarily, typically catering to traditionally underrepresented populations, as opposed to singleton and comprehensive models "primarily focused on middle or low achieving students and on youth who are socially or economically disadvantaged, but many still have restrictive requirements" (Bailey & Karp, 2003, p. 17; see Table 1).

Table 1

Types of Dual Credit Offerings

Type	Definition	Examples
Singleton	Individual elective course intended to introduce students to rigor of college courses and earn college credit	AP, dual credit, some tech prep programs
Comprehensive	A series of courses or entire curriculum designed to introduce students to academic rigor in their last two (2) years of high school	IB, some limited tech prep and dual credit programs
Enhanced comprehensive	Courses are a part of a complete curriculum of only dual credit courses that offer students support services	Middle college high schools, Early college high schools

Note. Adapted from "Promoting college access and success: A review of credit-based transition programs," by T. R. Bailey & M. M. Karp, 2003, Office of Adult and Vocational Education, U.S. Department of Education.

Need for Dual Credit

Education entities have attempted to better prepare students for their future, whether in the workforce or in transferring to continuing studies. Some literature has suggested students need 2 years of postsecondary education to learn advanced skills and required knowledge; thus, dual credit students were more likely to persist to complete their courses of study after graduation (Watt-Malcom, 2011). Regardless of whether high school students pursued a traditional academic path at a 4-year college or university or if they elected to explore options through career-technical education, data supported the notion dual credit students had stronger academic values, connections to goal setting and completion, and a higher level of confidence (Young et al., 2014). States need to enact policies reflecting these goals to effectively and efficiently establish, implement, and grow dual-credit program.

The history of dual credit has demonstrated most programs began organically due to partnerships between school districts and community colleges. These efforts lacked a comprehensive, focused policy dealing with basic logistical requirements for delivery, assessment, and reviews for quality of instruction and transferability of credit from a statewide perspective, but rather they reflected local needs and practices at the time of inception (Taylor et al., 2015). Several studies addressed what was needed in statewide dual credit policy, but the issue of quality has remained largely untouched (Bailey & Karp, 2003; Berger et al., 2010; Hughes et al., 2005; JoHyun, 2014; Karp et al., 2004; Taylor et al., 2015).

As states have moved forward with dual credit efforts, policies have been enacted to address emerging concerns. Karp et al. (2005) reported 40 of 50 states had dual enrollment legislative or regulatory policies (p. 2). The degree of regulation has varied greatly regarding areas of focus and control, ranging from voluntary to mandatory and including financial

oversight and compliance and targeted populations and admissions. Karp et al. noted several key areas in which lawmakers and those with policy oversight should concentrate their dual credit efforts, including (a) access; (b) course transferability; (c) partnership and faculty engagement; and (d) state mandates, regional accreditation, and local variation.

Access

At first glance, access should not be a worthy of research time and effort, as 98% of all community colleges in the United States offer dual credit as part of their open access mission (Thomas et al., 2013). However, the disconnect in policy and practice has put access squarely in the arena of needed focus. Many local public school districts and governing boards have put policies in place to establish required criteria before students can participate in dual credit programs. This effectively nullified community colleges' open access missions and their ability to providing dual credit courses (Thomas et al., 2013). Some states have integrated dual credit programs into student academic planning documents, thus giving a much broader exposure to student populations, all of whom stand to benefit from postsecondary exposure (Taylor, 2015).

Course Transferability

Most states have adopted policies about course transferability of dual-credit courses. However, receiving institutions have retained the right to review course before granting any credit. There are numerous accounts of colleges refusing to accept dual credit courses fully, despite state policies mandating courses be fully transferrable when awarded by a regionally accredited institution (Pretlow & Patteson, 2015). This has often resulted in frustration for students and parents who have paid to repeat courses they have already taken, paying a far higher tuition rate, and perhaps even more egregious, taking more time which has delayed graduation;

thus, completion rates have been impacted, defeating one of the major goals of dual credit efforts (An, 2013; Krueger, 2006; Swanson, 2010; Young et al., 2014).

Arizona has taken a proactive approach with the formation of taskforces designed to conceptualize, design, and implement creative, effective solutions for challenge of credit and course transferability (Stancliff et al., 2017). These taskforces have encompassed more than 40 postsecondary disciplines, with 1,700 participating individuals representing all public and tribal postsecondary institutions across the state. This kind of deep, comprehensive approach to collaborative problem solving has resulted in solid, sustainable policies serving secondary and postsecondary students, alike.

Two common themes have resonated from the literature, considering the mix of published work. First, there was a significant difference in approaches for all aspects of policy; and second, issues with quality assurance have remained largely unsolved.

Faculty Perspectives and Partnerships on Dual Credit

The role of faculty in the dual credit arena is critical. The concept of ensuring rigor in curriculum and instruction is embedded in the role of faculty. There have been concerns about rigor, especially when dual credit coursework has been delivered physically at the high school (Bailey & Karp, 2003; Radunzel et al., 2014). One method used to ensure quality and rigor has been to address faculty credentials and certification. The National Alliance of Concurrent Enrollment Partnerships (NACEP) began at a conference at Syracuse University in 1997 as the result of educators discussing challenges surrounding offering postsecondary level instruction in high schools (Scheffel, 2016). Scheffel (2016) stated standards were considered and adopted immediately, as a result of deep concern of ensuring dual credit or concurrent enrollment courses were truly college-level, they produced positive learning outcomes, and the institutions issuing

and honoring the credit could be assured the courses met rigor and value standards. NACEP criteria were adopted to address the student experience through curriculum rigor. The criteria were also adopted to help support and address faculty concerns regarding credential and degree, mentorship, training, and expertise in the field of study and instructional methods (NACEP, 2020). Stronger and more collaborative partnerships resulted in greater impacts on students (Kim & Bragg, 2008). One example of exemplary work in this area was the coordination and collaboration of faculty and industry partnerships in the career-technical education (CTE) arena. A report delivered by the National Assessment of Career and Technical Education to Congress (2014) referred to the Carl D. Perkins federal programs and how they mandated secondary and postsecondary entities worked together to develop a "seamless program of study" (p. 2) for students in Grades 9–14. Statewide policies addressing partnerships and cohesion of curriculum were most effective (Taylor et al., 2015). Compliance has been a challenge as community colleges have often been the most underfunded educational entities in the state (Mullin, 2010). Resources have been the scarcest commodity, including human capital. Faculty engagement with community partners has helped mitigate some of the shortage, but capital resources have been needed often to complete much of the development work related to curriculum development and instructional delivery.

In Idaho, natural faculty partnerships have formed because of a statutory requirement stipulating high school faculty teaching a dual credit course for a postsecondary institution must have an assigned faculty mentor from the staff of the college or university providing the class or coursework (Idaho Legislature, 2016). This mentor–mentee relationship has helped to advance a sense of partnership between the college or university and the high school. Benefits such as engagement for both faculties have been realized through deeper commitment to effective

instruction and coaching for students. Community college faculty benefited as they received development so they could transition into adjunct roles to advance their careers if desired. The importance of on-going training and development of partnerships between the community college faculty and high school faculty cannot be overstated (Taylor et al., 2015).

There have been challenges in dual credit courses concerning instructional faculty in the classroom. Provided certain criteria have been satisfied, traditional dual credit models have used both high school and college-level faculty to deliver instruction. The physical setting in which students take dual credit courses has been the subject of study and academic inquiry. These studies have attempted to answer where the classroom setting makes a difference in measured student outcomes. There have been a range of dual credit delivery methods, including online classes, in-person classes at the community college or another postsecondary institution, or classes at the student's home high school (Tobolowsky & Allen, 2016). Offering courses in the student's home high school has been a long-standing practice. Young et al. (2016) reported approximately 74% of all dual credit courses offered nationwide in 2005 occurred on a high school campus. Only 23% of enrolled students took their courses on a postsecondary campus and just 4% were delivered online. Research from 2006 indicated a transition to more on-campus class delivery of dual credit courses resulted in a more positive experience for students. A broader array of available courses, use of more advanced technology, better facilities, and higher possibilities of positive interactions between traditional-aged college students and high school students all contributed to a better student experience (Jordan et al., 2006).

Necessary faculty credentials were often a central concern when the issue of instructional quality emerged. *A Nation at Risk* declared the United States needed to provide an improved, skilled, and adaptable workforce (National Commission on Excellence in Education, 1983).

Higher education and secondary education needed significantly improved outcomes to supply the workforce. Improving teacher credentials at the high school level was one of the strategies to improve outcomes. More rigorous credentials would result in more rigorous studies and, ultimately, student learning and achievement (Fincher-Ford, 1996). Credentialing and accreditation of dual credit instruction was realized through the founding of NACEP programs in 1999 (NACEP, 2020). The first concurrent enrollment standards of the NACEP (2020) were adopted in 2002, revised in 2009, and revised again in 2017. These standards helped ensure course delivery, materials, and quality of instruction were equal to students' expectations when they took the same course physically on a college/university campus. Provisions were also included to ensure the student support experience was as equal as possible to what would be expected on a college or university campus.

These standards were also based on criteria treating high school faculty the same as adjunct faculty members in the community college arena. Teachers were required to hold a master's degree and subject-matter expertise (Borden et al., 2013). This standard illuminated the difference between dual credit instruction and AP at the high school level. A master's degree and subject-matter expertise are required to teach as an adjunct/dual credit instructor at the community college level. There were far less stringent requirements for high school faculty to become AP certified. According to the National Center on Education and the Economy (2020) and the College Board (2020), a high school faculty must pass a certification exam in a desired area of curricular instruction to teach AP courses.

State Mandates, Regional Accreditation, and Local Variation

With previously described models in mind, states defined their individual approaches to clarify intent and outcomes in policies and statues. For example, Djurovich and Fergus (2017)

cited Minnesota state law which said, “dual credit or dual enrollment programs allow eligible high school students to take postsecondary courses for both college and high school credit while a student is enrolled in high school” (p. 13). The statute clarified courses could be taken at the high school, online, or on the actual college campus. A more central definition of dual credit was found in Hoffman’s (2012) work provided a more central definition of dual credit “programs that enroll high school students in college courses for college credit” (p. 2). Commonly referred to as dual enrollment, these programs belonged to a broader category called “college transition programs” by the U.S. Department of Education in 2003 (p. 1).

According to Tobolowsky and Allen (2016), effective programs showed the importance of defining terms, scope of operation, and logistics. In Idaho, dual credit has been defined in Idaho Code §33-4602 and by the Idaho Advanced Opportunities Act (Idaho Legislature, 2016). Additionally, definitions for IB, AP, and tech prep were also explained, as were the mechanisms for payment on behalf of the student through the Idaho SDE to the corresponding higher education institution.

In summary, the term dual credit was defined as a college course with college-created curriculum, delivered by a college-approved faculty, through which the student receives credit both at the postsecondary institution and the corresponding secondary/high school upon successful completion of the course (Adams, 2013).

Idaho Dual Credit History and Advancements

In Idaho, early efforts to provide more rigorous coursework through dual credit had several disparate efforts in the late 1980s and 1990s. High school students wanting to take college-level courses for credit were relegated to enrolling as a part-time student at an institution; thereby, paying part-time tuition and course fees, navigating schedules to and from campus, and

finding the flexibility in their own high school schedule. Recognizing difficulties this approach presented, Idaho launched an official coordinated statewide effort in 1997 (ISBOE, 2018b). Progress was slow and the Idaho legislature created the Idaho Digital Learning Academy (IDLA, 2020) in 2002. IDLA's primary function was to provide digital delivery of courses for students needing flexibility in scheduling or without access to needed courses, including more rigorous courses qualifying as dual credit (IDLA, 2020). Progress was made over the next decade with a benchmark of approximately 9,000 students participating in IDLA courses in 2012 (ISBOE, 2018b).

Legislative changes were enacted in the 2012 session introducing the precursor to the eventual IAOP: the fast forward program (Idaho Legislature, 2012). The program provided state monies for students taking advanced, rigorous coursework resulting in early completion of high school graduation requirements. Monies were capped at $200 for high school juniors and $400 for seniors. The 8 in 6 program was also adopted. The 8 in 6 program addressed high performing students completing advanced coursework to satisfy their graduation requirements, a provision existing to roll the savings realized by the state by not having to provide the student with funding at the secondary level. Those savings were used subsequently to help fund the student's postsecondary efforts for the equivalent of their first 2 years of college (Idaho Legislature, 2012).

A monumental shift occurred in 2014–2015; Senate Bill 1050 was passed. SB 1050 combined all efforts underway at the time and reorganized them into the Advanced Opportunities Act. The legislation removed the cap for reimbursement for high school juniors and seniors, thus clearing the way for a dramatic increase in course enrollment (Idaho Legislature, 2015).

In the 2016 legislative session, the Idaho legislature approved House Bill 458, which attempted to address the challenges of increased course enrollment and others that had started to

present themselves through the passage of the Advanced Opportunities Act (ISBOE, 2018b). The IAOA provided $4,125 of state general fund monies for each high school student to use during their secondary school years on dual credit courses, AP courses, CTE courses, IB courses, and college placement tests, such as the ACT or SAT. Monies were paid to the college or universities on behalf of the student by the Idaho State Department of Education (ISDE). Payment for the high school faculty member by the postsecondary institution for their work would still be at the discretion of the district that employed the faculty member and was on an institution-by-institution basis. The fee of $65 per credit was established with a provision to raise to that amount to $75 with ISBOE approval.

The ISBOE created partnerships with seven public postsecondary institutions; Boise State University, College of Southern Idaho, College of Western Idaho, Idaho State University, Lewis-Clark State College, North Idaho College, and the University of Idaho. Two private, not-for-profit institutions were also included in the partnership: College of Idaho and Northwest Nazarene University. A third private, non-for-for profit institution, Brigham Young University-Idaho was added in 2018 (ISBOE, 2018). One more additional public comprehensive community college, the College of Eastern Idaho, formerly known as Eastern Idaho Technical College, was also added in 2018 (ISBOE, 2018b).

Any changes to the established tuition fee of $65 per credit were subject to approval by the 8-member ISBOE. The ISBOE sets all tuition and fees annually for the public 4-year college/universities. Idaho's four community colleges each have their own locally elected boards of trustees who hold the responsibility to set tuition and fees, including dual credit courses. Although a different tuition structure for dual credit through an Idaho community college is not prohibited, the long-standing practice has been for the four community colleges to align their

dual credit tuition rates with the ISBOE (S. Crumrine, personal communication, February 25, 2020). In April of 2019, the ISBOE raised the tuition rate for dual credit from $65 to $75, citing increased cost of delivery and oversight incurred by the institutions (ISBOE, 2021). Each of the four community colleges followed, adopting the new $75 per credit rate for dual credit.

The importance of dual credit in Idaho cannot be overstated; the state has a low go-to-college rate and a corresponding low number of adults holding a degree or certificate. Dual credit has been identified by the ISBOE, the Idaho legislature, and policymakers across Idaho as the main vehicle through which these low performing areas can be corrected. Understanding the history of dual credit, the reasons why it was originally created, and its effectiveness are key to the success of the IAOP program.

Student Perspectives on Dual Credit

Students' experiences with dual credit programs have not been explored rigorously in scholarly research. Multiple studies have pointed out benefits of taking dual credit such as increased engagement in later years of high school, academic preparation for postsecondary courses after graduation, and savings in time and costs for students and their families (Andrews, 2000; Duncheon, 2020; Hoffman, 2012; Kingston & Anderson, 2013; Piontek et al., 2016; Pretlow & Wathington, 2014; Squires & Edmonds, 2016; Taylor et al., 2015; Tobolowsky & Allen, 2016). Furthermore, data gathered and reported by the National Student Clearinghouse indicated students who complete dual credit coursework were 10% more likely to complete a degree, at minimum (Sheffel, 2016).

Another benefit to students was a boost to their academic confidence and psychological perspective (Duncheon, 2020). An unidentified student in Duncheon's (2020) work stated, "Teachers have a curriculum to follow and they have to teach a certain way. . . . The dual credit

program develops you to do well in [the] college. So, I'm taking my basic math course dual credit and, then, in the summer, I'll take Calculus 1" (p. 24). Other student perspectives indicated their motivations to take dual credit courses were grouped by the following responses: incentives, challenges, college readiness, or extra boost in grade point average (O'Connor & Justice, 2008). Although these findings were relevant and significant, they could be more impactful if they were explored using a deeper qualitative inquiry such as interviewing. Of the 51 articles, reports, and books I reviewed in this area, only Duncheon (2012) and Jaramillo et al. (2019) offered first-person student quotes, reactions, or perspectives. Qualitative interviews with students offering their experiences in dual credit are needed and will advance the body of scholarly work overall.

Financial Benefits and Considerations of Dual Credit

Finances are a crucial area of dual credit analysis. For example, some of the pertinent questions addressed in existing literature were: who pays for the courses, why is dual credit important, and what are the states' motivations to fund dual credit. In many cases, students have had little out of pocket expenses for their participation in dual credit programs (Orr, 2002). Some states have taken a more aggressive approach, offering discounts on tuition at state universities for students who complete an associate degree through dual credit in high school. In Utah, 75% of upper-class tuition costs (i.e., Years 3 and 4, junior and senior years) are waived for Utah students earning their associate degrees in high school (Bailey et al., 2002).

Texas has taken a more conservative approach. Students who want to enroll in dual credit courses pay their own tuition and the cost of books. Many disadvantaged populations have been eliminated from participation by virtue of the economic burden. As a result, the early college high school concept was enacted in 2003 in Texas through which colleges and universities

decided to waive all or part of students' tuition and fees related to the effort (Mansell & Justice, 2014). Dual credit enrollments have been counted in the overall headcount calculation helping to bolster enrollment gains from year to year and resulting in increased funding based on various formulas depending on the state (Andrews, 2000; Taylor, 2015).

In Idaho, tuition and fees covering early offerings of dual credit have been paid entirely by the student. Local public school districts covered the cost of required textbooks as part of their contribution to the program, justified by the fact courses counted toward high school graduation requirements in addition to awarding college credit. Reduced tuition and partial stipends covering costs were added as the policies were amended in 2008, and again in 2012 (ISBOE, 2018b). Ultimately, with the adoption of the IAOP in 2016, Idaho took a step toward full financial commitment to dual credit as a mechanism to reduce students' costs for college and increase their degree completion and go-on rates. The IAOP provided $4,125 for each student to take dual credit courses, covering AP and IB testing costs and SAT and ACT college entrance exam fees (SBOE, 2018a). As the program grew, institutions received monies in exchange for providing dual credit courses, as outlined in Table 2.

Table 2

Dual Credit in Idaho Academic Year 2018-2019 (Fiscal Year 2019, FY19)

Institution	$ Amount	Credits	Unduplicated students served
FY 2020	$17,419,573	233,835	29,672
Boise State University	$2,390,847	31,999	6,822
College of Eastern Idaho	$198,161	2,651	537
College of Southern Idaho	$3,141,298	42,154	7,640
College of Western Idaho	$4,833,024	64,848	11,716
Idaho State University	$1,821,526	24,388	3,744
Lewis-Clark State College	$561,013	7,509	1,229
North Idaho College	$1,319,941	17,883	1,888
University of Idaho	$860,760	11,498	2,331
Northwest Nazarene University	$2,096,976	28,061	5,894
Treasure Valley Community College	$98,725	1,517	246
Utah State	$70,050	935	140
Brigham Young University-Idaho	$15,768	324	51
Other	$11.485	68	49

Note. Data from "State Research Dashboards," by Idaho State Board of Education, 2020 (https://dashboard.boardofed.idaho.gov/StatewideDashboards.html#timelineLine).

In Idaho, as in other states, dual credit enrollment has been included in the total calculation for any adjustments in base funding related to average enrollment. This calculation in Idaho has been called enrollment workload adjustment (EWA). Adopted by the ISBOE as part of its education policy in 2007, the formula used a weighted value system awarding funding dollars based on an institution's production of degrees and certificates. Dual credit students enrolled as part-time students at Idaho public institutions subject to EWA were counted as part of the total headcount, but they also skewed degree and certificate completion rates as few students completed a credential awarded from the postsecondary institution prior to graduating high

school (ISBOE, 2007). Bailey et al. (2002) reaffirmed multiple benefits beyond funding increases were attributed to dual credit, including "improved relationships with area high schools and local communities" (p. 15).

Funding has been a major consideration of state dual-credit programs. In Idaho, this approach to fully fund a student's postsecondary study effort when still in high school helped to further establish the theory of justice, stating individual rights and liberties should be equally distributed (Rawls, 1999). If a state's constitution guaranteed rights such as the right to establish and maintain a general, uniform, and thorough system of public free common schools, as in Idaho, then Rawls' theory is applicable (Idaho Constitution, 1889).

Although the moral context has been addressed through Rawls' theory of justice (1999), substantial literature has covered the economic imperative driving early college completion through dual credit courses. States investing in dual credit expected to see returns from students completing college sooner and entering the workforce earlier, and in turn, contributing to state coffers (Phelps & Chan, 2016). The impending retirement of Baby Boomers in the United States has been equally as pressing as a state's desire to see return on their investment. Estimates have showed 76 million individuals will reach traditional retirement age by 2024. Some industries, particularly the middle-skilled or those requiring some postsecondary education or training below a baccalaureate degree, will be affected disproportionately by baby boomer retirements (Matheny et al., 2015).

Differing Views on Dual Credit

Scholars have written about inconsistencies in definitions of rigorous coursework high school students have taken for college credit (Adams, 2013; Bailey & Karp, 2003; Tobolowsky & Allen, 2016; Ward & Wolf-Wendall, 2016). Multiple terms and subsequent definitions abound

in the literature such as designations like concurrent enrollment, joint enrollment, or dual enrollment, creating a challenge for centrality and uniformity. Ward and Wolf-Wendel (2016) stated, “Dual Credit can also fall under other more generic terms: accelerated learning options, or credit-based transition courses” (p. 8).

Dual credit has had its challenges with several stakeholder groups (Krueger, 2006). Assertions of diluted program quality and ineffective instruction and systems inherently created obstacles for underserved student populations. Consistent tracking of students and their educational progress, or lack thereof, has remained an issue for institutions (Sheffel, 2006). Faculty and administrators have been concerned with dual credit on multiple fronts (Andrews, 2000). These potential obstacles have included fears from faculty “that they will lose classes of exceptional students that they might otherwise be assigned to teach” (Andrews, 2000, p. 36). Fink et al. (2017) raised questions about why students in some states have done substantially better in college than students in other states, and why there have been large achievement gaps between different income groups in some states.

Scholars have considered the role of education in addressing inequity among underserved populations (Jones, 2019; Kelly, 2015; Kelly & Elliot-Kelly, 2018; Nachbaur & Kyriakides, 2020; Perna, 2020). Despite spending decades studying and subsequently attempting to address inequities in education, minority groups such as persons of color, women, and other underrepresented groups have been overlooked in educational research and dual credit research, specifically (Dillard, 2000; Milner, 2007; Taylor, 2015). There have been gaps not only in equity regarding diversity in educational research, but there has been a significant need to acknowledge the basis of bias and privilege when structuring and designing research (Tatum, 2001). Tatum (2001) stated:

> In a race-conscious society, the development of a positive sense of racial/ethnic identity not based on assumed superiority or inferiority is an important task for both White people and people of color. The development of this positive identity is a life-long process that often requires unlearning the misinformation and stereotypes we have internalized not only about others, but also about ourselves. (p. 53)

Some significant areas regarding equity in dual credit offering, delivery, and completion among served populations have needed review and correction. Researchers found little or no improvement in an examination of a 2005–2006 policy change in Virginia specifically designed to encourage more dual credit participation in underrepresented populations such as men overall and male and female Hispanics and Blacks (Pretlow & Wathingon, 2014). Although White students made up 64.3% of the 2006 graduating class, they accounted for 80.3% of dual enrollment students. The corresponding figures for Black students were 23.8% and 13.9%, respectively. The numbers of dual-enrolled Hispanic students remained abysmal. Though Hispanics accounted for 5.5% of the 2006 graduating class, they constituted less than one half of 1% (0.41%) of dual-enrolled students, with only 50 of the 4,334 Hispanic graduates participating in a minimum of one dual enrollment course during their senior year (Pretlow & Wathingon, 2014). The gaps widened, leaving equity issues unresolved. Further research asserted expansion of academic programs in native languages could help with comprehension and assessment performance (Zuniga et al., 2018). Additional research looked at rural versus urban settings, suggesting students in rural settings with relative equal access to dual credit enrolled and completed courses in comparative numbers to their urban counterparts. Diversity of courses offered and depth of instructional expertise and credentials were factors for the same students (Hodara & Pierson, 2018).

Despite the long-standing inequities in higher education for students of color and students with low socioeconomic status, community colleges have remained a focal point of hope for student populations of all demographic categories, but especially those in underserved populations (Long, 2016; Long et al., 2014; Park & Assalone, 2019). Recently, improvements in outcomes based on equity and equitable measures have become more prevalent than the traditional benchmark of equitable access as the most effective and appropriate way to address equity issues in postsecondary education (Dowd, 2003).

Methodology and Conceptual Framework

For decades, scholars have engaged in studying dual credit courses (Adams, 2013; An, 2013; Andrews, 2000; Bailey et al., 2002; Blankenberger et al., 2017; Duncheon, 2020; Hodara & Pierson, 2016; Karp et al., 2007; Orr, 2002; U.S. Dept. of Education, 2003; Young et al., 2014). Both quantitative and qualitative methods have been employed in exploring and analyzing dual credit, depending on the scope and nature of the effort. Although quantitative methods address the question of how many and how long adequately; more is needed to adequately address the question put forth by many scholars; why?

Ravitch and Carl (2016) defined methodology as "the ways in which your overall stance and approach to research broadly and your study specially shape your specific research methods to collect and analyze data, e.g., interviews, focus groups, specific analytic processes" (p. 6). Of the six main qualitative methods (i.e., phenomenological, ethnographic, grounded theory, case study, historical, and the narrative model), the case study method has been the most often used.

Researchers examining the progress and needs of dual credit programs in six nonurban Kentucky school districts used a qualitative case study method (Piontek et al., 2016). The combination of data analysis, paired with insightful interview questions, provided the research

team with all they needed for "the first systematic investigation of dual credit policies and practices in Kentucky College and Career Readiness Alliance member districts" (Piontek et al., 2016, p. 2).

A more traditional, quantitative case study approach to data analysis of dual credit was offered by Giani et al. (2014). Giani et al. (2014) used data from the Texas education research center to develop a statistical analysis of gaps "between high school and postsecondary for all students, and particularly students that come from populations historically underrepresented in higher education" (p. 214). The work lacked a context that could have been provided through qualitative interviews of students, faculty, and administrators involved with dual credit in the areas queried. O'Connor and Justice (2008) incorporated questions aiming to glean more information and insight about the obstacles or incidents preventing students from enrolling in dual credit courses. Their work used qualitative inquiry through survey questions to establish categories about obstacles and incentives to dual credit enrollment. The case study methodology was key to effectively revealing potential areas of improvement to existing dual credit policy in Texas (O'Connor & Justice, 2008).

Other recent examples of qualitative case study work on dual credit have included DeSalvo and Fergus (2017), Duncheon (2020), Duncheon and Relles (2020), Eden (2020), and Hart (2019). Alpi and Evans (2019) best summarized the evidence for choosing qualitative case study methodology:

> As a qualitative methodology, however, case study research encompasses a great deal more complexity than a typical case report and often incorporates multiple streams of data combined in creative ways. Distinctions include the investigator's definitions and delimitations of the case being studied, the clarity of the role of the investigator, the rigor

of gathering and combining evidence about the case, and the contextualization of the findings. (p. 107)

Not all scholars have agreed case study research is viable and sustainable (Corcoran et al., 2004). Yin (2014) said case studies allowed the researcher to "reveal the multiplicity of factors which have interacted to produce the unique character of the entity that is the subject of study" (p. 82). This has been often overused, bringing an overdependence on case study to essentially cover any research methodology that is not a survey or experiment (Merriam, 1998).

Qualitative case study research can be more effective and sustainable if careful consideration is taken during research design to address four main areas of concern:

- Purpose: Define a clear purpose from which the study draws and proceeds
- Role of players: Ensure all actors (players) involved in whatever effort studied are represented and engaged in the process to best guarantee data and feedback.
- Tension: A natural tension exists between practice and theory. Work to address those positive findings to be incorporated into future practice.
- Challenge: Push the reader and the researcher. What is more challenging can and should be more significant. (Corcoran et al., 2004)

Although there were significant case studies published about dual credit, there was a noticeable lack of scholarly work examining distinct methodology and its impact on research outcomes. This is an area of potential future study for scholars to consider.

Conceptual Framework

The importance of aligning a conceptual framework as part of the research structure cannot be overstated (Collins & Stockton, 2018). The essential function of conceptual frameworks was defined by Collins and Stockton (2018) as a "map of how all the literature

works together in a particular study" (p. 2). For the purposes of this qualitative case study, I chose economic rational choice theory as the conceptual framework. Rational choice theory is the basis of economic rational choice theory. Rational choice theory is addressed in research by Wittek (2013) who summarized several models explain or attempt to explain social phenomena as outcomes of a person's actions. In the context of dual credit and students' decisions to enroll in these courses, rational choice theory and economic rational choice theory, specifically, surmise students make these decisions based on an assumption the outcome (e.g., course completion, grade, earlier start on college level-work work) will be positive in a general sense.

The overarching umbrella of choice theory bridges out from economic rational choice theory and general rational choice theory. Choice theory as purported by Glasser (1990) suggested humans have five basic needs embedded in their fundamental structure: survival, love, power, fun, and freedom. As one looks at the five basic needs, the student's perspective on dual credit can be realized. Dual credit coursework is a matter of academic survival. Love of rigorous learning is addressed through dual credit; having power over one's own academic journey can be exercised through the choice of taking dual credit. Finally, fun and freedom come into play as the student realizes the positive outcomes of the first three choices.

Researcher Perspective

Given the history and increasing importance of dual credit in the U.S. educational landscape, I had expected a significant amount of scholarly research would be available. Additionally, given the smaller stature of the state of Idaho in terms of educational populous and presence, I did not expect to find robust levels of research specific to Idaho to be available on the topic of dual credit. These expectations were met.

In the arena of literature relevant to methodology and theory, again, I expected there would be sufficient literature to satisfy the needed review to help substantiate the choice to employ this methodology given the popularity of qualitative case study. After completion of all reviewed literature, I was confident in my choice of methodology and theory as effective tools through which this study was executed and would be of value to the scholarly community to help advance the body of knowledge on the topic of dual credit.

Summary

The topical perspective of dual credit comes from a multifaceted desire of educators to increase rigor in a student's latter year(s) of high school, attempting to keep high school students engaged, giving them an early start on their postsecondary academic journey, easing their transition to college, and ultimately reducing their time to degree completion of a postsecondary credential or degree (Adelman, 2006; Duncheon, 2020; Giani et al., 2014; Hoffman, 2012; Hughes et al., 2005). Early dual credit programs aimed to accomplish this goal were found as far back as the 1950s through advanced placement programs. True dual credit courses, defined as a college course delivered at a student's home high school for college credit, were found initially in the 1970s and 1980s. Dual credit programs became more mainstream in the 1990s, when eventually 40 of 50 states offered some sort of dual credit in their systems. In 2022, 47 of the 50 states and the District of Columbia, have state law or policy addressing dual credit delivery.

Delivery models of these programs range from AP, IB, early college high schools, and middle college high schools to dual credit. These delivery methods are defined by three main models: singleton, comprehensive, or enhanced comprehensive. Financing these efforts through tuition and course fees has been a continual challenge for states, school districts, and corresponding postsecondary institutions (Duncheon, 2020). As a result of the varied approaches

to financing and course and model delivery, there has been a significant need to implement policy to ensure quality, consistency, and desired outcomes for all parties.

NACEP serves a key role in accrediting dual credit programs to give guidance for instructional excellence, ensuring equity in course delivery and outcomes, student experience, and faculty credentialing (Sheffel, 2016). Equity issues have remained for several disadvantaged populations when considering dual credit. Lower socioeconomic students and students of color have been far less likely to have access to dual credit as data and research revealed clearly they were the populations most in need of equitable access to higher education (Long, 2016; Long et al., 2014; Park & Assalone, 2019). The student first-person perspective has been woefully understudied in available research. Multiple studies existed including annual Idaho specific quantitative reports of aggregated survey data and course outcomes; however, qualitative interview-based research = has been significantly limited. This finding solidified my choice to conduct a qualitative case study as a meaningful, significant contribution to the field.

Finally, the review of literature on methodology, specifically qualitative case study methodology, paired with economic rational choice theory as a conceptual framework proved satisfactory. Case study has been widely accepted and acknowledged as a preferrable method through which descriptive observation and analysis could take place (Patton, 2002).

In conclusion, although there has been a fair amount of literature on the general topic of dual credit, there is an apparent need for further study in numerous areas on the topic of dual credit, especially first-person student accounts for Idaho specific institutions.

Chapter III: Methodology

Dual credit has been used in many states as a solution to the problem of low go-to-college rates, to address the challenge of keeping academic rigor part of the high school curriculum, and as a way to help parents and states ease the cost of postsecondary education (Adams, 2013; An, 2013; Andrews, 2000; Bailey et al., 2002; Blankenberger et al., 2017; Duncheon, 2020; Hodara & Pierson, 2016; Karp et al., 2007; Orr, 2002; U.S. Department of Education, 2003; Young et al., 2014).

The topic of dual credit and its impact on students is worthy of consideration given the amount of time, effort, and financial resources states like Idaho are devoting to dual credit courses. In 2020 fiscal year, the state of Idaho spent $17.419 million on dual credit courses for students (ISBOE, 2021). Despite spending millions on dual credit course, Idaho's go-on rate has not improved and has remained stagnant at 42% for more than 7 years (ISBOE, 2021). This lack of substantial improvement helped cement the need for research to address the following questions. How well is dual credit working in Idaho? Why are students who take dual credit, seemingly not going on to college in greater numbers? And, if they are going on, is dual credit helping them to finish faster?

Purpose of the Study

The purpose of this qualitative case study was to provide a descriptive lens of the Idaho Advanced Opportunities Program (IAOP) and experiences of students who took dual credit courses while enrolled in Idaho high schools. With the passage of HB0458a, the IAOP was defined in statute (Idaho Legislature, 2016). The IAOP required an annual report be published and presented to the Idaho legislature (Idaho Legislature, 2016). Although the generated reports contained valuable data and findings about overall program participation and credit attainment,

there was a glaring lack of direct student voice and perspective. Given the Idaho State Board of Education's (ISBOE, 2020) stated intent of dual credit to improve the go to college rate, believed to raise the total number of degree/certificate holding citizens, the purpose of this study was to examine whether the IAOP was accomplishing their objective. The results will provide a more comprehensive picture of the dual credit landscape in Idaho when paired with the available statistical data from the ISBOE; thus, helping to inform lawmakers, policy makers, and dual credit program managers on Idaho campuses and high schools.

Research Design and Methodology

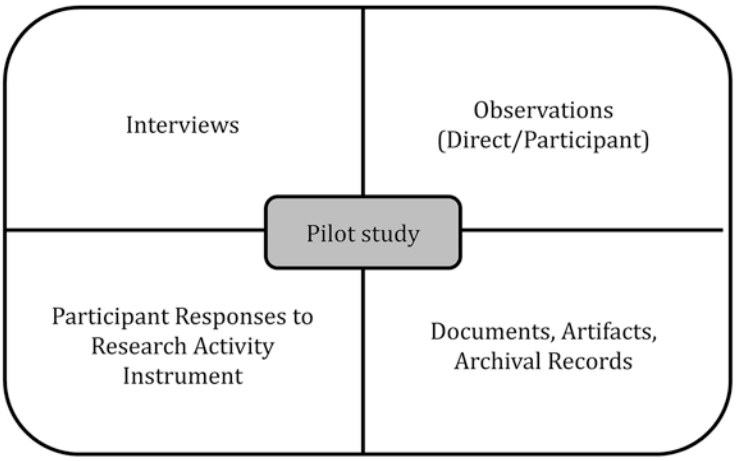
A descriptive qualitative case study was determined to be the most effective approach to answering the unaddressed question: What is the student perspective on dual credit in Idaho? Case study research has been defined as a qualitative approach in which the researcher explores a real-life, contemporary bounded system (i.e., a case) through detailed, in-depth data collection involving multiple sources of information; thus, reporting a case description and case themes (Bickman & Rog, 2009; Creswell & Creswell, 2018; Yin, 2014). The methodology uses multiple and creative avenues of data to demonstrate the total impact and effect of the examined subject (Alpi & Evans, 2019; Creswell & Creswell, 2018; Leavy, 2017; Merriam, 1998; Yin, 2014). Alpi and Evans (2019) expounded on the importance of understanding the totality of a case study by stating, "As a qualitative methodology, however, case study research encompasses a great deal more complexity than a typical case report and often incorporates multiple streams of data combined in creative ways" (p. 1).

This qualitative case study looked at current college students at the College of Western Idaho (CWI), who took dual credit courses while enrolled at an Idaho public high school through the IAOP. Direct observation of participants was not possible as the data used to bound the case

was reported from prior years. Alpi and Evans (2019) stated triangulation of data sources would still exist even without direct observation (see Figure 1).

Figure 1

Visualization of Case (Pilot) Study with Multiple Data Streams



Note. Retrieved from "Distinguishing case study as a research method from case reports as publication type," by K. M. Alpi & J. J. Evans, 2019, *Journal of the Medical Library Association*, *107*(1), 1–5.

Of the three different types of case studies used in qualitative research, the decision to use descriptive case study hinged upon criteria detailed by Yin (2014). Yin (2014) advised to use the case study method, and in particular, the descriptive case study when the researcher was looking at contemporary events and "when you cannot change behaviors" (p. 12). At its core, this case study examined a "contemporary phenomenon (the case) in depth and in its real-world context" (Yin, 2014, p. 16). For purposes of this case study, dual credit fell squarely in the definition of a contemporary phenomenon. The decision to use a descriptive case study was also reinforced

given I could not manipulate or change responses to the research questions. Yin (2014) added two sources of evidence must be provided to gain validity and reliability in a descriptive case study. I accomplished this through interviews with former dual credit students, who were now college students, involved faculty, and administrators, combined with survey data from the annual dual credit report from the Idaho SBOE.

The essential design elements of this case study involved (a) an online survey, (b) interviews with students aged 18 or over who indicated they were willing to be interviewed, and (c) a document review and analysis, including existing data from the most recent Idaho SBOE dual credit reports. Other applicable documents were reviewed and used as part of the process to reach verifiable conclusions and recommendations for further study. Those documents included published policies on dual credit from CWI, ISBOE, and Idaho Code 33-4602. Data collected from the online survey was analyzed for overall results, apparent trends, and demographic information. Interviews with 30 students, faculty, and program administrators were recorded with respondents' prior consent. These interviews were transcripted, coded, and analyzed as a second stream of examination. The third stream of data, document review and analysis, was recorded and detailed as part of the final case study.

Research Questions

The central focus of this research effort encompassed efforts to address the following questions:

- Research Question 1: Why do students take, or not take, dual credit courses through the IAOP?
- Research Question 2: For those students who are took dual credit courses as part of the IAOP, why are they not going on to college in greater numbers?

- Research Question 3: Do those dual credit students who go on to college, complete degrees and certificates in less time than non-dual students? If so, what facilitated their completion, and if not, what obstacles did they face?

Participants and Sampling

Primary participants in this case study were dual credit students who attended the College of Western Idaho (CWI). Specifically, this research encompassed students who took dual credit at an Idaho public high school between 2016 and 2020. Those courses were delimited, requiring courses provided by any of the eight approved Idaho public postsecondary institutions: Boise State University, College of Eastern Idaho, College of Southern Idaho, College of Western Idaho, Idaho State University, Lewis-Clark State College, North Idaho College, and the University of Idaho. Participating students were sampled through two channels: (a) responses to an online survey and (b) a one-on-one interview with the researcher with prior consent.

Instrumentation and Procedures

Scholars have indicated qualitative research data collection methods can include several approaches: interviews, focus groups, observation and fieldnotes, reflective writing, document review (R. Wagoner, personal communication, November 12, 2019). Specific data collection methods for this research included: document review and analysis, surveys, and interviews. Strength in data was achieved through triangulation of multiple data sources (Creswell & Creswell, 2018). Sequencing was important as it helped build a solid foundational knowledge base, aiding me in uncovering the desired data necessary to complete this project. The data collection sequence was as follows: (a) review of documents, (b) survey, then (c) interviews.

Document Review

The primary documents examined as part of this study included the 2020 Dual Credit Report, published by the ISBOE. The ISBOE report detailed the total number of credits attempted by students during the 2019–2020 school year, the types of courses taken, the success rate for those courses, and a demographic breakdown of students participating in dual credit. The ISBOE used data from the Idaho State Department of Education (ISDE) and the Idaho statewide longitudinal data system, known as the postsecondary measures of academic progress (PMAP) to determine go-on rates, demographic breakout, and degree/certificate attainment (ISBOE, 2020).

Other documents reviewed as part of this case study included the ISBOE policy on dual credit and Idaho State Code §33-4602. Memoing and journaling were used as research procedures to aid in the processing of document review.

Online Surveys

An online survey was distributed to all CWI students, ages 18 and older, asking for responses. The survey (see Appendix A) questions were designed to probe responses that gave the researcher data to determine factors that contributed to dual credit student's decision-making process in high school, their level of participation, and sense of value of the dual credit program. Finally, the survey asked whether the respondent was willing to be interviewed further about their dual credit experience. These responses provided a pool of potential subjects for qualitative one-on-one interviews. The survey was constructed through an online platform and responses were collected through a nondescriptive email address, idahodualcredit@gmail.com, thus establishing a level of anonymity with the survey structure. The students and their accompanying data were treated as respondents for the purposes of this study. A respondent was defined by Morse (1991) as "those involved [will] respond or answer structured or semi-structured

questionnaires in order tell the researcher exactly what the researcher asks; no more, no less" (p. 403).

Interviews

Interviews were conducted to lend further insight and data as to reasons a decision was made to take or not take dual credit in general; and to take or not take it through an Idaho community college or university. Additional questions focused on the overall assessment of the quality of instruction, delivery, and nature of course. The scope of interviews ranged as follows:

- Graduated high school students, now enrolled at CWI, who took dual credit in high school (12 total interviews)
- Graduated students, enrolled at a CWI, who did not take dual credit (12 total interviews)

Interviews with CWI dual credit program officials (three total) and high school dual credit faculty (three total) were also completed to gain additional insight on outcomes and challenges associated with the dual credit experience. This resulted in a total of thirty interviews. Program officials from CWI interviewed included the executive director of the dual credit program, the provost, who oversees all instruction in CWI, and a student success advisor. High school dual credit faculty interviewed were chosen based on recommendations from the executive director.

Interview participants were recorded electronically, but only after each has granted individual permission prior to the start of the interview. Participants were identified only by their role in the dual credit construct. Questions were structured based on guidance from Creswell and Creswell (2018) to be open-ended, but topic specific and focused enough to address the central research proposition. Given the pandemic restrictions, all interviews were conducted remotely via Zoom. The same protocols for recording applied; consent was obtained prior to the start of

the interview, as required by the Idaho State University Human Subjects Institutional Review Board. All interviews were transcribed by a professional service and secured to ensure validity, integrity, and objectivity. Participants were selected due to responses to a survey for students who fit the stated criteria.

Data Analysis

This qualitative case study used a descriptive and correlational analysis of collected data. As part of descriptive theory in a qualitative case study, Yin (2014) said the focus was on "such issues as (a) the purpose of the descriptive effort, (b) the full, but realistic range of topics that might be considered for a complete description of what is to be studied, and (c) the likely topic(s) that will be the essence of the description" (p. 36). The decision to employ a descriptive case study as part of qualitative research was reached primarily due to the availability of data, the size and scope of potential responses, and the method of reporting to maximize reach and impact of results to involved parties, such as policy and lawmakers, education administrators, and academic scholars.

The analysis of results derived from both in-person and online student surveys were coded for keywords related to the conceptual theory of rational choice, to assign a value to each, then evaluated using linear regression to visualize trends and conclusions in the data sets. A similar approach was employed with respect to in-person interviews with dual credit officials and faculty; coding and keywords were assigned to traits, values, intents as they related to dual credit.

Data and analysis were compared with students who did not take dual credit through constant comparative methodology, defined by Ravitch and Carl (2016) as a method of coding and comparing data for the purposes of analysis. Results and analysis were viewed through the

conceptual theory of economic rational choice theory (i.e., students will make choices based on what is in their best economic interest). Coding of answers, along with transcription of the open-ended interview responses, was sent via the Cloud, password protected, to a professional transcription firm to ensure data security, information integrity, and any possible identity concerns.

Coding

Responses to interviews were coded for general favorable or unfavorable factors (i.e., positive or negative).

- Obstacles to enrollment of dual enrollment in high school
- Obstacles to enrollment in postsecondary after high school
- Obstacles to faster (easier) completion once enrolled in postsecondary
- Positive influence/experience of dual credit while in high school
- Positive influence on enrollment in postsecondary after high school
- Positive influence on faster (easier) completion once enrolled in postsecondary

Coding of interview feedback of program administrators and faculty was as follows:

- Obstacles to more effective g delivery of dual credit
- Obstacles that should be best addressed by state policy
- Obstacles that should be addressed by college (institution) policy
- Positive outcomes from participating in dual credit

Validation and Triangulation

Validation in this proposed case study was accomplished through triangulation; the use of multiple data sources. In this case study, direct observation of participants was not possible. The data being used to bound the case was reported from prior years, making current observation

impossible. Alpi and Evans (2019) stated that triangulation of data sources still exists even without the direct observation. Three of four streams of data were still present in this study: interviews, surveys responses, and document review.

The data on student credit taking behavior from the ISBOE 2020 report was nonidentifiable to any individual person and, as such, lent credibility to the study. All data, findings, analysis were catalogued and will be stored for 1 year after publication of this study, both electronically and in hard-copy form in secure places. Secure places are defined as password protected cloud-based storage platforms such as Dropbox. The physical documents are stored in a locked file cabinet in an off-site storage from the researcher's home. The location of the storage is protected by a code only access gate and the storage unit itself is locked with a key only accessible lock.

Peer Review

Additionally, credibility was realized through informal peer review. The research was shared with three college and university administrators. Each of these administrators brought more than 30 years' experience in high education to the review. Each administrator had personal experience with dual credit programs on an Idaho community college campus or Idaho public university. Each was familiar with the IAOP and the parameters established for this study.

Member Checking

An additional avenue of validation of the study was to use member checking. Member checking is defined as the sharing of data, analyses, interpretations, and findings of the work with the participants (R. Wagoner, personal communication, November 12, 2019). Given the number of participant interviews (six), member checking added validation to the triangulation completed for this study.

Creative Writing

The role and importance of reflectivity as an element of creative writing cannot be overstated. Reflectivity is defined as the transcription of interview notes and/or recordings with the purpose of creating a written record that can be referenced and used in adding context and additional insight to the overall body of research work (Oliver et al., 2005). Researchers must address just how strictly they will relay each nuance of the interview. All in-person interviews were recorded for playback to ensure accuracy, context, and intonation, that was crucial to gaining the insights necessary for accurate data analysis and interpretation.

Summary

As the researcher, a personal interest in dual credit has its origins in my original desire to be instrumental in the crafting, passage, and implementation of meaningful policy and law relative to responsibly advance student achievement and success in today's higher education landscape. I worked on draft language used in the 2012 legislative effort, known as Fast Forward, which laid a foundation for the IAOA, passed in 2016. I was also deeply involved in the crafting, advocacy, and passage of the IAOA and as such, I had an on-going interest in the topic and to see, through this detailed study, whether the original intentions were being met through this policy adoption.

As a matter of review, this descriptive qualitative case study examined perceived obstacles, benefits, and outcomes that current CWI students experienced. These students took dual credit while enrolled in an Idaho public high school through any of the seven regionally accredited public 2-year community colleges or 4-year Idaho colleges and universities that participated in the IAOA. The study compared responses of those students with experiences of students who did not take dual credit in high school.

In conclusion, dual credit has been a major factor in Idaho's educational landscape. An enhanced understanding of student dual credit and course taking decisions; faculty observations, concerns, and recommendations; administrative challenges; policy approaches, including funding and oversight; and impacts on college enrollment, retention, and degree completion were all worthy considerations of a qualitative research study of this nature. Substantial research exists in the field of study of dual credit, but it lacked a direct connection to the State of Idaho, Idaho community colleges, Idaho 4-year colleges and universities, and public-school districts. Further, need for a more expansive study on a state-supported programs exists, including advanced placement (AP) courses, and these programs impact on minority and underrepresented populations and school districts.

Chapter IV: Findings and Discussion

This qualitative case study was designed to gain a deeper perspective of the student experience with dual credit as currently offered at the College of Western Idaho (CWI) through the Idaho Advanced Opportunities Program (IAOP). This qualitative case study examined the student experience through the conceptual framework of economic rational choice theory. Rational choice theory was summarized by Wittek (2013) as a model through which social phenomena helps to explain a person's choices. Economic rational choice theory falls under a larger scope of general choice theory which suggests that people will make choices based on a need to satisfy one or more of five fundamental needs: survival, love, power, fun, and freedom (Glasser, 1990).

Research Questions

The central focus of this research effort attempted to address the following questions:

- Research Question 1: Why do students take, or not take, dual credit courses through the IAOP?
- Research Question 2: For those students who are took dual credit courses as part of the IAOP, why are they not going on to college in greater numbers?
- Research Question 3: Do those dual credit students who go on to college, complete degrees and certificates in less time than non-dual students? If so, what facilitated their completion, and if not, what obstacles did they face?

Participants and Sampling Procedures

The primary participants in this case study were dual credit students who attended CWI. Specifically, this case study examined the experiences of students who took dual credit in Idaho, through the IAOP between the years 2016–2020.

The data gleaned through this research was strengthened through triangulation (Creswell & Creswell, 2018). The researched purposely designed sequencing of the triangulation which helped to provide a fundamental knowledge base and a deeper understanding of dual credit in Idaho. The data collection sequence used was as follows: (a) review of documents, (b) survey, then (c) interviews.

Document Review

The primary document examined in this case study were the 2021 Dual Credit Report published by ISBOE. The report detailed the total number of credits attempted by students during the 2019–2020 school year, the types of courses taken, the success rates in those courses, and demographic breakdown of students participating in dual credit. The ISBOE uses data from the ISDE and the Idaho Statewide Longitudinal Data System, known as the PMAP, to determine go-on rates, demographic breakout, and degree/certificate attainment (ISBOE, 2020). Previous reports from 2017, 2018, 2019, and 2020 were also reviewed for historical context and trends. Other documents reviewed as part of the case study included the Idaho SBOE policy on dual credit and Idaho State Code §33-4602. Memoing and journaling was used to aid in the document review process.

Online Surveys

An online survey was distributed to all CWI students, ages 18 and older, asking for their response. The survey was delivered through an online platform and responses were collected through a nondescriptive email address, thus helping to keep a level of anonymity in the survey structure. The students, and their accompanying data, were treated as respondents for the purposes of this study. A respondent was defined by Morse (1991) as “those involved [will] respond or answer structured or semi-structured questionnaires in order tell the researcher

exactly what the researcher asks: no more, no less" (p. 403). The survey questions were designed to probe responses providing insight into the respondent's association with dual credit in high school (see Appendix A). Additionally, the survey asked if the respondent was willing to be interviewed further about their dual credit experience. These responses provided the pool of potential subjects for qualitative one-on-one interviews.

Interviews

A total of 36 interviews were conducted to lend further insight into students' decisions to take or not take dual credit courses. The breakdown of interviews included:

- Graduated high school students, now enrolled at CWI, who took dual credit in high school (24 interviews),
- Graduated students enrolled at CWI who did not take dual credit (six interviews)
- Interviews with CWI dual credit program officials (three interviews).
- High school dual credit faculty (three) to help me gain additional insight about the outcomes and challenges of the dual credit experience.

All interview participants were recorded electronically, with each participant granting permission prior to the start of the interview as required by the Idaho State University Human Subjects Institutional Review Board. Transcription of all interviews was facilitated by two professional services (i.e., Zoom and Sonix) to help ensure validity, integrity, and objectivity and reduce potential bias on the part of the researcher conducting the interviews.

Major Findings and Results of Survey and Interviews

The survey was sent to students at CWI on March 5, 2021, and the survey remained open through March 24, 2021. During this time, a total of 156 students responded. Of those 156, 141 students had graduated from an Idaho high school and advanced to the next steps of the survey

(see Table 3). Nearly 87% of the survey respondents said they chose to take dual credit in high school, a clear indication of IAOP growth and student reach (see Table 4). The impact of the IAOP through the lens of economic rational choice theory was evident, as more than 48% of respondents said the state of Idaho paying for dual credit was their number one reason for enrolling in a dual credit course in high school (see Table 5). Students who chose to take dual credit in high school and responded to this survey were 3 times more likely to go directly to a college/university in the fall following their high school graduation (see Table 6).

Table 3

High School Graduates

Response	Number of students	Percentage
Yes	141	90.38
No	15	9.62

Table 4

Dual Credit Enrollment in High School

Response	Number of students	Percentage
Yes	135	86.54
No	21	13.46

Table 5

Reason for Participating in Dual Credit

Response	Number of students	Percentage
It was paid for by the state	62	48.06
Parents made me	2	1.55
Needed courses to get ready for college	39	30.23
It fit in my schedule	21	16.28
Friends	5	3.88

Table 6

Students Directly Enrolled in College/University After High School

Response	Number of students	Percentage
Yes	96	71.11
No	39	28.89

Survey respondents' academic credit accumulation during high school followed anticipated patterns with fewer credits attempted and earned in the freshman and sophomore years of high school, and juniors and seniors attempting and earning more credit. Thirty-seven percent of respondents said they waited until their junior year to start taking dual credit. Those who started in either their sophomore or senior years were nearly equal, 24.64% in the sophomore year and 25.36% in the final year of high school. Only 12.36% began their dual credit courses in their freshman year (see Table 7).

Table 7

Year in High School Started Dual Credit

Response	Number of students	Percentage
Freshman	17	12.32
Sophomore	34	24.64
Junior	52	37.68
Senior	35	25.36

Nearly 89% of the total students who took dual credit and responded to the survey chose to answer this question giving the query solid data from which analysis was conducted. Twice as many students began taking dual credit as sophomores than they did as freshman, leading to several unanswered questions. Why did they wait the year? Did they not feel ready academically? Were they not fully informed of the IAOP?

Research Question 1, which asked why students decided to take or not take dual credit, was better addressed and answered from data revealed during the interview portion of this research. There was a relationship between the lowest number of students who first enrolled in dual credit courses and the actual number of credits earned during that same year. Of the 12% of students who took dual credit during their freshman year, nearly the same amount took only one course, with a very small percentage (2.36%) attempting two or more courses, based on a course being three credits (see Table 8). A similar pattern was found for students who first attempted courses as high school sophomores (see Table 9)

Table 8

Number of Dual Credits Taken in Freshman Year

Response	Number of students	Percentage
0	109	85.83
1–6	15	11.81
6–12	3	2.36
12–18	0	0
18–24	0	0
24+	0	0

Table 9

Number of Dual Credits Taken in Sophomore Year

Response	Number of students	Percentage
0	102	80.31
1–6	17	13.39
6–12	8	6.3
12–18	0	0
18–24	0	0
24+	0	0

Juniors who took dual credit overwhelmingly still took a single course, as demonstrated by 50% of respondents stating they attempted between zero and three credits (see Table 10). However, course loads grew with the junior class cohort, as 30.16% said they took between three and six credits, which could be interpreted as up to two courses. The data also revealed those students likely started taking dual credit courses as results showed freshman or sophomores with multiple course loads, with 12.7% stating they took between six and 12 credits, and 6.35% declaring they took up to 18 credits in their junior year in high school.

Table 10

Number of Dual Credits Taken in Junior Year

Response	Number of students	Percentage
0	63	50
1–6	38	30.16
6–12	16	12.7
12–18	8	6.35
18–24	1	0.79
24+	0	0

Heavy academic course loads for dual credit students in the senior year mirror students in their junior year with near identical percentages (12.6%) stating they took six to 12 credits. A lower number of students (4.7%) took 12 to 18 credits, but more students took three to six credits (38.58%). The largest group of students were still in zero to three credit range, or a single class, at 42.52% (see Table 11).

Table 11

Number of Dual Credits Taken in Senior Year

Response	Number of students	Percentage
0	54	42.52
1–6	49	38.58
6–12	16	12.6
12–18	6	4.72
18–24	2	1.57
24+	0	0

As seen in Table 6, nearly 72% of dual credit students said they matriculated from high school directly to a postsecondary institution of their choice in the fall immediately after their high school graduation. This number strongly outperforms the Idaho statewide go-on rate of 46% for all graduating high school seniors (ISBOE, 2020).

However, for those students who chose not to attend a postsecondary institution directly after their high school graduation, the time frame for when they did enroll varied considerably. Some 40% of students indicated they attended in the following spring semester, leaving only one instructional period vacant, and 23% said they waited a full year, attending in the next fall. Just under 12% said they waited 2 years to attend; this demographic could be interpreted as Latter-Day Saint (LDS or Mormon) students, as 18-year-old men are greatly encouraged to participate in ecclesiastical missions, meaning many young Mormon men leave for their mission right after high school. Meanwhile, 23.81% said they waited more than 2 years to attend (see Table 12). This demographic was best represented with a response from Student 24 who stated, “I wasn’t sure what I wanted to do. I just knew I was tired of being in school. I was good at it [school] but didn’t want to waste a bunch of money figuring it all out.” This sentiment was echoed by a fellow respondent, Student 23, who stated, “It’s just so expensive. School, that is. I don’t have a lot of money and neither do my folks so I gotta be sure what it is I’m going to do.”

Table 12

Student Enrollment in Postsecondary Education After High School

Response	Number of students	Percentage
Following spring semester	17	40.48
Following fall (waited 1 year)	10	23.81
Waited 2 years	5	11.9
Waited more than 2 years	10	23.81

The conceptual framework of rational economic choice theory was key in examining these statements as each student expressed directly, they made choices they felt were in their best financial interests about dual credit. Although these students chose not to take dual credit courses, most respondents did choose to take courses, expressing they felt it was in their best interest. For example, Student 12 stated:

> I knew it was going to be tough, sure, but it was way cheaper to get started now what with someone else paying the bill, right? I mean, if I ended up doing badly in the class or even flunking it, I could repeat it but at least it would be on their dollar not mine.

Responses from Students 24, 23, and 12 supported choices of economic rational choice theory and general choice theory in alignment with the conceptual framework.

In the context of attempting dual credit courses in high school, economic rational choice has been defined as a choice in a student's best long-term financial interest due to saving time and tuition money to accelerate completion, leading to improved employment and financial stability (Wittek, 2013). Students make choices based on believing their decision is in their general favor to improve their station in life (Glasser, 1990). Responses for survey question asking for the biggest reasons for waiting to enroll supported the economic rational choice theory

further, as 32.43% of respondents indicated they "needed money to afford classes," and 27.03% needed to work for other financial reasons (see Table 13).

Table 13

Reasons for Waiting to Enroll in Postsecondary Education After High School

Response	Number of students	Percentage
Needed money to afford classes	12	32.43
Needed to work for other reasons	10	27.03
Church service	2	5.41
Military service	0	0
Tired of school, took a break	13	53.14

The final questions for respondents who took dual credit in high school indicated students would recommend dual credit overwhelmingly (95.49%) to a younger sibling, friend, or other acquaintance to do the same (see Table 14).

Table 14

Recommendation of Dual Credit in High School to Younger Sibling, Friend, or Neighbor

Response	Number of students	Percentage
Yes	127	95.49
No	6	4.51

Responses from the few students who said they would not recommend taking dual credit to others varied from perceiving courses as too hard, stating courses took too much time, or believing credits did not transfer. It is important to note six respondents answered this question out of 133 total respondents who answered the original question; as such, conclusions and analysis should be tempered with acknowledging the small sample size (see Table 15).

Table 15

Reasons for Not Recommending Dual Credit to Others

Response	Number of students	Percentage
Too hard	2	40
Takes too much time in high school	1	20
Credit didn't transfer, not worth it	2	40
Grades lowered my GPA	0	0

The sorting definition of athletic classifications according to the Idaho High School Athletic Association (2020) can be found in Table 16. Although athletic participation was not factored in any of the survey parameters, it could likely be a variable considered for future study. Referencing athletic classification provides a frame of reference for larger, medium sized, and smaller schools in the context of the study's results. As such, Table 17 shows the high school sizes sorted by athletic classifications for respondents who took dual credit.

Table 16

Idaho High School Athletic Association Athletic Classifications (Total Enrollment, Grades 9–12)

Classification	Student enrollment
5A	1,280+
4A	640–1,279
3A	320–639
2A	160–319
1A D1	100–159
1A D2	1–99

Table 17

Idaho High School Athletic Association Athletic Classifications of Respondents

Classification	Response	Percentage
5A	44	33.08
4A	39	29.32
3A	13	9.77
2A	21	15.79
1A D1	8	6.02
1A D2	8	6.02

For students who chose not to take dual credit, I attempted to answer why students decided not to take advantage of the IAOP and dual credit. Similar to other responses, the sample size was very small, with just 11 responses. Of those 11 respondents, 54.55% (six respondents), said they did not know enough about the program or how it worked. Scheduling conflicts and fear of rigor were also shown as reasons students decided to skip dual credit opportunities (see Table 18).

Table 18

Reasons for Not Enrolling in Dual Credit

Response	Number of students	Percentage
Couldn't make it work in my schedule	2	18.18
Fear class would be too hard	2	18.18
Didn't know enough about how it worked to do it.	6	54.55
Did not think I was going to college so why bother?	0	0
Dual credit classes offered did not interest me at the time.	1	9.09

Finally, the survey asked students if they would change their decision not to take dual credit now as a college student. Surprisingly, more than 7 out of every 10 respondents said they would not change their decision (71.64%), and 28.36% said they would (see Table 19).

Table 19

Would You Change Your Decision Not to Enroll in Dual Credit?

Response	Number of students	Percentage
Yes	19	28.36
No	48	71.64

Respondents who chose not to take dual credit came from larger schools primarily (i.e., 5A, 4A) as opposed to smaller schools (i.e., 2A, 1A D2) as shown in Table 20.

Table 20

School Classification of Students Not Enrolled in Dual Credit

Classification	Response	Percentage
5A	8	44.44
4A	8	44.44
3A	0	0
2A	1	5.56
1A D1	0	0
1A D2	1	5.56

Participants and Sampling: Interviews and Coding

Participants in this study were dual credit students who attended CWI. Specifically, this study examined the experiences of students who took dual credit in Idaho through the IAOP between 2016 and 2020.

Interviewee Pool of Participants

A total of 36 Zoom interviews were conducted as part of this research. Twenty-four students enrolled at CWI and who had taken dual credit through CWI were interviewed. Six students enrolled at CWI but who had chosen not to take dual credit during high school were also interviewed. I conducted six interviews with faculty and dual credit program officials; three with high school faculty who teach dual credit through CWI and three program officials affiliated with dual credit and instruction at CWI. All interviewees were asked for and provided consent to have their interview recorded as required by the Idaho State University Institutional Review Board. Each interview was recorded and later transcribed by two different services (i.e., Zoom transcription and Sonix) to provide a further layer of accuracy.

Interview Coding

Coding interview responses is crucial in qualitative research (Scott et al., 2019). When responses are coded, the researcher can better organize critical data to draw and connect themes with the theoretical and conceptual framework guiding the research (Williams & Moser, 2019). Many inexperienced researchers often struggle with qualitative research. Researchers can realize the strength of their data when they use either deductive or inductive coding, leading to a more productive analysis (Azungah, 2018). An operationalized deductive framework consists of four elements defined to help clarify the intent of responses. Once the elements are defined, the results can be organized into general themes to be analyzed to determine how they have aligned with the conceptual framework laid forth by the research design (Scott et al., 2019).

Using the framework set forth by Scott et al. (2019) all interview responses were coded to reflect one of the following four general elements: (a) fully negative, (b) slightly negative, (c) slightly positive, or (d) fully positive. These elements were used to deductively code answers

from the respondents and determine whether their decisions and actions related to dual credit were made in their best economic interest. Economic rational choice theory, as a part of general choice theory, states people (i.e., students in this instance) make decisions based on what is in their best economic interest. The conceptual framework theory suggests economic decisions are made as part of one's overall best intended outcomes and self-interests.

The answers and responses provided during the interviews were analyzed in a deductive framework and coded as follows:

- A student, faculty, or program official described an obstacle or other hinderance to dual enrollment in high school; coded as a negative element.
- A student, faculty, or program official described an obstacle or other hinderance to enrollment in postsecondary education after high school; coded as negative.
- A student, faculty, or program official described an obstacle or other hinderance to faster (quicker) program completion once enrolled in postsecondary education; coded as negative.
- Similarly, a student, faculty, or program official described a positive influence or experience of dual credit in high school; coded as positive.
- A student, faculty, or program official described a positive influence or experience relating to enrollment in postsecondary education after high school; coded as positive.
- A student, faculty, or program official described a positive influence or experience which led to a faster (quicker) program completion once enrolled in postsecondary education; coded positive.

Deductive coding of interview feedback from program administrators and faculty also included the following framework to help ensure accuracy of intent of answers and potential findings:

- Obstacles to more effective/satisfying delivery of dual credit were coded as negative.
- Positive incidents/outcomes (both personal and professional) from participating in dual credit were coded as positive.

Student Interview Results

Interview findings showed dual credit provided a positive experience for students. Whether during the dual credit course itself in high school or from outcomes and their impact once students were enrolled in their postsecondary education, there was a positive relationship between dual credit and the student. For example:

- Positive influence/experience of dual credit in high school (24/24 respondents or 100%)
- Positive influence on enrollment in postsecondary after high school (20/24 respondents or 83%)
- Positive influence on faster (easier) completion once enrolled in postsecondary (18/24 respondents or 76%)

Economic rational choice, the conceptual framework through which this study examined the dual credit experience in Idaho, was supported by these results. Results were also supported by other scholarly work, which found although students encountered numerous challenges in transferring credits and with degree completion**,** there was a common desire to enroll in dual credit due to their belief they would save money and time in their effort to complete a degree (Jabbar et al., 2021).

A representative sample of students reported their experiences, ranging from a sense of satisfaction in completing college level coursework successfully to feeling supported through student service professionals. For example, Student 10 stated:

> One of the reasons I started here [CWI] was because we met with a couple of advisors here and I talked to her and she, you know, told us all about it, told us how to get started, and from there, we just, you know, went.

Student 11 stated:

> I am so glad I took those classes in high school rather than having to do them now online, you know. I can skip right ahead and take some classes that I need for my major, rather than my generals, and that's the main point of it for me, I mean my dual credit experience, was that.

Student 22 stated, "It would not be an understatement to say dual credit changed my life, it completely changed my trajectory." Student 17 stated:

> It wasn't hard to get signed up or track it really. Me and my mom did it together and we got through it fine. I know there were a couple of kids that had to ask for help. I was really glad we got it figured out, because I totally got my math done in high school and I'm not very good at it so it saved me a lot of time here.

Student 12 stated, "I had five courses through CWI in high school. All of them were pretty great courses, I think. It was pretty easy [signing up]. They had it all loaded on the school computer, the money, all of it. All you had to do was just sign up." And Student 16 stated:

> I did 28 credits while in high school. Most of it is transferring. I heard that some of my friends who went to BSU [Boise State University], their credits are going all for electives which sucks because they have to chemistry and stuff again. Glad I came here!

The same students reported they encountered some difficulties in registering for classes, navigating college websites, and gathering transcripts from completed courses when attempting to register. Some students indicated they had to take courses again (6 of 24 respondents, or 25%),

which was deductively coded as negative toward dual credit in helping accelerate completion of their postsecondary degree/certificate. For example:

- Obstacles to enrollment of dual enrollment in high school (negative; 7/24 respondents, or 29%)
- Obstacles to enrollment in postsecondary education after high school (negative; 4/24 respondents, or 16%)
- Obstacles to faster (easier) completion once enrolled in postsecondary education (negative; 6/24 respondents, or 25%)

As such, several students reported encountering obstacles and challenges through their dual credit experience. Student 1 stated, "I tell my little brother not to take dual credit until he's either junior or something because it'll stress him out as a freshman. It's too hard for the younger ones." Student 24 stated, "I came in at least a year ahead of everyone because of dual credit. But, some of the classes I need, they don't have until next fall, so I'll lose a semester waiting for those." And Student 3 stated, "I think the biggest thing is the teacher. If you get a crap teacher, then it sucks. If you get a good teacher, then it's a good thing."

Of the six CWI respondents who chose not to take dual credit in high school, 100% (6 of 6 respondents) said their primary reason for deciding not to enroll in dual credit was due to either believed or perceived difficulty navigating the process. Four of the six respondents (67%) also added they did not believe they would be going on to college at the time of their decision and, as such, did not see the need for college-level coursework. These responses were deductively coded as slightly to fully negative in the framework described previously:

- Obstacles to enrollment of dual enrollment in high school (negative; 6/6 or 100%)
- Obstacles to enrollment in postsecondary after high school (negative; n/a)

- Obstacles to faster (easier) completion once enrolled in postsecondary (negative; n/a)

Three students provided insight and context about responses and their coded results. Student 29 stated, “I just wasn’t sure I was going to go to college, so why take it? I really don’t need that many courses here that I could have taken in high school, so yeah, I wouldn’t change.” Student 30 stated, “It just was too hard. I was at a small school and we didn’t have a lot of that to choose from. I didn’t want to deal with it.” And Student 28 stated, “I worked. No time for all that stuff.”

Faculty and Administrator Interview Coding Results

Interviews I conducted with high school faculty (three total) and college dual credit program and instructional officials (three total) were coded deductively as follows:

- Obstacles to more effective/satisfying delivery of dual credit (6/6 respondents, or 100%)
- Obstacles that could/should be best addressed by state policy (3/6 respondents, or 50%)
- Obstacles that could/should be addressed by college (institution) policy (5/6 respondents, or 83%)
- Positive incidents/outcomes from participating in dual credit (6/6 respondents, or 100%)

Respondents provided a range of context and insight into various mindsets and perceptions of faculty and program officials related to their individual experiences with the IAOP. For example, Faculty 33 stated, “The State Department is getting better, but it can still be a maze to figure it all out. If you have a district that has a good relationship with the college, then you’re ok. If not, you’re in trouble.” Faculty 31 stated, “I like the faculty mentor program that CWI has. I just wish we could get more help. There’s not enough time in the day.” Faculty 36 stated:

> I see the same kids, the high performers, taking the same types of courses because they like them. The state needs to have some sort of guidelines so they don't load up on poli-sci or history and, then, they get to college and they're way overloaded with credits in one area and, well, it's a problem.

Dual Credit Program Official 36 stated:

> We've got it about as dialed in as anyone in the state, honestly, I'd say. But the difference in the amount of credits and high school faculty my staff is handling vs. other schools, man, it's not even close and it's not right. We need more positions and more funding to do this right.

Faculty 32 stated:

> I see kids really push themselves, which is nice in today's environment. But they need to have a better understanding about what it is they're taking, that it does go on their transcript, and it can have an impact on their GPA if they don't do as well as they think they will. The state needs to be more open on this.

Summary of Findings

I also reviewed documents related to dual credit, the IAOP, curriculum and course guidelines at CWI, and Idaho Code 33-4602. CWI students completed the survey, as 156 original respondents were screened for eligibility. Of the 156 respondents, 141 met the established criteria. The respondents overwhelmingly indicated dual credit was a positive part of their high school academic experience. Results showed number of credits were scant during freshman years, improved in sophomore year, and more credits were attempted in the latter 2 years of high school. More than seven of every 10 respondents who took dual credit in high school said they went directly to college immediately following their high school graduation. This number was

less than the Idaho statewide average for all students, with just 46% going on to college. Of the 28% of respondents in the study who did not go directly to college from high school, more than half said either a financial barrier or an employment need kept them from going on to college. More than 90% of survey respondents said they would recommend a younger sibling or friend take dual credit in high school. Larger and medium sized schools were represented in the respondent pool more than smaller schools.

Interviews

Thirty-six interviews were conducted via Zoom during the research period of March and April 2021. Of the 36 interviews, 24 were with students who took dual credit through CWI in high school. Six respondents were students who attended CWI but chose not to take dual credit in high school. I conducted three interviews with current dual credit high school faculty and three with dual credit/instructional program officials at CWI. All interviewees were asked for and granted permission to be recorded. All 36 interviews were transcripted by two different services (i.e., Zoom and Sonix) for redundancy and accuracy. All 36 interviews were coded for positive and negative comments and obstacles using the deductive method. Thirty of the 36 respondents interviewed gave positive comments and experiences about dual credit. Most student respondents (83%) said dual credit had a positive effect on their enrollment in college, and 76% believed their dual credit work would help them complete their postsecondary education goals sooner.

Dual credit faculty and program officials were equally positive about the IAOP overall, but half (50%) believed obstacles should be addressed through state policy, and 80% believed policy at the institutional level should be adjusted to improve the dual enrollment program. Equally, 100% of faculty and dual credit program officials interviewed also believed there were obstacles to the IAOP that could be and should be improved.

Member Checking

Each respondent was presented with a synopsis of their responses and asked if the synopsis met their intent and if not, what they would like to have changed or restated. I did not receive any feedback prompting an action to exclude or recharacterize any responses.

Peer Review

Research findings were shared with three higher education professionals for their review. Each had significant experience with dual credit from either the faculty perspective or the administrative point-of-view. All three educators expressed their appreciation and acknowledgement of the work as reliable, consistent, and viable in the field of study.

Specific recommendations for future study and program improvements are addressed in the next and final chapter.

Chapter V: Summary and Recommendations

This chapter summarizes the qualitative case study including a brief look at the purpose of the study (i.e., Chapter I), a synopsis of the connection to published literature (i.e., Chapter II), a review of the research design including the central questions (i.e., Chapter III). Discussion of the findings (i.e., Chapter IV), implications, recommendations for further study, and a summative conclusion (i.e., Chapter V) are also included.

Discussion of Purpose

The purpose of the qualitative case study was to examine the Idaho Advanced Opportunities Program (IAOP) between 2016 and 2020. The IAOP provides $4,125 to each high school student in Idaho to pay for dual credit courses. This study examined the experiences of students who took dual credit and faculty and program officials with experience in dual credit in Idaho through the College of Western Idaho (CWI) as part of the IAOP between 2016 and 2021. Although Idaho provides IAOP monies for students to take courses through all eight of its public institutions and three private not-for-profits schools, this study focused on CWI as it is the largest provider of dual credit in Idaho.

Student participants were chosen through their responses to a survey questionnaire. As such, 154 CWI students met the required minimum criteria for inclusion in the study and advanced to the designation of respondent. Data were collected from respondents shaping general demographic information and credit and course-taking behavior about the IAOP. From the 154 respondents, 30 respondents were chosen to participate in qualitative interviews; 24 took dual credit during their high school coursework and six chose not to take any dual credit. Additionally, six high school faculty who teach dual credit and six dual credit program officials from CWI were interviewed. All interviews were conducted via Zoom, and transcripted and

coded for both positive and negative responses. All interviews centered around answering the three research questions put forth in the qualitative case study.

Connection to the Literature

The literature review for this qualitative case study revealed a stark lack of existing work in Idaho on the subject. However, significant work has been available from other parts of the United States. Commonality of instructional approach has varied from state to state, but there is a central desire to keep high performing students engaged and working toward postsecondary enrollment (Adelman, 2006; Duncheon, 2020; Giani et al., 2014; Hoffman 2021; Hughes et al., 2005). This has certainly been the case in Idaho, as both lawmakers and policymakers believe dual credit and the IAOP will keep students engaged and moving toward college enrollment (M. Freeman, personal communication, March 13, 2020).

Part of Idaho lawmakers' intent was to provide financial savings to both students and the state (D. Critchfield, personal communication, March 8, 2020). Financial considerations aid in increases to dual credit courses and, in turn, help to drive enrollment and improve the college's funding position (Andrews, 2000; Taylor, 2015). Dual credit is part of the overall enrollment workload adjustment (EWA) in Idaho and certainly reinforces findings from the literature. Dual credit also helps to confirm economic rational choice theory as the conceptual framework in this case study; as part of the general choice theory, economic rational choice theory says students (people) will make choices based on what is in their best financial interests (Glasser, 1990; Wittek, 2017). This applies to the postsecondary institution's perspective in offering coursework as it is in the institution's best economic interest to offer dual credit, given the potentially positive impact on their EWA and resulting state appropriated funding.

Research Design

My choice to use qualitative case study as the research method was consistent with choices from other scholars researching dual credit (DeSalvo & Fergus, 2017; Duncheon, 2020; Duncheon & Relles, 2020 Eden, 2020; Hart, 2019). Case study has been accepted and acknowledged widely as a preferred method to conduct descriptive observation and analysis (Patton, 2002). This qualitative case study was designed to provide an in-depth description and analysis of a program bound by place and time, and the data collected from respondents in the bounded system (Creswell & Creswell, 2013).

Conceptual Framework

For the purposes of this qualitative case study, I chose economic rational choice theory as the conceptual framework. Rational choice theory is contained in economic rational choice theory. Rational choice theory has been addressed in research by Wittek (2013) who summarized there were several models explained or attempted to explain social phenomena as outcomes of a person's actions. A student's decision to enroll in dual credit courses aligns with rational choice theory, surmising students make decisions based on their assumption the outcome (i.e., course completion, grade, or earlier start on college level-work) will be positive.

Economic rational choice theory and general rational choice theory are found under the overarching umbrella of choice theory. Choice theory as purported by Glasser (1990) suggested humans have five basic needs embedded in their fundamental structure: survival, love, power, fun, and freedom. The student perspective on dual credit can be applied looking at the five basic needs: (a) dual credit coursework is a matter of academic survival, (b) dual credit addresses a love of rigorous learning, (c) choosing to take dual credit courses can exercise power over one's

own academic journey, and (d) finally, fun and freedom come into play as students realize the positive outcomes of the first three choices.

Review of Research Questions

The research questions for this qualitative case study were focused on examining factors leading students to take dual credit, why students do not go-on to college in greater numbers, and finally, once students are enrolled in postsecondary courses, why they complete their degree or certificate programs faster as a result of having taken dual credit. The research questions were:

- Research Question 1: Why do students take, or not take dual credit courses through the IAOP?
- Research Question 2: For those students who are took dual credit courses as part of the IAOP, why are they not going on to college in greater numbers?
- Research Question 3: Do those dual credit students who go on to college, complete degrees and certificates in less time than non-dual students? If so, what facilitated their completion, and if not, what obstacles did they face?

Document Review

In addition to the student survey and interviews with students, faculty, and program officials, I conducted a document review. The primary official documents I examined included the 2020 Dual Credit Report published by the Idaho State Board of Education (ISBOE), the Idaho SBOE policy on dual credit, and Idaho State Code §33-4602, which outlined the state statute for the advanced opportunities. The ISBOE report detailed the total number of credits attempted by students during the 2019–2020 school year, the types of courses taken, student success rates for those courses, and demographic breakdown of students participating in the dual credit program. The ISBOE used data from the ISDE and the Idaho statewide longitudinal data

system, known as the PMAP, to determine go-on rates, demographic breakout, and degree/certificate attainment (ISBOE, 2020).

Key Findings and Discussion of Findings

The findings gleaned from this research revealed a number of themes detailed in Chapter IV and discussed in the following section.

Finding: There Are Various Influences on Student Participation in Dual Credit

The first key finding was in response to the first question asking why students take or do not take dual credit courses through the IAOP. Two major influences or motivations were found to take dual credit. First, students have taken dual credit based largely on the major factor of available monies covering nearly 100% of course related costs as covered through the IAOP. Other influences impacting students' decisions to take dual credit courses included parents, other family members, high school faculty, and peers. However, the biggest factor for deciding whether students take dual credit was their financial consideration. The IAOP provides $4,125 for each student to use on dual credit while enrolled at an Idaho high school. Just over 48% (48.6%) of survey respondents said the fact it was paid for by the state was the biggest factor (influence) in their decision to take dual credit. This action was viewed as a positive influence based on the study's conceptual framework, economic rational choice theory. Wittek (2013) said several models explained the social phenomena associated with a person's decision. In the context of dual credit and the IAOP, students made the choice to take college level coursework because it made economic sense for them. Because Idaho paid for the courses (up to $4,125), this became a positive influence for the student. It also represented a positive outcome for Idaho, as more students enrolled in postsecondary education courses, contributing to an increase in a more educated citizenry, a declared goal by the ISBOE (2010).

Discussion of Finding

Idaho should be recognized as a national leader in dual credit due to the state's decision to fund student participation at this level. Although Idaho was not an early adopter of a comprehensive statewide approach, the 2016 reforms known as the Idaho Advanced Opportunities are some of the most aggressive and advanced in terms of student benefit in the United States. This level of student focus was one of the driving reasons to examine the IAOP in this study. Continuation of the full fiscal support of the IAOP must be a major consideration for the overall strategic approach to education in Idaho. This is significant research as it was designed and executed to concentrate on the student perspective in the dual credit program, which has been paid for almost exclusively by the state. There have been many published scholarly works looking at dual credit through a myriad of lenses: credit accumulation, student head count year-to-year, curriculum alignment, faculty certification, and other elements attempting to provide a measure of qualitative and/or quantitative examination.

Finding: Dual Credit Provides an Early Start on College

Students have taken dual credit as a pathway to earn college credit while still in high school, thus helping to prepare themselves for postsecondary degree/certificate programs after graduation. Nearly one in three students who participated in this case study said the "need to get ready for college" (see Table 5) was their top reason for taking dual credit in high school. Exposure to dual credit translated to a go-to-college rate of 72%, dwarfing the latest statewide numbers for all students at 46%. The economic choice theory lens suggests students make decisions about dual credit based on what is in their best interest (Wittek, 2013). Their decision to take postsecondary classes while enrolled in high school affirmed their choice and accelerated

their time to degree completion, saving themselves time and tuition dollars and provided them with an opportunity to begin their careers sooner.

Discussion of Finding

Higher education administrators need to work with faculty to better address the availability of courses to ensure a wider, fuller spectrum of dual enrollment courses are available each term. This will require more support from funding sources, primarily from the state legislature. The Idaho legislature has restrained growth of higher education budgets during the 2010s, forcing colleges and universities to seek alternative funding means (M. Freeman, personal correspondence, March 13, 2020). Funding from alternative sources, often tuition, fees, grants, and endowment gifts, have been inconsistent and influenced highly by outside economic factors; thus, failing to provide stable, secure, and reliable funding streams needed to expand course offerings and corresponding student support services. Additionally, financial and supervisory support will be needed for faculty professional development to build dual credit courses to make them sustainable and meet required parameters and rigor. Commitment to sustainable funding, encompassing a wider vision of application, will require an increase in support from appropriators in the Idaho statehouse.

Finding: Students Hold Various Reasons for Not Recommending Dual Credit

The reasons varied for student respondents who said they would either not take dual credit again given the opportunity or would not recommend taking the courses to a friend or sibling. There was an even split (40%) for the two largest stated reasons: believing courses were too hard or issues with transferring credits after they had enrolled in college; as such, “it was not worth the effort” (see Table 15). The remaining 20% of respondents said dual credit “took too much time” (see Table 15) during high school.

Discussion of Finding

It is important to keep in perspective that these responses represented only six individuals of the 133 respondents for the question. As such, findings should be tempered with a degree of caution. However, there is value in evaluating the response findings. For students who said they believed the courses would not transfer and "were not worth it" (see Table 15), program officials should consider altering messaging to address students' perceptions. Student responses about the amount of time dual credit courses required should also be tempered, as time spent was based on each student's ability and study habits and was not standardized easily across a spectrum of potential students considering enrollment in dual credit courses.

Finding: Students Who Did Not Take Dual Credit Lacked Understanding of IAOP

Eleven students of the total 156 respondents said they decided not to take dual credit through the IAOP. The largest percentage of those students (55%) said it was largely due to the belief they "did not know enough about the program, how to do it" (see Table 17). Approximately 18% of student respondents said they could not make dual credit work in their schedule (18.18%), and another 18.18% said they "feared the classes would be too hard" (see Table 17). During interviews with students who did not take dual credit, one third said they felt their high school was "too small" to offer anything of value. Of the six students interviewed, one student said the courses would be too hard (i.e., difficult) and worried about the possible implications for their high school GPA and graduation.

Discussion of Finding

It is wise to temper the reaction to these findings, as the respondent pool was only 11 students from the total number of 156 survey respondents and six of the 30 interviewed students. However, the findings indicated students' perceptions and a need to better understanding the

Idaho dual credit program for students in all classes and high school sizes and how online delivery may help to open opportunities. Additionally, these students decided not to take dual credit but were still students at CWI, indicating they decided to pursue higher education at some point following high school graduation. This decision also illustrated the perceived value of a college degree or certificate. This decision is viewed through the conceptual framework of economic rational choice theory as a part of general choice theory (Glasser, 1990; Wittek, 2017). However, although these students opted not to take dual credit in high school, they did make decisions based on a perception or belief of what would be in their best interest, as they enrolled in college eventually.

Finding: Dual Credit Students Go on to College, But There Is Room for Improvement

Research Question 2 asked why did students who took dual credit courses as part of the IAOP not go on to college in greater numbers? Students who take dual credit through the IAOP do go on to college in greater numbers than the general population of Idaho students. Just over 71% of respondents said they went directly to college immediately following high school graduation as opposed to the Idaho statewide average of 47% of all graduating high school seniors (ISBOE, 2020). Nearly 30% of students who took dual credit queried in this study did not go-on to college immediately after high school graduation. Of those students, 40.48% said they waited one term and enrolled the next spring, and 23.81% waited 1 year, enrolling the next fall. Just 11.9% of respondents waited 2 years. This could be attributed to students who elected to serve voluntary church missions for the Church of Jesus Christ of Latter-Day Saints (LDS or Mormons) as southwestern Idaho is home to a significant percentage of Mormons (roughly 25% throughout the region and nearly 50% in western Ada County), which is squarely in the heart of the CWI service region (Idaho Census, 2020).

Discussion of Finding

The significant number of high school graduates who took dual credit but waited more than 2 years to enroll in any kind of postsecondary institution (nearly 1 out of 4, or 23.81%) should be addressed in future studies. Why are they waiting for more than 2 years? What factors are contributing to these decisions? Are these economic-based decisions, stipulating a job right after high school is worth more than the prospect of a better job in the future as a result of completing college? Students in the current economy have more options than ever for earning higher wages without any further training beyond high school. Educators know this will not persist long term. There will be an economic correction; and as a result, there will be an increased need for workers to gain new or updated skills through educational training. Breaking through the mass of noise in the student consumer marketplace is a challenge for education to deliver a message centering on more adaptive, responsive, student-consumer centric approaches to incorporate these student mindsets and decision-making processes.

Finding: Financial Considerations/Worries for College Students Are Real

The biggest element contributing to why dual credit students are not going on to college in greater numbers was answered in Table 13. Three main reasons emerged from the results: a perceived need of a break from school (35.14%), a need to find money or financial assistance for classes/college (32.43%), and an expressed need to work "for other reasons" (27.03%; see Table 13). The last two reasons combined exceeded the first (55.46% to 35.46%), indicating a substantial financial need for potential students.

Discussion of the Finding

The IAOP fills a need for students to take courses in high school, but Idaho's decrease in financial support through postsecondary scholarships is noteworthy Idaho ranks 15th out of 15

states in the Western Interstate Commission for Higher Education (WICHE) in the total amount and per student capita of state-funded scholarships (M. Freeman, personal communication, March 13, 2020). Idaho's lack of financial commitment to student scholarship and support will continue to hamper progress in student matriculation and completion, despite the state's exemplary work in dual credit. This is a case of not following through on a $20 million annual investment. More often, institutions are finding themselves facing the burden of finding financial resources for students without state support. Colleges and universities with highly effective foundations have seen some success, but the gap in available funding versus the need is growing. Student needs exist far beyond the simple equation of the cost of tuition and fees. In Idaho, state surplus funds exceed $1.9 billion in 2022. It is time to invest in higher education as an economic development strategy for the state of Idaho. The public education sector is woefully underfunded and, as such, it is failing to meet its potential in not only supplying an educated and skilled/ready workforce, but also an educated citizenry. Political ideology is a poor standard for pragmatic educational practices and polices such as dual credit and needed postsecondary funding support to advance goals of a state wishing to have 60% of its citizenry in possession of a credential of value (ISBOE, 2020).

Lastly, the reasons for not pursuing a college degree stated most often were being "tired of school" and needing "to take a break" (35.14% of respondents; see Table 13), begging the important questions of why students feel they need "to take a break," and why they are "tired of school." Is this a result of the rigorous nature of dual credit courses? If so, then how does the stop-out rate compare to AP students? Is there a comparison to be made from various time periods?

There are several opportunities for postsecondary institutions and the state of Idaho to better capitalize on the dual credit market through better messaging, communication, and advertising of available financial resources for students. Also, there is an opportunity to explore options for on-campus student employment that could be used toward satisfying tuition/fee payments as opposed to straight salary/financial compensation. On-campus positions could be funded through state appropriations or combined with industry-generated funds and/or foundational monies raised through philanthropy.

Finding: Dual Credit Students Are Not Completing at Accelerated nor Anticipated Rates

Research Question 3 asked if dual credit students who go on to college, complete their degrees and certificates in less time than students who do not complete dual credit? If so, what facilitated their completion and if not, what obstacles did they face? A strong indication showing dual credit students do not complete their postsecondary degrees/certificates faster than students who do not take dual credit was the most revealing finding. The reasons students gave for this finding ranged from difficulty with course scheduling, taking fewer credits per semester because of adjusting to a need to work more hours to help with financial concerns, academic workloads, and a general sense of any attendance is better than no attendance at all.

Discussion of Finding

It is important to note this study examined the experience of students in the IAOP which started in its current state in 2016. The study was conducted in 2020, providing 4 years for data and results. This is a limited scope and timeframe. However, initial findings did indicate the basis for trends and possible areas to be addressed. One primary area of interest and potential concern for policy makers and administrators is students are not completing their intended degrees/certificates substantially sooner than those who do not take dual credit. The reasons for

the delay in completion varied from course scheduling difficulty to decisions to take fewer credits per term; thus, lengthening the time to completion. The conceptual framework of economic choice theory, which says students will make choices based on what is in their best economic interest, may be relevant in these instances. However, the decision to lengthen time to degree completion is not always singularly influenced or controlled by a decision to just take fewer credits. Interviewed students expressed repeatedly course availability and scheduling often presented challenges and, as a result, delayed a more rapid degree completion. As previously detailed, the solution to provide more course offerings lies with substantial increases in support funding provided by the Idaho Legislature.

A student's decision to change their academic pathways (majors) is an additional element to consider and was not explored as part of the current study's outline. Community college students often explore different potential fields of study while enrolled, resulting in extended times to completion. This factor was not explored as part of the study but should be considered as a variable in future works about dual credit time to postsecondary degree completion.

Finding: Faculty Have a Positive Experience Teaching Dual Credit

Faculty members said they had largely positive experiences teaching dual credit coursework and working with CWI through faculty mentorship agreements. The IAOP is unique as it provides flexibility for high school faculty to teach dual credit without the requisite master's degree. CWI has chosen to pursue and has been awarded National Alliance of Concurrent Enrollment Programs accreditation, requiring a master's degree for all faculty. The flexibility provided by the IAOP allows for a faculty mentor relationship between a credentialed college faculty and a high school faculty member in a discipline. High school faculty who were interviewed for this study indicated the mentor relationship was a key element in their

satisfaction with the dual credit assignment. Additionally, faculty expressed students who took dual credit were higher achieving, academically driven, and had an attention to detail and outcomes exceeded the general study body populations in their individual schools.

Discussion of Finding

The insights provided by high school faculty about their experiences in the IAOP are important for officials and policy makers to consider as they look to the future. Faculty have a considerable influence on students, on the outlook they may have about college, and on their consideration about college and its value. Faculty help guide students to postsecondary institutions, often their alma maters. Valuable work can be done with faculty to improve students' perceptions about the value of attending a community college as part of their postsecondary education path. The continued mentor relationship between postsecondary faculty and high school faculty can be expanded beyond the IAOP. Colleges and universities could use the existing model to develop adjunct faculty and help strengthen instructional foundations. Recruitment, and subsequent enrollment, would likely improve through expanded working relationships between high school faculty members and postsecondary institutions, as each faculty would become more comfortable and confident about the student experience awaiting each student as their knowledge and relationship deepened with the college or university.

Finding: Dual Credit Program Officials See Strong Future

Dual credit program officials gave positive feedback about the IAOP, although they offered limited criticism about how the state of Idaho is operating in the IAOP. The ISDE, who administers the monies funding the program, has been held in high esteem for their work and the efficiency of payments sent to districts and or teachers, depending on each district's approach allowed under the program's guidelines. Additionally, the willingness of ISDE officials to

consider improvements and adjustments to their approaches was noted during interviews with dual credit program officials at CWI.

Discussion of the Finding

Consensus among the program officials showed adjustment is needed at the state level to address students' course-taking behaviors. Program officials said they found students taking more courses than needed in disciplines in which the student might excel. For example, a student may take six courses in history (18 credits totals) as it is a subject they like. However, when the same student enrolls in their degree or certificate program at CWI (or another college or university), they find they have more than enough credits to satisfy the degree requirement and they are probably going to end up paying for their last year or semester of college out of their own pocket. Intrusive advising is needed for dual credit students in high school to better align course-taking choices with possible degree/certificate requirements. Policy makers should consider a guided pathways model incorporating dual credit earlier rather than waiting until a student enrolls at a postsecondary institution (Jenkins et al., 2020). A policy discussion is necessary regarding attaching course selection to funding restrictions, to help alleviate a student taking too many courses in one particular discipline.

Additional Recommendations for Further Research

Although this research focused on dual credit students taking courses through the IAOP and CWI, there is a significant need to examine the impact of the IAOP across the 11 colleges and universities participating in the program in Idaho. Such a study could concentrate on degree completion and the obstacles dual credit students face during their years in upper division courses. In the Research Question 3 findings, students indicated one of the main reasons they advanced through their postsecondary programs quickly was difficulty in course scheduling.

Research should probe why colleges and universities do not offer full schedules in all terms. As detailed, it is reasonable to presume it is a matter of economics. However, if appropriators are beginning to look at the return on their dual credit investment and if the time to degree completion is a main point of measurement, colleges and universities will need to address this disconnect. Research concentrated on fiscal impacts of full-schedule offerings and potential outcomes is highly recommended. Other possible research could look at public versus private institutions, and not-for-profit institutions and the effectiveness of credit transfer in the IAOP. Future research would allow for more time to have past, giving a potentially more robust data set to examine and analyze, as the IAOP only traces back to 2016.

Future research centered on comparing institutions certified through NACEP and uncertified institutions is recommended. Examinations could focus on student experiences with rigor, quality of instruction, and student outcomes. Scholars should consider a study including a more policy-based approach from the state and how policies guide and dictate program outcomes. Challenges identified in this work could be used as a starting point to help clarify future approaches and provide a more economical and efficient approach to dual credit for students and for the state, whose dollars are paying for the courses and cost of instruction.

As stated previously, there is often confusion and delay in postsecondary course navigation regarding transfer of dual credit courses. Future research should consider an extensive exploration of states with fully implemented guided pathways models as opposed to states like Idaho with little to no progress in student-centric transfer/completion modalities. An inclusive and comprehensive look at guided pathways and its approach to advising, course, and degree navigation may yield valuable policy recommendations for postsecondary officials and appropriators to consider in future revisions to the IAOP.

Future research should be done to compare larger school districts against smaller schools/districts. Data from this work suggested a difference between larger schools and their smaller counterparts regarding schedules, classes offered, and potential areas of study for students interested in dual credit. How do smaller districts, with limited resources, provide opportunities to their students? How do larger districts manage the immense volume and ensure quality instruction?

The field of diversity, equity, and inclusion is another area of critical need for research and student focus in Idaho. This research effort did not break down student experiences based on racial background or socioeconomic status, or by examining other underserved populations such as LGBTQAI. An equity lens should be a foundational element through which all policy decisions are viewed to help bridge chasms of existing approaches. Although the state of Idaho provides $4,125 for each high school student, regardless of socioeconomic status, is this enough to help students in underserved populations who may not have access to other financial resources after graduation or who may not have access to enough courses to earn a certificate or associate's degree in high school due to limitations completely outside of their control? Are dual credit courses being offered in native languages, such as Spanish, to help second language learners be more successful? This research did not attempt to answer any of these pressing questions, but rather served as a foundational base from which future efforts may build in this high-need area.

Faculty equity is also an area of consideration for future study. This effort did not probe faculty considerations about bias toward programmatic impressions because they are paid a stipend from the college. Equity was not addressed regarding faculty composition, compensation, racial diversity, or other considerations, such as available professional development and advancement. Colleges and universities should address diversity, equity, and inclusion in all

aspects of its programmatic delivery, content, context of offering, administration, funding, and considerations in partnership with the ISBOE. The ISBOE adopted a goal of 60% degree/certification attainment in 2010. This work was based on the work from the Georgetown Center on Education and the Workforce authored by Anthony Carnevale (ISBOE, 2010). Carnevale's study (as cited in ISBOE, 2010) showed some 65% of the jobs be available in Idaho in 2020 would need some level of training after high school. With the changing demographics in Idaho, the work of increasing degree/credential attainment should consider all elements of the IAOP and how it can help the ISBOE reach their goal. This includes research and analysis of existing programs and potential adjustments in the future.

Lastly, a robust statewide analysis is recommended of dual credit courses compared to advanced placement courses and how students in each have performed in Idaho high schools as they matriculate into Idaho public and not-for-profit colleges/universities participating in the IAOP. This work could provide lawmakers, education policy experts, parents, and students with much needed information critical for successful academic outcomes for the state and its students.

Significance of the Study

This qualitative, descriptive case study was significant in the context of the IAOP. Aside from the annual report published by the ISDE, there have been limited studies examining the Idaho dual credit program, despite an annual allocation of more than $20 million of Idaho taxpayer money toward this program. At the time of the study's design in February 2020, only one study existed specific to Idaho dual credit: Holden and Pierson's (2016) work through the Regional Educational Labs Northwest. Later, Eden's (2020) work with the Manhattan Institute was released on empowering students in Idaho through dual credit. As Holden and Pierson's research was completed as the 2016 Idaho legislature finalized its work on the IAOA, it did not

give a full accounting nor impact of the program. Additionally, Eden looked at the element of the state of Idaho paying for coursework through IAOA but did not address the program outcomes or reasons why students chose to participate or not participate in dual credit in Idaho. The significance for all involved dual credit stakeholders cannot be overstated. This is work specific to Idaho, as it is data from Idaho about students in Idaho matriculating through an Idaho postsecondary institution. Future policy decisions can and should be made using the data as the work holds great potential for appropriators to consider revising outcomes, key performance measures, and funding levels for a keystone program designed to help bridge K–12 and postsecondary education. The role of the ISBOE is key for the future of dual credit, as the eight-member body can set policy best addressing the needs of current and future students, faculty, program administrators, and parents seeking to take advantage of accelerated coursework in the secondary education setting.

Lastly, this case study holds primary significance for CWI and community colleges in Idaho as it was designed to measure perspectives, obstacles, and successes found in the CWI dual credit program. CWI should be exceptionally proud of its work in this field as evidenced by the positive responses from students interviewed for this study. Other Idaho community colleges should consider a close study of the CWI approach to better align expectations and outcomes in dual credit in their various regions. Future study of dual credit in Idaho could look at program outcomes between community colleges or differences in student outcomes, experiences, and completion at community colleges and universities. This study was significant as it laid a foundation for many future efforts to proceed.

Summary

This chapter included a summary of the intended purpose of the study to examine why students made the decision to participate or decline to participate in the IAOP through dual credit course offerings. Research questions focused on obstacles to participation and experiences from students' perspectives including whether they expected to finish their postsecondary degree/certificate sooner due to having taken dual credit. The three main research questions were restated and related back to the results gleaned from the online survey results, document analysis, and respondent interviews. The work was connected back to a robust literature review to ensure a solid foundation of understanding of the academic pillars supporting dual credit and its research were explored and understood. A review of the descriptive case study research was summarized, giving an opportunity to emphasize the choice of research method and how it was supported by existing scholarly research. Conclusions and key findings were presented with multiple recommendations for future research to be considered for willing scholars.

Final Remarks

In conclusion, this research provides a rich, descriptive look at dual credit in Idaho through the IAOP and CWI's role as the state's largest dual credit provider. CWI should be recognized for their work in the dual credit arena and for impressive responses from program officials committed to earning NACEP accreditation. Faculty and students who participated in the research were largely satisfied with their dual credit experiences. Lawmakers should acknowledge the IAOP is a significant program of value in the educational community in Idaho. Lawmakers may want to consider revising the IAOP to be delivered exclusively through community colleges, thus allowing the state's 4-year universities to concentrate on upper

division education, graduate studies, and research, and leave the early college offerings to Idaho community colleges.

One final observation is regardless of whether students complete their education faster, the dual credit program has value in a student's overall education; it can set a positive course for life-long learning, better engage high performing students in high school, and reinforce the value of learning.

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Appendix

Current College Student Online Survey Questions

1- Did you take dual credit while in high school? (yes or no; if no, go to question 8)

   a. Yes

      i. How many credits (one class is usually three credits) did you have upon graduation?

         1. 0-6
         2. 6-12
         3. 12-18
         4. 18-24
         5. 24+

2- If yes- what was the biggest factor in your decision to take dual credit in high school

   a. It was paid for by the State
   b. Parents made me
   c. Needed courses to get ready for college
   d. It fit in my schedule
   e. Friends
   f. Other _____

3- What year of high school did you start taking dual credit?

   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

4- How many dual credits did you take during your freshman year?

1. 0-6
2. 6-12
3. 12-18
4. 18-24
5. 24+

b. How many dual credits did you take during your sophomore year?

1. 0-6
2. 6-12
3. 12-18
4. 18-24
5. 24+

c. How many dual credits did you take during your junior year?

1. 0-6
2. 6-12
3. 12-18
4. 18-24
5. 24+

d. How many dual credits did you take during your senior year?

1. 0-6
2. 6-12
3. 12-18
4. 18-24

5. 24+

5- Did you go directly to college/university after high school (fall of your high school graduating year)?

   a. Yes
   b. No, (if no, when did you enroll?)
      i. Following spring semester
      ii. Following fall (waited 1 year)
      iii. Waited 2 years
      iv. Waited more than 2 years
   c. If you waited to enroll, what was the biggest reason for waiting
      i. Needed money to afford classes
      ii. Needed to work for other reasons
      iii. Church service
      iv. Military service
      v. Tired of school, took a break
      vi. Other_____

6- Would you recommend taking dual credit in high school to a younger sibling, friend, or neighbor/acquaintance? (yes or no)

   a. (yes)
   b. If no- what is the biggest reason?
      i. Too hard
      ii. Takes too much time in high school
      iii. Credit didn't transfer, not worth it

iv. Grade lowered my gpa

v. Other_____

7- Size of high school you attended

a. 5A

b. 4A

c. 3A

d. 2A

e. 1A-D1

f. 1A-D2

8- If you did not take dual credit, what was the biggest reason for not doing so?

a. Couldn't make it work in my schedule

b. Thought class would be too hard

c. Didn't know enough about how it worked to do it

d. Did not think I was going to college so why bother?

e. Dual credit classes offered did not interest me at the time

f. Other_____

9- Size of high school you attended

a. 5A

b. 4A

c. 3A

d. 2A

e. 1A-D1

f. 1A-D2

10- Now, looking back- would you change your decision not to take dual credit in high school?

a. yes
b. no
c. why?

Would you recommend taking dual credit in high school to a younger sibling, friend or neighbor/acquaintance? (yes or no)

d. (yes)
e. If no- what was the biggest reason?
    i. Too hard
    ii. Takes too much time in high school
    iii. Credit won't transfer, not worth it
    iv. Grade may lower my gpa
    v. Other_____

11- Would you be willing to answer a few more questions with a student studying dual credit via zoom? The interview will take approximately 10-15 minutes and you will not be identified in the information provided. 24 Participants will be entered into a random drawing through which a $100 Amazon gift card will be awarded.

    i. Yes or no

[redacted]If yes- please email your contact information to:

[redacted]