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# An Exploration of Accelerated Student Perspectives on Participation Experiences and Making Career Choices

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# An Exploration of Accelerated Student Perspectives on Participation Experiences and Making Career Choices

by

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## ABSTRACT

Acceleration program options have grown rapidly in Florida and have been used to help students pursue an associate or bachelor's degree. The purpose of this qualitative study was to explore the experiences that former dual enrolled students had with selecting a major and a career. A snowball sampling approach was used to identify ten participants from the southwestern region of Florida with 12 or more credit hours from dual enrollment. Social Cognitive Career Theory (SCCT) was the conceptual framework used to help guide this study. The instrumentation for data collection included a short survey followed by a semi-structured interview. The data collected from the participants were coded and analyzed using a thematic analysis process. Key themes related to student perspectives on acceleration programs were viewing participation as getting ahead in their education and experiencing what college life is like. Regarding the student's choice of an academic major, two themes were identified: Having general ideas about their major choices before taking acceleration coursework, and altering career choices after participation in their program. About impact of participation, two themes were determined including the role of counselors on making career choices and providing related supports, and the opportunity to confirm choices for academic major. Overall, eight out of ten students that participated in this study remained undecided or changed their major/career path.

# CHAPTER ONE:

# INTRODUCTION

Acceleration programs, also referred to as dual credit programs, are used by policymakers to help high school students prepare for college and persist towards a degree (Tobolowsky & Allen, 2016). Acceleration programs also offer curricular options to students that shorten the time required to complete their degrees, allow enrollment in rigorous coursework, and increase depth of study for a particular subject area (OPPAGA, 2008). An accelerated student is someone who moves faster and at a younger age through an educational program and consequently places ahead of the regular high school curriculum. The more common acceleration program options for students are: Advanced Placement (AP); Bridge Programs; College Level Exam Program (CLEP); Dual Enrollment; Distance Learning/Virtual High Schools and Colleges; Early and Middle College High Schools; General Education Development as a Bridge to College; International Baccalaureate (IB); Tech Prep; College Tech Prep (Bragg et al., 2006); and Advanced International Certificate of Education (AICE) (The Florida Senate, 2018b).

Acceleration programs appeal to educational leaders and policymakers because students can earn college credits while they meet high school requirements. Dual credit programs save money by offering a broader number of courses and reducing the need for more seats in the classroom and instructors to teach classes (OPPAGA, 2009b). Given the potential benefits of acceleration programs, some states have changed laws and policies to increase student access to them. For example, 2018 Florida Statute 1003.4295 requires all high schools to advise students on the different acceleration programs available (The Florida Senate, 2018b). In 2014, Senate

Bill 850 was also passed in Florida directing the Florida College System (FCS) to establish a dual credit collegiate high school for students in every district (Appropriations Committee et al., 2014). As such, acceleration programs are embedded in our educational system and play an important role in student development. In 2002–3, a national survey on public two-year institutions assessed that 98% of schools across the United States participated in dual credit programs (Kleiner et al., 2005).

A critical perceived benefit of acceleration programs is that they help reduce the time required to complete a college degree, which has increased over the years (Hunt & Carroll, 2006). In 2015, it was reported that 59% of students at a public school completed their bachelor's degree within six years (National Center for Education Statistics, n.d.). In turn, research by Allen and Dadgar (2012) determined that dual enrolled students received more credits even after they enrolled in college and earned higher grades in comparison to First-Time-in-College (FTIC) students. Allen and Dadgar (2012) also discovered a positive correlation between dual credit programs and student retention. In general, acceleration programs have been found to encourage students to continue toward a bachelor's degree after earning a high school diploma and college coursework toward an Associate of Arts (AA) degree (Tobolowsky & Allen, 2016).

Admission into a dual enrollment program varies from state to state and across schools, while most students participate in dual enrollment through a community college (National Center for Education Statistics, 2021). In the state of Florida, partnerships and articulation agreements are sometimes developed between high schools, public colleges, and neighboring universities to allow a seamless transition for students from one school to another. Some of these partnerships involve scholarships toward tuition and other fees for the students (Florida College Access Network, 2018).

**Problem Statement**

In spite of the reported benefits of acceleration programs at a community college, students may struggle with their decision to pursue a major and career after entrance into the college environment. Career decisions for dual enrolled students come sooner because they earn college credit hours toward a major while simultaneously earning their high school diploma. These students may therefore face challenges as they seek guidance from high school counselors and college officials in declaring a major or planning for a career. In addition, dual enrolled students are given limited information about degree programs and prerequisite coursework, while admission into some programs is not guaranteed (Targeted Transfer Pathways, April 2018). Further, a dual enrolled student may not be considered degree-seeking, which could limit the services they receive at the college where they take their dual enrollment courses.

Students who participate in acceleration programs may also struggle with personal and environmental factors that can influence their major and career choices. As noted by Seidman (2012, p. 147), as college has become more diversified, "the community college serves a multiplicity of educational programs to an increasingly diverse student population." Students who participate in acceleration programs might struggle with support for their family, full or part-time work, and a full-time course load. To this end, it has been well documented that factors such as a person's background, personal attributes, their environment, and overt behavior contribute to a student's major and career choices (Lent et al., 1994) However, current research has not explored the role that personal and environmental factors have on degree/career choices for accelerated students. Related research is even more scant in the context of two-year colleges.

Accelerated students enrolled at post-secondary institutions, two-year colleges in particular, may need help with a variety of career-related concerns. In 1989, a study by Healy

and Reilly reported that college students need assistance from their college when it comes to: knowing about themselves; identifying a career goal; solidifying career plans; exploring career options; developing an educational plan; and learning about job search skills. These career-related areas may or may not have been addressed by high school guidance counselors and college officials. Thus, given the high rate of participation of two-year colleges in dual credit programs, the exploration of how students perceived their participation in acceleration programs and their experience selecting an academic major is warranted.

**Purpose Statement and Research Questions**

The purpose of this qualitative study was to explore the perceptions of former dual enrolled students regarding acceleration programs and their selection of a major and/or a career. The target students for this study were former dual enrolled students who earned 12 or more credit hours from a dual enrollment program from a two-year state college in the southwest region of Florida. This exploratory study was guided by three research questions:

1. What perceptions did former dual enrolled students have regarding acceleration programs?
2. Using retrospective reporting, how did former dual enrolled students describe their major and career choices before and after their participation in an acceleration program?
3. From the former dual enrolled student perspective, what factors impacted their major and/or career choices?

For the purpose of this study, a dual enrolled student refers to any student who enrolled and passed a college level course while attending high school. In turn, acceleration programs

refer to AICE, AP, IB, and dual enrollment offered in the state of Florida. Further, student perceptions regarding acceleration programs refers to their thoughts about the benefits and challenges of acceleration programs. In turn, the Social Cognitive Career Theory (SCCT) was used as a frame of reference to provide a broad overview of factors that can influence a student's major/career choices, briefly outlined in the following section. This theory is described in the next section.

**Theoretical Framework**

Social Cognitive Career Theory (SCCT) was the theoretical framework used to help guide this study. The SCCT is a model used by researchers to help understand student development as it relates to their career-related interests, occupational choices, career stability and success (Lent et al., 1994). The general premise of the SCCT framework is that students base their career choices and goals on having the necessary skills, knowledge, expectations about rewards, access to a supportive environment, and commitment to work. Other studies, such as that of Ali and Saunders (2009), have demonstrated validity with the SCCT relationships and constructs suggesting that cognitive factors play an important role in career development, along with personal attributes and environmental (e.g., institutional) conditions.

For this study, the SCCT model was used as a broad frame of reference to gather insight on cognitive, environmental, and personal factors a student may encounter while considering and pursuing an accelerated pathway. The SCCT model can provide the basis for the interpretation of the connection between factors such as a student's characteristics and predispositions, their learning experiences, and how those factors lead to a student's expected outcomes for success. In turn, a student's self-efficacy and expected outcomes may lead to the identification of interests

which then lead to the student's choice of major/career goal. As students follow a plan to pursue their career goals, environmental and contextual influences such as program supports and barriers such as failure to offer coursework for the desired program of interest can impact a student's ability to achieve their career goal (Lent et al., 1994). In short, the SCCT model highlights cognitive, environmental, and personal factors that can lead to decisions about participating in a particular accelerated career path. As such, each student experience is different, which aligns with a constructivist paradigm suggesting that personal meanings, truths, and existing knowledge is unique to the individual (Lichtman, 2012).

For the purpose of this study, the SCCT framework was broadly used to highlight the importance of some factors (e.g., cognitive, environmental, personal) in the process for deciding to participate in an accelerated program and choose a particular pathway. Students who participate in acceleration programs such as dual enrollment pursue majors of interest that they see themselves successful in and will have a positive career outcome. Thus, it was posited that students who take part in dual credit programs most likely see themselves as competent learners who want to save money and get ahead in their education. However, accelerated student environmental and contextual factors can play a role on the understanding of accelerated program choices, benefits, and participation experience. To address the purpose and research questions, the focus of the study was on allowing students to share their perspectives and insight as they considered and experienced participation, identifying factors important to them, and then using the conceptual framework for interpretative reference.

**Significance of Research**

The rationale for this study is to gain a better understanding from a dual enrolled student's perspective about their experience working with high school and college personnel to

explore their major and career options. Previous research supports the idea that predictive factors such as academics and previous college background are important when determining student success and preparation toward a career (D'Amico et al., 2014**)**. Dual credit programs are viewed as a possible answer to educational concerns relating to student preparedness, limited college access, cost of college, and degree completion rates (Tobolowsky & Allen, 2016). However, as dual credit offerings expand and additional acceleration program models emerge, research has not kept pace with the growth of such programs and their impact on major and career choices for accelerated students.

The research conducted on acceleration programs provided insight into issues that occurred as students utilized these programs and persisted toward their degree. As we learned more about acceleration programs from the student perspective, college administrators can now better assist by improving guided pathway resources with career development support and more specific information on degree requirements for students. College personnel and administrators can also better support an accelerated student with degree attainment. The results from this study identified personal and environmental factors that impacted major and career choices for a dual enrolled student. Future research can explore in more depth, students from different ethnic and cultural backgrounds and more specific dual credit programs. These ideas are expanded upon in chapter five.

**Definition of Terms**

- **Acceleration Programs or Dual Credit Programs**: Any curriculum program that allows high school students an opportunity to take rigorous coursework to broaden their curricular options. Students who pass an accelerated course may be eligible to earn college credit while attending high school (OPPAGA, 2009b).

- **Advanced Placement (AP)**: An acceleration program that offers college-level coursework to high school students. Taking an AP exam can earn a student college credit hours and placement (The College Board, n.d.).
- **Advanced International Certificate of Education (AICE)**: An international curriculum and examination system that offers diplomas to students who meet the curriculum criteria (Cambridge Assessment International Education, n.d.)
- **Collegiate High Schools**: High schools that allow students to earn a high school diploma and dual enrollment credit hours at the same time (Appropriations Committee et al., 2014).
- **Concurrent Enrollment:** A term sometimes applied to college-level courses offered on the high school campus which may not apply toward a student's high school requirements (Bragg et al., 2006).
- **Dual Enrollment (DE)**: A program that allows high school students to take post-secondary coursework to earn credits toward a high school and/or post-secondary degree (Dual Enrollment Programs, 2019).
- **Early Admission:** A type of dual enrollment whereby students who meet the eligibility criteria can enroll at a post-secondary institution on a full-time basis and earn credible hours toward their high school diploma and associate degree (The Florida Senate. (2018d).
- **International Baccalaureate (IB)**: An international education program offering a diploma, open to students aged 16 to 19. Students who take and pass the IB assessment exams can earn college credit (International Baccalaureate Organization, 2015).

- **Retention:** The persistence of students and the increased importance to college administrators who try to improve graduation rates and decrease loss of tuition revenue from students who drop out or transfer to another institution (Tobolowsky & Allen, 2016).
- **Self-efficacy**: A student's belief in their success at a task; this is a learned rather than inherited trait (Tinto, 2017).
- **Semi-structured or guided interview**: This tool requires a format for the researcher to follow but allows the interviewer the flexibility to deviate from the prepared questions if the situation arises (Lichtman, 2012).
- **Social Cognitive Career Theory (SCCT):** A theoretical framework used to help students develop an understanding of career-related interests, make occupational choices, and achieve career stability and success (Lent et al., 1994).
- **Thematic Analysis (TA):** A qualitative approach used to sort data, concepts, topics, and ideas into coded categories which can then be analyzed (Braun & Clarke, 2012).

# CHAPTER TWO:

# LITERATURE REVIEW

Student participation in acceleration programs has helped to reduce the cost of college, prepare students for rigorous coursework at post-secondary institutions, and promotes timely graduation (Tobolowsky & Allen, 2016). However, little information is available regarding what happens as students pursue different curriculum options and career choices. This study explored the perceptions former dual enrolled students in Florida had relating to their acceleration programs and selection of a major and a career. In this chapter, a literature review is reported, focusing on acceleration programs; current laws and statutes in Florida; student transitional issues, student retention and success; and conceptual frameworks identified for the study.

## Acceleration Programs

There are four primary acceleration programs offered typically found in high schools including Dual Enrollment (DE), Advanced Placement (AP), International Baccalaureate (IB), and the Advanced International Certificate of Education (AICE). For contextual reference, a brief overview of the acceleration program options follows:

### *Dual Enrollment (DE)*

Dual Enrollment (DE) was first formed as an extension to secondary schools during the first half of the twentieth century (Barnett & Hughes, 2010). In the 1920s, educators argued for the facilitation of student progression from high school to college, but structural differences

undermined those efforts. It was not until the 1970s that dual credit resurfaced to create meaningful connections between school districts and post-secondary institutions (Tobolowsky & Allen, 2016).

The first dual credit program offering college-level courses in the United States began in 1973. Syracuse University's Project Advance was developed to provide high-achieving students an opportunity to earn college credits while in high school. College faculty and high school administrators took a one-semester introductory course and adapted it into a two-term course with a final exam. The final exam was developed by Syracuse University for students to take and earn college credit (Greenberg, 1989). The main difference between dual enrollment today and earlier programs is the amount of time spent teaching the material and the exam students must pass before they earn college credit.

### *Advanced Placement (AP)*

Advanced Placement (AP) is a product created by College Board, a not-for-profit agency founded in the 1900s. The AP program was created in 1955 to offer students the opportunity to access college-level courses while still attending high school (Allen & Dadgar, 2012). The design of the AP program has changed very little since its inception. Students who take an Advanced Placement course can choose to take the AP exam to earn college credit. On a scale of one to five, students must earn a 3 or better on the exam to be eligible to earn college credit towards a post-secondary institution. The AP program is mainly used in the United States and Canada. American colleges and universities have the option to grant placement and credit hours to students who obtain high scores on the exams but how those credit hours apply may

vary (Tobolowsky & Allen, 2016). Credit hours earned, transfer student eligibility, and college GPA is obtained only if students pass the AP exam (Tobolowsky & Allen, 2016).

To determine the impact AP courses had on persistence towards a degree, Morgan and Klaric (2007) explored the academic careers of students who had taken AP exams and compared them to students who had not. The findings indicated that AP students graduated earlier than non-AP students within all racial, ethnic and gender groups in the study. In addition, AP students in science and math were more likely to major in a field closely related to science and math compared to non-AP students (Morgan & Klaric, 2007). Further, students who passed AP exams in science earned significantly higher GPAs in college compared to students that failed their science exams (Shaw et al., 2014). Previous research on AP students evaluated academic performance in math and science but no research has assessed academic performance in all curriculum areas.

### *International Baccalaureate (IB)*

International Baccalaureate (IB) was founded in Geneva, Switzerland in 1968 but was not established in the United States until 1975. The International Baccalaureate mission is "to provide a challenging and comprehensive education [enabling] students to understand and manage the complexities of our world and provide them with skills and attitudes for taking responsible action for the future" (International Baccalaureate Organization, 2015, p.1). The IB organization works with schools, governments, and organizations globally to develop challenging programs, an international education, and rigorous assessments. This program encourages students to be active, compassionate learners who understand other people and their differences (International Baccalaureate Organization, 2015).

The International Baccalaureate diploma program was first offered in 1968 to students aged 16–19. The program, designed for students in their last two years of school, aimed to prepare students for college-level work. The program was initially geared towards children of diplomats, scientists, and business leaders looking for a strong education outside their country of origin (Tobolowsky & Allen, 2016). In this regard, the AP program has a curriculum recognized mainly by the United States and Canada, whereas the IB program looked to establish a common curriculum recognized worldwide and prepare students for an international education (Bragg et al., 2006).

The IB diploma program has expanded to middle and primary years of education and there are also career-related programs developed for students worldwide. IB has a rigorous standardized curriculum and tests to help assure academic success for students in pursuit of a college or university education (International Baccalaureate Organization, 2015). Students that earn the IB diploma achieve a high GPA their first year of college, however those with IB courses but no diploma achieve the lowest GPA compared to other acceleration programs. IB students reported that they felt prepared academically for college, but research has found a disconnection in the transfer of knowledge and skills for which the IB program fails to compensate (Shaw et al., 2014).

### *The Advanced International Certificate of Education (AICE)*

The Advanced International Certificate of Education (AICE) was initiated in 1858 by the University of Cambridge (Cambridge Assessment International Education, n.d.). The AICE program includes two levels, the Advanced Subsidiary (AS) and the Advanced (A). The two levels focus on the development of knowledge, comprehension, and skills in subject content. The

goal of the AICE program is to raise the standards of education through the administration of exams for individuals who are not members of Cambridge University (Cambridge Assessment International Education, n.d.). Today more than eight million schools administer the AICE program annually in over 160 countries (Cambridge Assessment International Education, n.d.).

**AP, AICE, and IB in Florida**

In Florida, an Accelerated Mechanism Program was established in 1979. It is one of the oldest state-wide sponsored programs in the country (Hunt & Carroll, 2006). Since the initiation of Florida's Accelerated Mechanism Program, other outside acceleration initiatives such as AP, AICE, and IB have been incorporated into Florida's program to help serve students. If a student scores a certain level on an AP, AICE, or IB exam, colleges and universities may grant the student credit hours toward a degree (Tobolowsky & Allen, 2016). The Florida state system has 28 colleges and 12 universities that are considered public schools and mandated to participate in the Accelerated Mechanism Program (Florida Department of Education, 2017).

The AP program in Florida first began in 2000 in partnership with College Board. The state of Florida agreed to pay the AP exam fees so that students and their families would not have to pay for the test. The number of AP exams taken in the state of Florida has increased from 63,000 in 1998 to nearly 400,000 in 2018. Florida ranked third across the United States in 2018 for getting their high school students to take and pass the AP exam. However, the percentage of students with at least one passing score for the AP exam in Florida was only 31.7 (Postal, 2019).

The AICE program was successfully piloted in Florida between 1997 and 2000 (Shaw et al., 2014). AICE was recognized as a Florida state-funded program in 2002 and provided

advance courses from an international curriculum to 11th and 12th grade students. In 2007–8, 2,171 high school students in Florida were enrolled in the AICE program (OPPAGA, 2008).

In 2007, IB programs were offered in 27 Florida districts as a choice to help broaden curriculum options, increase depth of study, and offer rigorous courses to help prepare students for college and reduce a student's time to degree. After completion of the program, students could earn a high school diploma and an internationally recognized IB diploma. Students who took the IB exam and earned the requisite score were eligible to receive college credit. In 2007–8 9,802 high school students in Florida were enrolled in IB courses (OPPAGA, 2008).

**Dual Enrollment in Florida**

Dual Enrollment in Florida refers to the enrollment of secondary school students in a post-secondary course that can apply toward a career and technical certificate, associate degree, or baccalaureate degree. The dual enrollment program can be broken down into different types, such as part-time dual enrollment, early admission, collegiate high schools, and concurrent enrollment programs (Bragg et al., 2006). To meet the criteria to dual enroll in Florida, a student must pass a Common Placement Test (CPT) and achieve a 3.0 unweighted GPA, or a 2.0 unweighted GPA if the student wants to take a career and technical education course (The Florida Senate. (2018d).

Students who meet Florida's eligibility requirements are exempt from the payment of registration, tuition, and lab fees. Instructional tools are available at public high schools for dual enrollment courses at no cost to students or the school. Dual enrollment courses can apply toward high school graduation requirements and may also apply toward college credit hours; however, course offerings may vary by district ((The Florida Senate. (2018d).

In the state of Florida, from 2004 to 2005, all 67 school districts and a total of 37,657 students participated in dual enrollment courses. The schools with the highest levels of participation offered courses on both the college and high school campus (OPPAGA, 2008). Figure 1 shows the increase of students who took dual enrollment courses from 2011 to 2017.

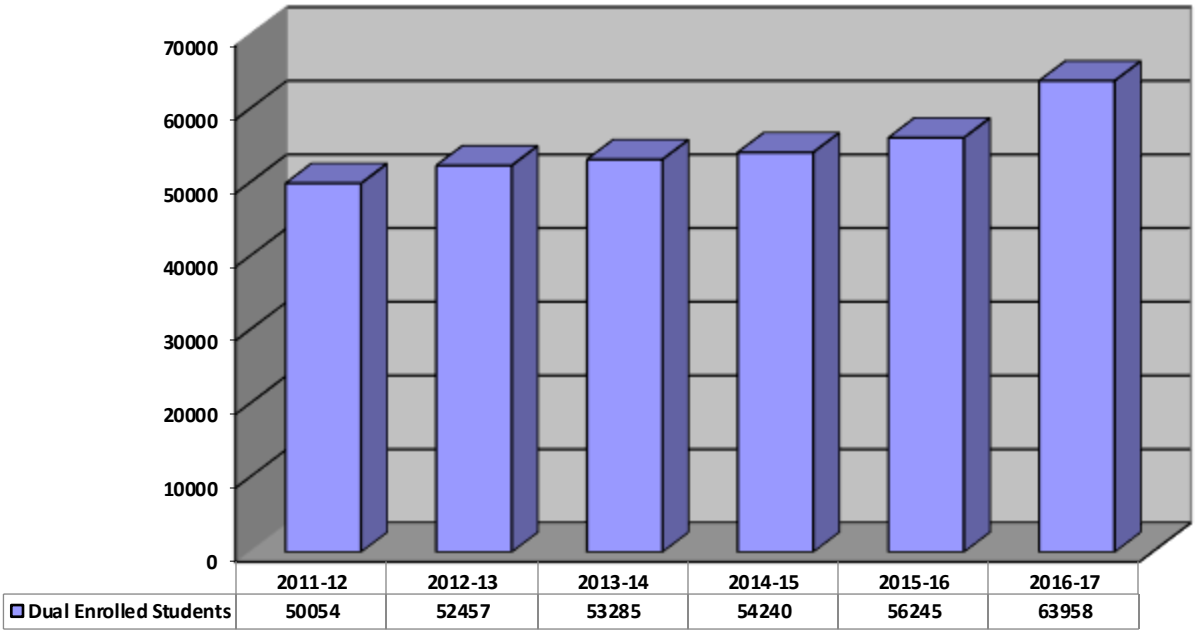


**Figure 1.** Dual enrolled students 2011–17 (Florida Department of Education, 2017)

According to the data reported in Figure 1, 14,000 more students were enrolled in dual enrollment courses within the state of Florida from 2011 to 2017, an increase of 28%. Within that timeframe, the percentage of those students who earned college credit was 94% (Florida Department of Education, 2017).

Dual enrollment programs are funded in a different manner to other acceleration programs in Florida. The state of Florida does not provide incentive funds for dual enrollment but does provide FTE funds to students who are simultaneously enrolled in high school and at a post-secondary institution. The funding is similar to taking two courses: one at the community

college, and one with the school district. In 2005–6, for each student registered for a dual enrollment course, Florida contributed $347 to the school districts and $304 to the community college (OPPAGA, 2006). Financial incentives can impact an accelerated student's decision to participate in a dual credit program which may eventually impact their success and persistence toward a degree (Tobolowsky & Allen, 2016).

**Early admission** is an advanced form of the dual enrollment program in Florida. Through early admissions, students can apply to a college or university, and if accepted, they can attend full-time (Khazem & Khazem, 2012). The early admissions program is for eligible secondary students who want to excel by enrolling at a post-secondary institution on a full-time basis. The dual credits earned can apply toward a student's high school diploma and their associate or bachelor's degree. Students who choose to participate in an early admission program must enroll in a minimum of 12 credit hours per semester and cannot be required to exceed more than 15 credit hours. A financial benefit of the early admissions program is that students are excused from paying registration, tuition, and lab fees (The Florida Senate. (2018d).

**Collegiate high schools** are an option for high school students interested in pursuing college-level courses. Collegiate high schools are approved by state legislators when a college, in collaboration with the school board within the college's service area, develops a curriculum that offers both secondary education and an associate degree at the same time. Most collegiate high schools in Florida are also charter schools that are part of the state's program for public education (Section (S.) 1002.33, 2012 Florida Statute (F.S.)). In Florida, charter schools have attempted to provide smaller size classes, an alternative curriculum, and more opportunities for parental involvement since 1996 (The Florida College System: Research and Analytics, 2013).

Charter and collegiate high schools have helped to: provide students with an enhanced learning environment; educate students on resources available on college campuses; and help elevate student success expectations. For some states, dual enrollment and middle/early college transition programs have been expanded to fully engage secondary students in college-level programs. Accelerated secondary school concepts provide students with a five-year curriculum plan and offer a combination of high school and college classes that further a student toward an associate degree or up to 60 transferable college credit hours. Some benefits of charter and collegiate school programs include less time to degree and increased alignment between secondary and post-secondary schools (The Florida College System: Research and Analytics, 2013).

In a survey conducted in 2013, it was reported that all twenty-eight colleges in Florida offered dual enrollment options, with fifteen of those colleges offering a charter or collegiate high school. Fifteen of the high school programs were being offered on a college campus, and five were offered to students off-campus. There were twenty partnerships between secondary and post-secondary institutions, with a breakdown of twelve collegiate high schools, six charter high schools, one early admission program, and one career technical prep academy. In the 2012–13 academic year, 944 associate degrees were awarded to students out of a total of 2,207 high school graduates who participated in the program (The Florida College System: Research and Analytics, 2013). As charter and collegiate high schools become more popular, it would be beneficial to discover the impact these programs might have on students pursuing different major and career paths.

**Career academies** were first opened in Florida in the late 1980s. Career academies are designed to integrate a career focused, academically rigorous coursework curriculum in order to

provide students from diverse backgrounds the opportunity for work-based experiences through collaboration with local businesses. Career academies also focus on a small community of high school students who work closely with instructors and follow a career themed curriculum. The goal of career academies is to prepare students for education at a community college or university and for the workforce. The CAPE Act mandated that all school districts have a career academy and in 2008-2009, 66 of 67 school districts in Florida had registered a total of 490 academies (Dixon, Wilson, & Borman, 2011). Career academies help guide middle and high school students towards career pathways and offer opportunities for student to earn career dual credit hours.

**Variations Between Acceleration Programs**

There are clear differences and variations between Florida's acceleration programs. Acceleration programs for high school students are funded by the state through the Florida Education Finance Program. Students enrolled in an acceleration program are included in their school districts' full-time equivalent (FTE) count, and the districts are given funds based on enrollment numbers. In 2005–6, Florida allocated $694 of FTE funds for each full-year high school course taken by students. Florida also provided additional incentive funds to the school districts for AP, IB, and AICE programs. For each AP exam passed, school districts received an additional $904; for each IB exam, an additional $894; and for each AICE exam, $862 (OPPAGA, 2006).

School districts were also given additional funds by the state if students earned a diploma offered by AICE or IB. In 2005–6, the state of Florida paid $1,119 for each IB diploma and $1,082 for each AICE diploma earned by students (OPPAGA, 2006). School districts in Florida benefited more from the financial incentives given by students who participated in AP, IB, and

AICE programs. However, compared to other acceleration programs, dual enrollment was more cost-effective at that time. For example, in the 2006–7 academic year, a study compared college credits earned for IB, DE, and AP students in Florida. 78% of students who participated in the IB program earned college credit hours toward a degree, compared to 98% of students who participated in the dual credit program; of the students who participated in the AP program, only 48% earned college credit hours toward a degree (OPPAGA, 2008).

AICE, AP, DE, and IB are funded differently, have different philosophies and curriculum goals, and there are differences within the programs that allude to variations that can affect student persistence and success. For a comparison of Florida's acceleration programs (DE, AP, IB, and AICE) see Table 1.

**Table 1.** 2017 Comparison of Florida's Acceleration Programs

| | **Dual Enrollment** | **Advanced Placement** | **International Baccalaureate Diploma Program** | **Advanced International Certificate of Education** |
|---|---|---|---|---|
| **Florida Statutory Eligibility Requirements** | 3.0 GPA for college credit courses.<br>2.0 GPA for career dual enrollment courses.<br>Pass appropriate sections of college placement test. | None | None | None |
| **Local Eligibility Requirements** | Colleges may specify additional criteria in Dual Enrollment Articulation Agreement (DEAA) | Districts set criteria. | Districts set criteria. | Districts set criteria. |
| **Level of Instruction** | College-level Grade earned is part of | Advance HS course aligned with college level content and | Advance level HS course only eligible for college credit if | Advance level HS course only eligible for college |

**Table 1. (Continued)**

| | | | | |
|---|---|---|---|---|
| | permanent college transcript. | learning outcomes. Eligible for college credit if student passes end of course AP exam. | student passes IB exam. | credit if student passes AICE exam. |
| **Florida Statutory Eligibility Requirements** | 3.0 GPA for college credit courses.<br>2.0 GPA for career dual enrollment courses.<br>Pass appropriate sections of college placement test. | None | None | None |
| **Local Eligibility Requirements** | Colleges may specify additional criteria in Dual Enrollment Articulation Agreement (DEAA) | Districts set criteria. | Districts set criteria. | Districts set criteria. |
| **Level of Instruction** | College-level Grade earned is part of permanent college transcript. | Advance HS course aligned with college level content and learning outcomes. Eligible for college credit if student passes end of course AP exam. | Advance level HS course only eligible for college credit if student passes IB exam. | Advance level HS course only eligible for college credit if student passes AICE exam. |
| **Instructor Qualifications** | SACS criteria for college/university faculty – master's with 18 graduate credit hours in subject field. | Public school teacher education requirements. Professional teacher training provided by College Board. Required AP Audit approval of AP courses/AP teacher syllabi. Required AP Audit approval of AP courses/AP teacher syllabi. | Public school teacher education requirements. Mandatory training by IB organization. | Public school teacher education requirements. Mandatory training by University of Cambridge International Examinations.<br><br>Cambridge International Examinations. |
| **Program Availability** | All public schools in the 67 school districts. Private schools with articulation agreements. Home school students. | Offered in 63 Public school districts. Available in some FL Private Schools. Available to all Florida Virtual School and home school student. | Offered in 30 school districts 83 participating schools. | Offered in 16 school districts.<br><br>26 participating schools. |

**Table 1**. **(Continued)**

| | | | | |
|---|---|---|---|---|
| **Program Availability** | All public schools in the 67 school districts. Private schools with articulation agreements. Home school students. | Offered in 63 Public school districts. Available in some FL Private Schools. Available to all schools via Florida Virtual School. Home school student. | Offered in 30 school districts 83 participating schools. | Offered in 16 school districts.<br><br>26 participating schools. |
| **Courses Available** | Any college-level academic or career course unless excluded in local DEAA. No prep courses/physical education. | Thirty-eight AP Subjects offered as courses and examinations approved by the College Board AP Program. | Courses offered as a part of the IB curriculum and testing program. | Courses offered as part of the AICE curriculum and testing program. |
| **Exit Requirement for Post-secondary Credit** | Passing grade in course "C" or better in Gordon Rule course. | Pass standardized AP exam. | Pass standardized IB exam. | Pass standardized AICE exam. |
| **% Enrolled Earning Post-secondary Credit (2007)*** | 94% in 2009-2010. | 41% in 2009-2010. | 81% in 2009-2010. | 59% in 2009-2010. |
| **School District Financial Incentives** | No additional incentives beyond base FTE. | .16 FTE bonus for each student passing an AP exam. | .16 FTE bonus for each student passing IB exam.<br>.3 FTE bonus for each student earning an IB diploma. | .16 FTE bonus for each student passing AICE exam.<br>.3 FTE bonus for each student earning an AICE diploma. |
| **Teacher Financial Incentives** | No incentives. | $50 bonus for each student scoring 3 or higher on an AP exam. $500 bonus for at least one student from a D or F school who scores 3 or higher on AP exam. $2,000 cap for any teacher in a given year. | $50 bonus for each student scoring 4 or higher on an IB exam. $500 bonus for at least one student from a D or F school who scores 4 or higher on an IB exam. $2,000 cap for any teacher in a | $50 bonus for each student scoring E or higher on an AICE exam. $500 bonus for at least one student from a D or F school who scores E or higher on an AICE exam. |

**Table 1**. **(Continued)**

| | | |
|---|---|---|
| | given year, with some allowances for a $3,000 cap. | $2,000 cap for any teacher in a given year. |

**Data obtained from the Florida Department of Education (2017) website. Articulations http://www.fldoe.org/core/fileparse.php/5421/urlt/0078393-cfaap.pdf*

Overall, students who choose to participate in acceleration programs have done well academically (Tobolowsky & Allen, 2016). However, student participation and academic success may vary between acceleration programs. For instance, the eligibility requirements for students to participate in a dual enrollment program is a 3.0 GPA and a college-level placement score, whereas there is no eligibility requirement for students to participate in AP, IB, and AICE programs. Further, dual enrolled students have a 94% chance of earning college credit, which is significantly higher than AP, IB, and AICE students. Finally, instructors who teach dual enrollment courses must have a master's degree and 18 credit hours of subject area training, whereas instructors for AP, IB, and AICE programs are only required to have a public school teaching certification and mandatory training. Incentive funding has since changed, but even with those changes, there are still more financial incentives for school districts and instructors who teach AP, IB, and AICE compared to dual enrollment (Florida Department of Education, 2017).

Students interested in an acceleration program have many options and are not limited to a single dual credit program as students can participate in more than one acceleration program. There may be benefits to a student's exposure to multiple programs since each has its own advantages and challenges. However, as acceleration programs become entrenched in the Florida educational system by policymakers, there is uncertainty about what is the most effective way to deliver these programs to students (Tobolowsky & Allen, 2016).

**Laws and Policies**

In Florida, policies have been developed over the years to promote acceleration programs. In 2002, Florida Statute 1007.23 (Statewide Articulation Agreement) was established to enable a seamless transition of student credit hours from one educational institution to another **(**The Florida Senate, 2018c). Florida's Statewide Postsecondary Articulations Manual, revised in May 2020, gave guidance on the transfer of accelerated credit hours (DE, AP, IB, and AICE) between educational institutions (Office of Articulation, Florida Department of Education, 2020). Florida legislators also mandated the creation of general education requirements as well as a statewide course number and credit system to help students meet graduation requirements.

The Statewide Course Numbering System (Florida Statute 1007.24, 2016) was developed to increase communication between various programs and institutions in Florida. A faculty committee was appointed by the Commissioner of Education in conjunction with the Chancellor of the State University System to recommend single level courses to the system. The objective of the course numbering system was to facilitate a smooth transition of student credit hours between participating institutions so that students could graduate without duplicating coursework.

The 2017 Florida Statute 1007.25 (General Education Courses; Common Prerequisites; Other Degree Requirements) was updated in 2019 to include a requirement to notify students of their eligibility to graduate with an Associate of Arts (A.A.) degree. This statute established the general education core that students needed to take in order to graduate with an A.A. degree (i.e., 36 hours of general education courses with one course selected from five different curriculum areas). The five subject areas determined by a statewide faculty committee were communications, mathematics, social science, humanities, and natural science. Courses approved in each curriculum area were not required to be offered at all institutions; however, each

institution had to accept coursework transferred in that met the required curriculum area (The Florida Senate, 2017). Accelerated credit hours could apply toward the general education core; however, how those hours were applied was to be determined by the Florida College System institution or university that accepted the student (The Florida Senate, 2018a).

Florida Statute 1003.4295 (Acceleration Options) was updated in 2016. This statute required all high schools to advise students on acceleration courses and on early graduation options. In the 2011–12 academic year, high schools were mandated to offer courses in IB, AICE, or a combination of at least four courses of DE or AP in curriculum areas such as English, mathematics, science, and social studies (The Florida Senate, 2018b). This statute was put in place to encourage high schools to work with different institutions providing acceleration programs.

The 2018 Florida Statute 1007.27 (Articulated Acceleration Mechanisms) was first implemented in 2002. This statute required institutions in the Florida College System and state universities to award credit toward specific courses in which competency was demonstrated through the passing of a course or examination. The objective was to shorten the time needed for students to meet high school and post-secondary degree requirements, broaden course offering options, and provide more depth of study in a particular subject area. Colleges and universities cannot award duplicate credits and cannot exempt students from courses without the award of credit if competencies have been established (The Florida Senate, 2018a).

In another effort to push for the expansion of acceleration programs, Senate Bill 850 was passed in 2014. The bill mandated that a collegiate high school be established for students in every district by the Florida College System (FCS). Its guidelines set out that: a collegiate high school program at minimum should include high school students in grades 11 and 12; the

program must allow students one full school year to earn Career and Professional Education **(**CAPE) industry certification; and students participating in the program must successfully complete 30 credit hours of dual enrollment courses toward an Associate of Arts or baccalaureate degree while earning a high school diploma (Appropriations Committee et al., 2014**).**

A summary of relevant laws and statutes that have had an impact on acceleration programs and the application of accelerated coursework throughout the state of Florida is given in Table 2.

**Table 2.** Florida Laws, Statutes, and Objectives

| **Laws & Statutes** | **Objectives** |
|---|---|
| 2018 Statute 1007.23 Statewide Articulation Agreement | To enable a seamless transition of student credit hours from one Florida institution to another. |
| 2016 Statute 1007.24 Statewide Course Numbering System | To facilitate transfer of accelerated credit hours for students between participating institutions. |
| 2017 Statute 1007.25 General Education Course; Common Prerequisites; Other Degree Requirement | Requires students to take 36 hours of general education courses with one course selected from five different curriculum areas; accelerated credit hours can apply toward general education core. |
| 2018 Statute 1003.4295 Acceleration Options | Requires all high schools to advise students on accelerated courses and early graduation options. |
| 2018 Statute 1007.27 Articulated Acceleration Mechanisms | Mandates institutions in the Florida College System and state universities to award credit toward specific courses that competency is demonstrated in through the passing of a course or examination. |
| Senate Bill 850 | Mandates that a collegiate high school be established for students in every district by the Florida College System (FCS). |

**Data obtained from the Florida Legislature website. http://www.leg.state.fl.us/*

Florida legislators have changed general education requirements, pushed high schools to advise on acceleration programs, and pushed to establish a collegiate high school in every district

in Florida. As a result, questions have arisen as to the impact these changes may have on students as they transition into the college environment and pursue their major and career?

**Student Transitional Concerns**

Acceleration programs appeal to Florida policymakers, parents, and students for various reasons. For legislators, acceleration programs can be costly, but they still save money because they reduce the cost of instruction for the state and increase space in classrooms. Acceleration programs address parents' concerns with secondary school curricula and keep students engaged in the educational process. For students, acceleration programs provide more course registration possibilities and the ability to pursue an area of interest in depth, while one acceleration course has the potential to meet both high school and college requirements (Hunt & Carroll, 2006). Students participating in Florida acceleration programs save money because they are exempt from tuition, registration, and exam fees (The Florida Senate, 2018a).

Research conducted by Kanny in 2015, highlighted some of the pros and cons of dual enrollment programs from the student perspective. The study took place in a low-income community in California. There were five high school seniors who dual enrolled at the community college and self-selected to participate in the study. All participants identified with being latino and shared some of the positives of dual enrollments such as an increased familiarity and understanding of various aspects of college and academics. Their early exposure to college helped them with student identity development and with them obtaining the necessary skills and coping strategies to be successful. These students learned about hidden curriculum that provided them with more explicit skills and they also felt more independent. Some of the negative issues these students struggled with were poor grades and negative interactions with others. In addition, these students shared that they received limited support from their high school staff

while dual enrolling and would have liked to have more ongoing support from counselors, teachers, or professors (Kanny, 2015).

Despite the benefits, students in acceleration programs can also face several challenges. In 2002–3, research conducted by Bragg et al. (2006) it was estimated that 1.2 million high school students enrolled in dual credit programs in the United States. With this rapid growth of dual credit programs, it has become difficult to measure transition concerns for accelerated students because of a lack of consistency in the implementation from one program to another (Kim, 2014). There are also inconsistencies between each program regarding level of instruction, the qualifications of the instructors, and financial incentives (Florida Department of Education, 2017).

Students who participate in acceleration programs come from various backgrounds, which makes it difficult to measure the effectiveness of each program. Acceleration programs have helped provide college access financially for students from middle- to low-income families. Acceleration programs have also been proven to increase access to college for many underserved student populations that struggle to overcome discrimination and a lack of support (Bragg et al., 2006). For example, in the 2001–2 academic year, data collected by the Florida Department of Education showed an increased rate of African American and Hispanic students enrolling in college after participation in a dual enrollment course. For African American students, 69.7% enrolled in at least one dual enrolled course went on to college, compared to 44.9% who did not take a dual credit course. For Hispanic students, 68.5% enrolled in at least one dual enrolled course went on to college, compared to 54.3% who did not take a dual credit course (Hunt & Carroll, 2006). Acceleration program initiatives have therefore helped provide college access to

students from different racial and ethnic backgrounds; however, the impact various acceleration programs have on major choices and career paths for these students is unclear.

The different models of acceleration programs have grown so much that we can find students who participate in multiple programs. In 2006, 98,395 students in Florida were participating in accelerated courses, and 11% of those students were participating in both dual enrollment and one or more accelerated course (Estacion et al., 2011). Students who participate in more than one acceleration program can lose hours because of duplication. In 2005, 17.5% of accelerated courses and exams taken by students in Florida did not transfer to a post-secondary institution. This failure to transfer credit hours was mainly because students completed multiple courses and exams resulting in the same college credit or did not submit documentation of earned grades and scores to the receiving institution (OPPAGA, 2009a).

Students with transfer coursework often face institutional barriers and a lack of support through the transfer process (Taylor & Jain, 2017). In the past, state universities have shared their preference of admitting students who participated in advanced placement over dual enrollment programs, and this policy has caused tension between school districts and community colleges, with the result that high school guidance counselors will direct students to advanced placement courses instead of dual enrollment programs.

In 2013, Rodriguez conducted qualitative research analysis on transfer students with accelerated hours. Using a purposeful sampling technique to interview 15 students who took part in a dual credit program, he learned that students with transfer hours struggled because of a lack of support from receiving institutions. Research on dual enrolled students who transferred to a university indicated transfer students did not feel supported by their new institution. The lack of preparedness, social, and academic support eventually led to a delay in the transfer of the student

into the four-year institution (Rodriguez, 2013). Dual credit students who transfer to a four-year institution will need to be aware of these issues so that they can prepare for a major before entrance into their receiving institution.

In 2010, a study conducted by Ishitani and McKitrick observed the educational experiences of native students compared to transfer students at a four-year institution. Community college transfer students experienced a different environment to that to which they had been accustomed before the transfer. Laws, policies, and procedures differ from one school to another, and some changes in culture can be unfamiliar to transfer students. Often, community college students struggle with the transfer of credit hours, finding adequate housing, and registering for the appropriate classes (Ishitani & McKitrick, 2010). A transfer student can experience a dip in grades referred to as "transfer shock," usually occurring after their first semester (Hills, 1965).

A transfer student's major can also have an impact on their transfer experience. Transfer shock is more common for math and science majors. In a 2014 study of transfer students, it was found that being a science, technology, engineering, and math (STEM) major had a more negative impact on a student's earned credit hours and GPA (D'Amico et al., 2014). Students who suffer from transfer shock report feelings of alienation and isolation. Some students experienced "transfer ecstasy", characterized by an increased GPA, but this was more common among art, humanities, and social science majors (Cejda, 1997). For a summary of common themes from previous research conducted on students transitioning from one school to another, see Table 3.

**Table 3**. Common Themes from Research on Transfer Issues 1965–2017

| Research Support | Common Themes on Transfer Issues |
|---|---|
| Hills, 1965 | - "Transfer Shock" is a dip in grades, usually occurring after the student's first semester. |

**Table 3. (Continued)**

| | |
|---|---|
| Healy & Reilly, 1989 | - Students needed assistance with their self-knowledge and developing an educational plan. |
| Cejda, 1997 | - Transfer shock was more common for math and science majors.<br>- "Transfer Ecstasy," an increased GPA, was more common among art, humanities, and social science majors. |
| Hunt & Carroll, 2006 | - Acceleration programs reduce time to degree.<br>- High school and college courses could be completed simultaneously.<br>- High school guidance counselors will direct students to Advanced Placement courses instead of dual enrollment because of university preferences toward AP students. |
| OPPAGA, 2009a | - Financial incentives to acceleration programs.<br>- Students complete college and high school at the same time.<br>- Students who participate in more than one acceleration program can lose hours because of duplication. |
| Rodriguez, 2013 | - Students with transfer hours struggle because of a lack of support from the receiving institutions.<br>- Students feel unprepared socially and academically. |
| Kim, 2014 | - Difficult to measure the transitional outcomes for accelerated credit students because of a lack of consistency in the implementation from one program to another. |
| D'Amico et al., 2014 | - A student's major can impact their transition experience.<br>- Science, technology, engineering and math (STEM) major was a negative predictor of earned credit hours and GPA. |
| Ishitani & McKitrick, 2010 | - Transfer students struggle with registration, housing, etc. |
| Taylor & Jain, 2017 | - Accelerated students may suffer from credit loss, inaccurate advising, and bad information on transfer procedures.<br>- Students often face institutional barriers and poor support with the entrance process. |
| Florida Department of Education, 2017 | - Inconsistencies between acceleration programs such as level of instruction, the qualifications of the instructors, and incentive funding for schools and instructors. |

**Data obtained from various research studies on transfer students and their issues.*

The transitional issues summarized in Table 3, such as transfer shock and credit loss, allude to some of the barriers a student can encounter while entering a new college program. High school students taking part in multiple acceleration programs may also struggle with some of these issues.

Students may be affected by factors such as transfer shock, lack of support, and institutional barriers at their receiving school. A student's experience in a dual credit program may also vary depending on the program, the student's ethnic and economic background, and

chosen major of interest. Receiving colleges and universities have preferences and will put restrictions on the credit hours received by different acceleration programs.

**Student Retention and Success**

In the 1960s, student retention became a concern across the United States. After the civil rights movement, more opportunities were made available to students from different ethnic and racial backgrounds. However, while access was made available to a variety of student groups, resources were given to help prepare these students for college and a career. Consequently, many minority students failed out of college before they could earn a degree (Seidman, 2012). Research conducted by Vincent Tinto, Robert Lent, Steven Brown, and Gail Hackett helped pave the way to understanding factors that impact student retention and a student's pursuit of a major and career. As a result, different approaches have been used to increase student retention and persistence toward a degree at post-secondary institutions for students from all backgrounds; among these approaches is the use of acceleration programs (Allen & Dadgar, 2012).

In 1975, Tinto researched dropout behavior in higher education, suggesting various reasons such as academic failure or voluntary withdrawal. Sometimes students leave college permanently or temporarily with the intent to transfer to another institution. Students need to feel as though they are integrated into the social system of their college community. The more active a student is in college, the more likely they will persist toward their degree and career goals at that institution. On the other hand, a lower commitment will lead to a higher probability of leaving (Tinto, 1975).

In 2017, Tinto further detailed this view on persistence, self-efficacy, sense of belonging, and the value of curriculum. According to Tinto, persistence is the motivation students have when in pursuit of goals, even when challenges arise. Schools that want to retain students must

appeal to their motivation to stay and complete a degree. Self-efficacy refers to a student's belief in their success at a task; this is a learned trait and not inherited. A strong sense of self-efficacy can assist a student with goal attainment, while a low sense of self-efficacy can discourage them. A sense of belonging within the college community influences a student's desire to stay and earn a degree. Finally, a student's valuation of the curriculum can impact their motivation to learn. Students need to feel that what they learn has quality and is relevant to the knowledge they need both now and, in the future (Tinto, 2017). Overall, as suggested by Tinto, colleges and universities want to retain their students, while students look to persist toward a degree and are often willing to transfer to another institution to accomplish this goal.

**Conceptual Framework: Social Cognitive Career Theory (SCCT)**

Lent, Brown, and Hackett developed the Social Cognitive Career Theory (SCCT), the conceptual framework used to help guide this study. SCCT addresses two career concerns: a student's ability to overcome obstacles, and their performance attainment (Niles & Harris-Bowlsbey, 2014). SCCT also theorizes that students can make premature decisions on occupational choices due to inaccurate self-efficacy beliefs. There are connections between a student's self-efficacy and factors such as a student's background, predisposition, gender, race, disability, and health status; a student's self-efficacy and expected outcomes leads to their interests, which then lead to the student's choice of major/career goal. During their first year in college, students will develop an understanding of career-related interests, make occupational choices, and achieve career stability and success (Lent et al., 1994). As students follow a plan to pursue their career goals, personal, environmental, and contextual influences such as barriers at their receiving school will impact a student's ability to achieve their career goal. The results can lead to the student changing their career path.

SCCT also provides a framework for understanding three parts of career development that are connected to one another. First is the construction and elaboration of career-relevant interests. Second is the selection of academic and career choice opportunities. The third is the performance and persistence of an individual toward their educational and occupational pursuits (Lent et al., 1994). In this context, accelerated students may base career goals and choices on the assumption that they have the necessary skills, knowledge, expectations about rewards, supportive environment, and commitment to work. However, these assumptions might change over time, altering their major and career choices.

The SCCT framework draws from Albert Bandura's (1986) general social cognitive theory. This theory incorporates concepts such as self-efficacy beliefs, outcome expectations, and personal goals, and how these three concepts interrelate with other factors. According to Bandura, a student's self-efficacy belief is their judgement of their ability to organize and accomplish a course of action (Bandura, 1986). In SCCT, a person's belief in their abilities plays an important role in the career decision-making process. A person's self-efficacy beliefs are shaped by four elements: accomplishments from their personal performance; social persuasion; vicarious learning; physiological states; and reactions (Lent et al., 1994). There are two major areas of concern with SCCT in this regard, because the theory does not take into consideration student academic performance and their level of attained success, nor their degree of persistence regardless of the obstacles (Niles & Harris-Bowlsbey, 2014). However, it is still clear that a student's belief in themself can impact their career choices. It is also evident that factors that shape career decisions for accelerated students can be examined more closely through a qualitative study.

Additional studies have helped provide validity to the SCCT model regarding relationships and constructs. For example, in 2009, Ali & Saunders conducted a study on the career aspirations of 63 high school students living in the central part of rural Appalachia. Several social cognitive career theory (SCCT) factors were measured to help assess their vocational/educational self-efficacy beliefs, career decision outcome expectations, age, socioeconomic status (SES), and perceptions of peer and familial support. The results indicated that lower SES students would benefit from interventions designed to increase their confidence and expectations about their future (Ali & Saunders, 2009). In another study, conducted by Healy and Reilly (1989) on 2,926 students enrolled at ten community colleges in California, it was found that students desired assistance with many career-related elements. Students who participated in higher education programs regardless of their background were concerned with the planning and implementation of their career choices. Students also needed help from their college when it came to self-exploration, identifying career goals, solidifying career plans, exploring career options, educational planning, and learning job search skills (Healy & Reilly, 1989).

Most students want to follow a plan when in pursuit of their career goals. However, cognitive factors (self-efficacy and sense of belong) along with personal factor (socioeconomic status and living situation) and environmental factors (support from receiving school programs and academic barriers) will impact a student's ability to achieve their career goal (Lent et al., 1994). The SCCT framework can be used as a broad reference in qualitative research to examine the unique experiences shared by accelerated students in pursuit of a major and career path.

## Conclusion

Acceleration programs have developed over the years and have been proven to help reduce the cost for legislators and a student's time to degree. Students who participate in acceleration programs such as dual enrollment have higher GPAs and complete more courses compared to other FTIC students. However, students who enter a new school do not always perform well, and some suffer from a drop in their GPA after the first semester of courses. In particular, students who transfer into science, math, and business majors seem to struggle more compared to students in pursuit of majors in the arts and humanities.

Environmental and personal factors can have an impact on student retention, persistence toward a degree, and career choices according to Tinto's interactionist theory and Lent, Brown, and Hackett's social cognitive career theory (SCCT). A lack of student motivation and involvement on campus can also impact the success of students. New students who participate in an acceleration program such as dual enrollment may struggle with low self-efficacy and a lack of connection to their college environment. For students who participate in an acceleration program, we are unsure which factors impact their career choices as they transition into the college environment.

Acceleration programs are rooted within the laws and in every district throughout Florida. Overall, students who participate in acceleration programs do well academically. However, there are gaps of information that need to be addressed in relation to specific curriculum areas and accelerated student transfer experiences. The goal of this study was to collect and analyze data gathered from students and share those results. The qualitative study methodology used to explore research questions about dual enrollment programs is described in Chapter Three.

# CHAPTER THREE:

# METHODOLOGY

The purpose of this study was to explore the perceptions former dual enrolled students had regarding acceleration programs and choosing a major and/or a career. Specifically, the goal was to develop a better understanding of a student's perspective regarding the pursuit of acceleration programs, the benefits of these programs and the issues arising from participation and choosing a major/career pathway. Three research questions were used to drive the inquiry:

1. What perceptions did former dual enrolled students have regarding acceleration programs?
2. Using retrospective reporting, how did former dual enrolled students describe their major and career choices before and after their participation in an acceleration program?
3. From the former dual enrolled student perspective, what factors impacted their major and/or career choices?

In this chapter, a description of the chosen qualitative research methodology is provided including an explanation of the: (a) research design; (b) background; (c) participants; (d) data collection methods; (e) data analysis; (f) ethical concerns; (g) issues of trustworthiness; and (h) limitations/delimitations for this study.

## Research Design

A descriptive exploratory approach grounded in a constructivism paradigm was the chosen research design for the study. Through descriptive exploratory analysis the researcher

gets a detailed account of a phenomenon from the perspective of the participants. The researcher can explore a topic by gathering information from the participants and their knowledge contributes to the understanding of a phenomena (Hunter et al., 2019). A descriptive exploratory approach aligns with a constructivist paradigm which is the belief that personal meanings, truths, and existing knowledge is unique to the individual (Lichtman, 2012). However, environmental, and contextual influences vary, and this may impact a participant's perceptions of reality.

An exploratory approach fit the study because the purpose was to gain insight from the accelerated students' perspective about their participation in acceleration programs using broad research questions. Given the many variations between acceleration programs it was fitting to explore and describe participation perspectives drawn from students who ventured down different pathways. As noted previously, dual enrolled students with accelerated coursework participated in programs such as the AP, IB, and AICE and it was important to explore student perceptions of the different programs. Likewise, it was also important to explore mediating factors students identified that played a role in their decision to participate and select an accelerated program of study. In turn, the descriptive emphasis provided the grounds for a detailed account of a phenomena. A descriptive study documents and explains perceptions from the participant's perspective (Hunter et al., 2019). The significance of detailing experiences from the accelerated student's perspective was to create a picture of their decision-making process, participation, and experience with dual enrollment programs.

The Social Cognitive Career Theory (SCCT) framework was used broadly to help guide this study. Factors from the SCCT model were the basis of exploratory questions developed and posed to the participants. The SCCT model focuses on cognitive factors such as self-efficacy and sense of belonging; environmental factors such as institutional barriers and academic support

advisors; and personal factors such as socio-economic status, living situations and enrollment status. The collection of data from students' perspectives was analyzed and compared to factors identified with the SCCT framework.

**Institutional Context**

The Florida public post-secondary system comprises 28 state and community colleges (Florida College Access Network, 2018). All Florida state and community colleges offer dual enrollment programs, and all public post-secondary institutions are required to accept accelerated credit hours from dual enrollment, AP, IB, and AICE programs. To be eligible for dual enrollment, students must have a 3.0 unweighted GPA and achieve a minimum score on a common placement test. A variety of dual enrollment programs are available to high school students, such as part time dual enrollment, accelerated dual enrollment, early college, and collegiate high schools. All of these dual enrollment programs are available to students in different formats in high schools, colleges, and online. Thousands of students participate in a dual credit program each year. For example, in the 2015–16 academic year, 114,126 high school students in Florida took a dual enrollment course, and 38.8% (44,240) of those students went on to a college within their first year after graduating high school (Richard, 2018).

The study was conducted in the southwest region of Florida featuring a mix of suburban and rural communities. In this region, there are three public colleges (to be referred as College "A", College "B", and College "C") serving students in 10 counties combined. Students can participate in multiple acceleration programs simultaneously and students can enroll at two or more colleges at the same time to earn dual enrollment credit hours.

College "A" is a small public college with four campuses and a headcount of about 3000 students. College "A" is in a rural area of the southwest region and serves three counties. The

college offers college credit and career certificates, associate, and bachelor's degrees. The College also offers GED preparation, instruction in English for Speakers of Other Languages (ESOL), and community enrichment courses and has a high enrollment of Hispanic students. College "A" has agreements with nearby colleges and universities to offer a seamless transition into bachelor's and master's degree programs. College "A" also offers different types of dual enrollment programs such as, college credit, early college, early admission, and an honors dual enrollment program.

College "B" is a midsize public college with three campuses and a headcount of over 10,000 students, 18.8% of those students enrolled in a dual enrollment program. College "B' is near a city and serves two counties. The college offers certificates, associate, and bachelor's degree programs. College "B" offers different types of dual enrollment programs such as, collegiate H.S., accelerated dual enrollment and early admission.

College "C" is another a midsize public college with five campuses and a headcount of over 16,000 students with 18.4% of those students enrolled in a dual enrollment program. College "C" is near a suburban area and serves five counties. College "C" offers college credit certificates, associate, and bachelor's degree programs. College "C" offers different types of dual enrollment programs such as, collegiate H.S., dual enrollment and early admission. None of the participants took part in a dual enrollment program at college "A", however, nine of the ten participants attended a dual enrollment program at either College "B" or "C" and one participant attended dual enrollment programs at both College "B" and "C".

**Participants**

The target population was students who had participated in a dual enrollment program at a public Florida community or state college in the southwest region. The researcher's goal was to

find 10 or more former dual enrolled students that took part in one or more acceleration program at one of the three colleges operating in the region. A small number of participants is appropriate for a constructivist qualitative research design as noted in the literature. For a constructivist qualitative study, one case example can provide a wealth of knowledge for future research (Boddy, 2016). The researcher wanted to find students from different backgrounds exposed to various types of acceleration programs. In particular, the researcher's priority was to identify former dual enrolled students who earned 12 or more credit hours from dual enrollment and participated in their program on a part-time, full-time, in-person at their high school, in-person at the college, or online dual enrollment program. The researcher also wanted former dual enrolled students who participated in other acceleration programs to gain a thorough idea about the different acceleration programs from the student perspective. Finally, the researcher wanted to explore personal characteristics such a socioeconomic status, gender differences, living situations and enrollment status to further understand if those factors interplayed with student perceptions and see if there was an alignment of those factors with the SCCT framework.

A purposeful recruitment strategy was initially anticipated for the study. The intent was to obtain permission to recruit students who met the criteria on a college campus to participate in the study. However, during this time the COVID-19 pandemic shut down the country and all college campuses were closed. Thus, to recruit participants for the study, the strategy was changed to a snowball approach, which is a method that involves the use of informants to identify people with the characteristics the researcher would like to investigate (Lichtman, 2012). For this purpose, the researcher contacted by phone and email family members, coworkers, and neighbors who lived in the southwest region of Florida in order to find potential candidates for

participation and the participants identified provided the researcher with contact information to other potential participants.

Fifteen students were identified through the snowball approach and were then contacted by phone or email and asked to participate in the study. Ten of the fifteen students agreed to participate in the study. The characteristics of the group include five males and five females, eight white and two Hispanic students, all participants were living with family, and all participants made less than 20,000 a year. Six of ten students earned 12-24 dual enrollment credit hours and three students earned more than 60 dual enrollment credit hours. Three of the ten students were full-time dual enrolled students and seven were part-time dual enrolled students. Three of the ten students participated in a dual enrollment program that took place at their high school and one student participated in an online dual enrollment program. Three of the ten students participated in other acceleration programs, and one student participated in dual enrollment at two different colleges and was also taking AP courses at the same time.

The researcher was familiar with some of the participants which made establishing a rapport with students easier. Some of the participants were children of friends of the researcher. Two participants lived in the same neighborhood as the researcher. Eight of the participants attended the same school and campus where the researcher worked and were children of coworkers. Some participants shared that they recognized the researcher as an employee at their school.

**Instrumentation**

The inquiry underlying the study sought to explore the perceptions former dual enrolled students had regarding acceleration programs and choosing a major and a career. Specifically, the goal was to focus on student's perspectives regarding the benefits of acceleration programs,

decision to enroll, choosing a particular major/pathway and the experience from participation. To meet this goal and address research questions. The instrumentation used to gather information for this study included a survey and the use of semi-structured interviews.

The survey served two purposes. First, the survey was used to gather demographic information from participants such as age, gender, ethnic background, home status, relationship status, enrollment status, employment status and earned dual enrollment credit hours. This allowed for systematic documentation of basic information to characterize participants as a group and individually. The second purpose of the survey was to confirm data from interview questions to ensure consistency in the characterization of individual responses.

The data points for the survey represent demographic items typical of descriptive research use to profile participant's background including age, gender, ethnicity, home status, relationship status, and employment status. Additionally, four questions were used to document participation in dual enrollment (e.g., enrollment status and earned dual enrollment credit hours) and career choices before and after their participation in a dual enrollment program. The draft survey included a total of 14 questions and was created using Microsoft forms, an application available as part of Office 365, which allows users to produce and post surveys online.

The draft survey was pilot tested on a peer to ensure the software was easily accessible to the user and to ensure all questions needed to answer the research questions were addressed. After the pilot test on the survey was complete, an additional question was added afterwards (How many credit hours did you complete?") to ensure participants met the 12-credit hour or more criteria. Due to the pandemic developments, it was only possible to pilot test the survey with the assistance of a colleague at work with a background in student services. This pilot test to the survey was done by sending a Teams invite to the peer and including a link to the survey.

During the Teams meeting with a peer, the survey was completed by the peer with the researcher available to answer questions. After the survey was completed and any minor adjustments were made, the researcher viewed a copy of the results in Microsoft forms and saved the copy to a Microsoft OneDrive folder. The final version of the survey questions is available in Appendix C.

In turn, a semi-structured interview was developed to gather information from the participants about their perspective and experience with acceleration programs, major/career choices, and factors that impacted their choices and participation. Interviews are a common tool used to collect data in a qualitative study **(**Denzin & Lincoln, 2013**).** Interviews can be conducted in multiple formats such as individual, group, online, structured, semi-structured, and in-depth. Individual, semi-structured or guided interviews was the preferred data collection method for this research design. Guided interviews require the investigator to produce an outline of questions used for every participant, but the interviewer may deviate from the questions if the situation demands it (Lichtman, 2012**).**

To address the first research question seeking to document perceptions of former dual enrolled students regarding acceleration programs, six questions were drafted to elicit related insight. An example of the questions is: Can you talk to me about your experiences in high school taking dual enrollment courses? Similarly, to inform the inquiry for the second research question seeking to explore major and career choices before and after participation in an acceleration program, four questions were initially developed to gather perspectives on the decision-making process for selecting a major. An example of related questions is: Did you have a chosen major and career goal before you started to take your dual enrollment courses? Likewise, to address the third research question seeking to document factors that impacted major and career choices, four questions were drafted, and an example question is: Did you experience

any challenges with pursuing your major of interest/career choice, after you moved on with accelerated credit hours? In all, the draft of the interview protocols included fourteen guiding questions.

The interview protocol was then pilot tested in tandem with the survey with the assistance of a colleague as previously reported. Using Microsoft Teams and appointment invite was sent to the peer to review survey questions and then to practice interview questions. After the pretest was complete, based on peer feedback and the researchers' observations minor grammar and word use changes were made to the interview questions. In total, there were fourteen interview questions. Once the interview protocols were completed a final version was saved on Microsoft OneDrive. The final version of the protocols is available in Appendix B.

A pilot test of both survey and interview explored potential problems such as sensitive and possible threatening questions and insufficient answers to questions, redundant questions, poor word structure and possible poor transitions from one question to another. Due to the Covid pandemic, forms, surveys, and interviews all needed to be conducted in the virtual environment and a test run with a peer helped ensure that all electronic and online forms were accessible.

**Data Collection**

As part of the study, the researcher completed training to conduct research involving human subjects. A certificate of completion from the Collaborative Institutional Training Initiative (CITI) (see Appendix D) was awarded to help ensure the researcher was educated on ethical conduct toward human subjects. The researcher also needed to gain approval (see Appendix E) from the Institutional Research Board (IRB) at the University of South Florida (USF) before they could begin the data collection process on students of interest. Initially, the

researcher started the IRB process for approval to recruit participants from colleges in the region, but because of the COVID 19 lockdown, this strategy was cancelled as potential participants had to be identified and recruited directly through a snowball approach.

Upon participation in the study, students were sent a Microsoft Teams meeting invite that included an attachment of the informed consent form. An hour was scheduled to meet with each participant to review their consent form, complete survey, complete the interview, and allow for any follow-up questions**.** Figure 2 displays the breakdown of the timeline anticipated for each participant interview.

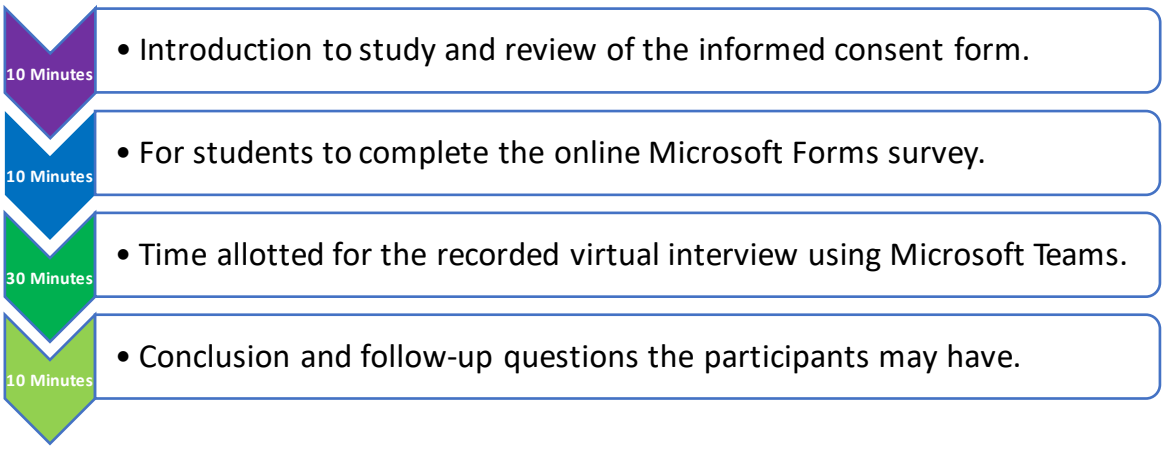


**Figure 2.** Participant Time Commitment Breakdown

During the Teams videoconference meeting, preliminary information was provided to the participants. The preliminary information included the purpose of the study, how the information obtained would be used, and how long the meeting would take. Then each participant reviewed and signed the informed consent form. Next, the researcher reviewed the Microsoft forms survey with each participant and a link to the survey was sent to the participants to fill out. Once the ten-minute survey was completed, the researcher proceeded with the interviews. Thirty minutes was allotted to conduct the virtual interviews. The participants were asked for their permission before interviews were audio-recorded and later transcribed to ensure accuracy. The participants

were asked the fourteen questions during the interview. Later, names of the participants would be changed to ensure their privacy. At the end of the session, the interviewees were asked to share any final thoughts. After the interviews were completed, contact information was given to the participants in case they had any further questions or concerns.

Post-interview tasks included transcription of each interview, organization of collected data, labeling of collected data, and writing down final notes before data analysis. Names and other identifiable information from the students were removed to maintain confidentiality and were not disclosed in the results. Once the data was collected from surveys and interviews, the names were first replaced with codes, for example "HS (12-2000)" for participant 1, and eventually were changed to pseudo names. The participants who completed the survey and interview were mailed a $10 Starbucks or Publix gift card as a thank you for their contribution to the study.

**Data Analysis**

Thematic analysis was used to examine the collected data. Thematic analysis is a systematic identification method used to organize and provide insight into meaningful themes across a data set (Braun & Clarke, 2012). The thematic analysis process helps the researcher make sense of collective experiences and find commonalities. However, common experiences are not always meaningful in relation to answering research questions and numerous categories can be found from one data set. Analysis is an important part of the process and is used to identify relevant themes use to answer the research questions.

For this study, the phases followed to analyze data collected from surveys and semi-structured interviews included listening, transcribing, analyzing, and coding the information. The researcher listened to each recording and generated a transcript using Microsoft Teams software.

The researcher then reviewed the transcript with the recordings and made any corrections that occurred because of inaccurate dictation. The researcher then thoroughly read and listened to each interview. The researcher also reviewed each survey to verify if what was said in the interviews aligned with what was written in the surveys. The analysis of common themes across different data sources is known as data triangulation and serves the purpose of increasing the validity and dependability of the study (Bloomberg & Volpe, 2012).

The thematic coding process began with the researcher combing through the collected data line-by-line to find codes. There are six steps for a researcher to follow from data coding to identifying themes as displayed in Figure 3.

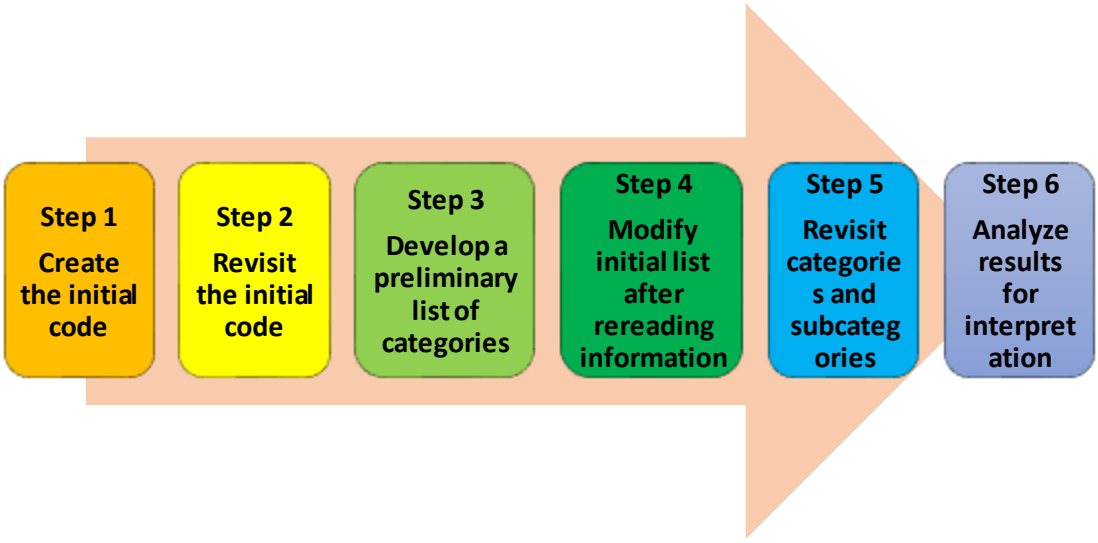


**Figure 3.** Thematic Analysis – Six Steps (Braun & Clarke, 2012)

The six-step process to thematic analysis begins with:

**Step one** is when the researcher familiarizes themself with the data and creates the initial code. During this step the researcher is immersed in the collected data from the participants. The researcher repeatedly reviewed textual data collected from interviews and surveys. The researcher also listened to audio recordings and/or watched video recordings that were collected

during the interviews. Finally, the researcher used an inductive approach to make notes of items such as words used and quotes that were of interest to help with the process of analysis.

**Step two** is generating initial codes to start the process of systematically analyzing the collected data through codes. During this step the researcher created three tables for each research question using Microsoft word to organize the participant transcripts and begin identifying codes interpreted from the participant transcripts.

**Step three** is the discovery of categories and themes. During this step the researcher looked for themes from the code to assist in answering each research question and included those themes to each of the three tables organized by research questions.

**Step four** is a review of potential themes to ensure the identified themes capture the essential elements of the data in relation to the research questions. During this step the researcher checked the developing themes to the code and to the entire data set.

**Step five** is when the researcher defines and names the themes. During this phase the researcher explains what is specific about each theme and ensures there is no overlap between themes for each research question. The researcher may also discard any theme that does not pertain to answering the research questions.

**Step six** is analyzing and reporting the results. During this phase themes are presented in a logical and meaningful way. The researcher also provides examples to the reader to support conclusions and explains how those conclusions answer the research questions.

To summarize, the researcher's objective was to analyze information shared by accelerated students from a constructivist point of view, then to identify codes, categories, and common themes collected from the participant interviews to identify common themes to document the three research questions.

## Ethical Concerns

Ethical behavior can be defined as a set of moral principles, rules, or standards governing a person or a profession (Creswell & Creswell, 2014). For instance, ethical concerns might arise in relation to confidentiality while conducting interviews. The personal information collected by the researcher must be safeguarded. A research study must follow the processes of the Institutional Research Board (IRB) before data can be collected from participants.

This research design was submitted to the University of South Florida's Institutional Research Board in January 2020. The study was approved and met the criteria for an exemption from the IRB review (Appendix E). To help safeguard the participants' personal information, all information collected during the study was protected with passwords on the researcher's computer and kept for a maximum of six years after the release of the study.

At the beginning of the interview process, the participants were given a consent form, which was used to explain the study and address any ethical concerns that might arise (Appendix A). This consent form was reviewed with the participants before any data was collected for the study. Contact information was available to participants in case they were interested in speaking with a counselor after the interview. The researcher wanted to assure the participants that resources were available to them before and throughout the interview. After the virtual interview was completed, the participants were offered a $10 gift card to Publix or Starbucks as thanks for their participation in the study. Those gift cards were mailed to the participants.

## Issues of Trustworthiness

Criteria a researcher should be mindful of when evaluating the trustworthiness of a qualitative study include credibility, dependability, and transferability. The credibility of a study

refers to the perceptions of the participants and whether the researcher has accurately represented their thoughts (Bloomberg & Volpe, 2012). To help establish credibility, field notes were kept, and permission was obtained from the participants to video-record the interviews to self-reflect on at a later time. To help prevent any discomfort or pressure to participate, virtual interviews were established which allowed students to attend the meeting from the comfort of their own homes. At the completion of the interview, participants were offered the option to contact the researcher with any concerns regarding accuracy or if they wanted to withdraw from the study.

The dependability of the study refers to whether processes and procedures used to collect and interpret information can be followed by others (Bloomberg & Volpe, 2012). This was addressed by providing details throughout the methodology of the steps used to recruit participants; administer the virtual interview and survey; and analyze the collected data using thematic analysis. The theoretical framework guiding the study is explained in the literature review along with other relevant research. Finally, a detailed breakdown of how the interview questions posed to the participants might help the researcher address the three research questions was also included in the methodology.

The transferability of the study refers to how well the reader thinks processes and procedures can be applied to other settings and communities (Bloomberg & Volpe, 2012). To address questions about transferability, detailed descriptions of acceleration programs, relevant Florida laws, research relating to accelerated students, transitional student issues, theoretical frameworks, each participant's background, and the participants' perceptions about pursuing majors and careers are provided in this study. Qualitative studies cannot usually generalize their results to other participants and scenarios, but results may be able to contribute to other theories and incite further research.

## Limitations

Limitations arose during the study due most significantly to environmental factors. For instance, during the timeframe of the study in March 2020 Florida went into lockdown because of the COVID-19 pandemic, therefore recruitment efforts and interviews with students could not be conducted face-to-face. Contact with potential participants was restricted to phone, videoconference, and email exchanges.

There were limitations when conducting interviews with the participants because interviews could only be done virtually using Microsoft Teams and some participants may not have been as comfortable sharing experiences within the virtual environment. At times, there were interruptions during interviews with participants because of poor internet connections. There were also interruptions from family members because the interviews were conducted in uncontrolled environments.

A snowball sampling process was used to recruit participants, which made it easier to establish trust between the participants and the researcher. That initial rapport helped foster open communication between the researcher and participants, but there may have been personal biases that had an impact on the results, since the participants were familiar with the researcher as a parent, advisor, and educator. In addition, the researcher had previously taken part in acceleration programs such as Advanced Placement and dual enrollment. Therefore, the researcher had their own perceptions of acceleration programs based on personal experiences. Finally, the researcher's previous experience in higher education as an academic advisor and an advocate for students with disabilities could also be viewed as a limitation. The researcher needed to be mindful of this as they conducted their research. That is why it was important to

record all interviews and take detailed notes, to enable the researcher to be as objective as possible in their analysis.

There were limitations when it came to the recruitment of ten of the participants for this study. It was difficult to find a well-rounded representation of students during this timeframe because of the Covid pandemic. If this study were to be conducted again, it should be expanded to include more students from different living situations, cultural, and ethnic backgrounds.

There were also delimitations to the population sample chosen for this study. The participants had to meet the criteria of a former dual enrolled student with 12 or more credit hours earned from an acceleration program in Florida. Florida's acceleration programs are required by law to follow articulation agreements, general education requirements, dual enrollment criteria and the Florida common course numbering system. Even with those limitations/delimitations, there was enough data collected, coded, and matched to common themes and theories to increase the trustworthiness and credibility of the results.

# CHAPTER FOUR:

# FINDINGS

The purpose of this study was to explore from the former dual enrolled student perspective, their perceptions about acceleration programs and with choosing a major and/or a career. In this chapter the findings resulting from the thematic analysis are described for each research question driving the study. The research questions were:

1. What perceptions did former dual enrolled students have regarding acceleration programs?
2. Using retrospective reporting, how did former dual enrolled students describe their major and career choices before and after their participation in an acceleration program?
3. From the former dual enrolled student perspective, what factors impacted their major and/or career choices?

To provide context for the study finding, a summary of the participant's characteristics is first reported followed by brief individual profiles. A description of major themes identified for each research question is then provided.

## Participants' Characteristics

Fifteen students were contacted, but only ten chose to participate in the study. Throughout May and June 2020, participants were identified using a snowball sampling method. For the

students interested in participating in the study, appointments were made, and interviews conducted online. For reporting purposes, the real name for each participant was replaced with a pseudonym.

There were five male and five female participants, with an age range between 18 and 20 years old. Eight of the ten participants identified themselves as White and two as Hispanic, and all of them lived with their parents/guardians/relatives. All participants earned more than 12 hours of dual enrollment credits, with six participants earning between 12 and 24 credit hours and four participants earning more than 24 credit hours. Two participants were working full time, while the majority were working part time between 10-30 hours a week, and one participant was not working at all. Accordingly, seven of the participants made less than $10,000 per year and three made between $20,000 and $30,000 per year.

Regarding college enrollment, five participants were enrolled in classes full-time, three were enrolled part-time, and two were not enrolled in any classes. In terms of their class standing, six participants were at sophomore level and 3 participants were at junior level of college, while one participant reported attending a technical school. For their major of interest before entering their dual enrollment program, six participants chose STEM with one participant specifying mechanical engineering, one participant was interested in the Arts & Humanities, while the other two were undecided. At the time of the interview, four participants followed up choosing a STEM major, including the one interested in mechanical engineering, two chose Business, two were enrolled in Arts & Sciences, and two were in Education. In turn, eight participants reported their future plans as completing a degree and work full-time, five wanted to travel, and three planned to pursue missionary or volunteer work. Three of the participants plan to work part-time,

join the military, or go to a technical school, respectively. A brief profile of each participant is reported below.

**Table 4.** Participant Acceleration Programs

| Participant | Acceleration Programs | Delivery of Program |
|---|---|---|
| Adam | Full time accelerated dual enrollment program. | At the college |
| Amber | Part time dual enrollment | At the college |
| Callie | Part time dual enrollment | At the high school at first but then moved to courses on campus. |
| James | Part time dual enrollment<br>Student also took AP | At the high school at first but then moved to courses on campus. |
| Jane | Full time accelerated dual enrollment program. | At the college |
| Larry | Full time accelerated dual enrollment program.<br>Student took AP courses | At the college |
| Martha | Part time dual enrollment at two different school<br>Student took AICE<br>Student also took AP | At the high school and online dual enrollment at another school. |
| Natalie | Part time dual enrollment<br>Student also took part in a career academy for health science. | At the high school at first but then moved to courses on campus. |
| Norman | Part time dual enrollment | At the college. |
| Randy | Part time dual enrollment<br>Student also took AP | At the high school. |

***Adam***

Adam was a 20-year-old single white male living with his family, employed full-time, and earning $10,000–20,000 per year. He earned more than 60 credit hours from his dual enrollment program and was also a full-time college student at a junior class level standing.

Adam shared he had a great experience with his dual enrollment program and working with high school guidance counselors. He had no problems signing up for classes and his

courses provided him with a better class schedule for balancing his time between sports and school. Although he was warned the workload would be difficult, he was the first student to participate in a full-time accelerated dual enrollment program on the college campus. Dual enrollment provided Adam with an opportunity to leave high school and feel like an adult. Adam felt he could be his own person by attending college and getting ahead in his education. He did not participate in any other acceleration program, only dual enrollment.

Adam did not complete his accelerated dual enrollment program but instead transferred to a university. He started dual enrollment taking college courses toward a STEM major with a focus on engineering, but then changed his major to business. Adam struggled with time management and Calculus II at the university, which was more difficult than he anticipated. He did one semester at the university and decided to return to his former college where he took dual enrollment classes so he could complete his associates degree. Adam was also offered an opportunity to pursue a technical school program in fire science and was planning to leave college to pursue that program. Overall, Adam shared that dual enrollment was the best decision and "the best opportunity to get college done early".

***Amber***

Amber was a 19-year-old single white female living with her family, employed part-time, and earning less than $10,000 per year. She had between 12 and 24 credit hours of dual enrollment courses before she started her degree-seeking program and was a part-time college student at a sophomore class level standing.

Amber did not participate in any other acceleration program, just dual enrollment, and reported having a good experience. She liked working with her guidance counselors and taking

part-time dual enrollment classes on the college campus, because it helped get her in the mindset for college. She felt her counselors were helpful getting her into the classes she needed for her degree, and appreciated they only allowed her to take two classes, starting things off simply. However, she did not like being denied the opportunity to dual enroll during the summer semester, as she had planned to save money. She wanted to take as many classes as she could, because she "liked the discount" and was also trying to get ahead in her education**.** She also shared that she struggled with procrastination and taking math and science courses. She did not blame her teachers and advisors for her issues with math and science because she knew she would have to work harder to get a good grade.

Amber did not really know what she wanted to major in before she started college but was considering to major in Arts and Sciences. During her first semester as a dual enrolled student, she became interested in teaching and education is her current major of interest. Based on her overall experience, Amber's advice to other dual enrollment students was that they should take things slowly and try to keep at least a "C" grade so that they can remain in the program.

***Callie***

Callie was a 19-year-old single white female living with her family and was unemployed. She had between 12 and 24 credit hours of dual enrollment courses before she started her degree-seeking program and was a full-time college student at a sophomore class level standing.

Callie liked the dual enrollment program, had no complaints about the program, and said everyone had been helpful. Callie shared that her high school counselors were very good and gave her simple instructions on how to pick college classes on the computer. Callie explained that she went to another high school and had to transfer mid-semester and because of that, she

would have been short on her high school English requirements. Thus, she was advised by her high school counselors to dual enroll and take two college level English courses at the high school, to help her catch up and meet her high school English requirements in one semester.

Callie reported that before she started to take college courses, she had been in pursuit of a STEM major. Later, she narrowed her interest on a nursing major and that she was sticking to that career track. She reported facing no major challenges pursuing her major. On the contrary, she noted she became more interested in wanting to do nursing "because of the classes and how helpful the teachers were." Her overall perspective is that the dual enrollment program is beneficial because it helps to prepare for college, get ahead with related coursework, and save money along the way.

***Jane***

Jane was a 20-year-old single white female living with her family, employed part-time, and earning $10,000–20,000 per year. She earned more than 60 completed credit hours from her dual enrollment program and her Associates of Arts degree. She was not taking any classes at the time of the interview because of the COVID-19 pandemic.

Jane participation in a dual enrollment program allowed her to go straight from high school to the college on a full-time basis, and she liked the idea of taking college courses for free. She reported not having a good high school experience as she had been bullied and often ate alone. She did not recall any interactions with guidance counselors in high school, and felt she received better guidance from college counselors to help her graduate with her high school diploma and Associate of Arts degree at the same time.

Jane did not like the location of the dual enrollment program because the college campus was far from her house and transportation was an issue for her. Jane also faced challenges transitioning into her dual enrollment program. In high school her teachers were more proactive helping students, whereas in college students she had to put forth effort and time to get help from instructors. In all, Jane had experienced taking honors courses and so she felt prepared to participate in dual enrollment courses.

Jane reported that she had begun dual enrollment with an interest in a STEM career but had no concrete ideas about a specific major. She said, "I still hadn't decided" about her major of interest and "just says anything", because the school wants to know her answer about a major. Jane wanted to let other students interested in dual enrollment know that they should take advantage of the resources on campus, such as tutoring services, communicate with professors, and "don't overstress yourself."

***James***

James was a 19-year-old single white male living with his family, employed part-time, and earning $10,000–20,000 per year. He earned 40 credit hours from his dual enrollment program and was a full-time college student at a sophomore class level standing.

James attended a military academy for high school and first took dual enrollment courses part-time at the high school with high school professors. Eventually, James took his dual enrollment courses on the college campus. James did take part in other acceleration programs such as pre-IB, honor classes, and AP courses, but he felt there were conflicts between the administration of each program (high school, dual enrollment, and College Board). All programs were rigorous, and he struggled with his priorities, but still enjoyed the dual enrollment program.

He liked that he could complete high school and college at the same time, and he liked the financial benefits of the dual enrollment program.

James shared challenges with the dual enrollment program. For example, he felt that his high school guidance counselors had not been educated enough about college courses and the college system. The high school counselors steered him away from courses he needed to take. He also took courses that were not necessary for his major of interest, and in general not needed, because of the advice given by his high school guidance counselors. James shared that he was hesitant about going to college guidance counselors because of his high school experience.

James gave a comparison of his dual enrollment and AP courses. He stated, "I think that dual enrollment is way better than AP credits and some honors classes." He said this because he was doing the same amount of work for both, but for AP classes he must take and pass one test to earn college credit. James stated that he found dual enrollment and college courses "more graceful, more adapting and more welcoming to students of all variety, ages, and cultures, and I also met a lot of other people who were in that same boat." Dual enrollment was an opportunity for James to get out of high school, meet new people, and prepare for college.

James said his major and career goals before starting his dual enrollment program were fitness and medicine. He had taken a course in high school with an instructor who was a physical therapist and became interested in pre-med and the sciences. His mother was a nurse, and he did not want to do her job but was interested in doing something similar. James' career focus has changed from STEM to a business degree. He also likes working with people and feels he is a good communicator, which is one reason why he switched to business. He wanted to share with other students interested in dual enrollment that they should get out there and try it, even if it was just one or two classes.

***Larry***

Larry was a 19-year-old single Hispanic male living with his family, employed full-time for the summer, and earning less than $10,000 per year. He earned 66 credit hours from his dual enrollment program and an Associate of Arts degree. Larry was also a full-time college student at a junior class level standing.

Larry liked his full-time dual enrollment program at the college campus because he was able to graduate high school and college at the same time. He liked that he was able to take math courses such as college algebra and calculus on the college campus, which was more relaxed compared to his high school campus. Larry also liked the financial incentives of the dual enrollment program. Some challenges for Larry were a lack of opportunities for students to help each other in his dual enrollment program**.** He shared that the coursework he had taken had been very rigorous, and for some of the courses, he had needed to study with other people to succeed. In addition to his dual enrollment courses, Larry participated in another acceleration program and took an AP world history course. The AP course and final test were difficult, but he passed and felt the course help him prepare for the dual enrollment program.

Larry shared that he wanted to "become a pilot or construct any kind of vehicle or plane". Larry did not want to waste time taking unnecessary classes, so he had narrowed down his major of choice from the beginning. He wanted to pursue a major in math, science, or engineering and entered dual enrollment wanting to major in mechanical engineering, and his current major is still mechanical engineering. Larry said the best advice to give a new dual enrolled student is to become friends with your advisors, counselors, and classmates.

***Martha***

Martha was a 20-year-old single white female living with her parents, employed part-time, and earning less than $10,000 per year. She had between 12 and 24 credit hours of dual enrollment courses from two different colleges. Martha was a full-time college student at a sophomore class level standing.

Martha talked about the different acceleration programs she had participated in. One dual enrollment program took place with one community college at her high school, while the other dual enrollment program was with another community college, and the courses were offered online and on the college campus. Martha also took AICE and AP courses at her high school while participating in dual enrollment programs. She shared that dual enrollment was her favorite, because with AICE and AP there was a test at the end and the credits you earned were reliant upon that final test. Martha said that she felt that the teachers in her AP and AICE course had just been 'teaching to the test'; she felt dual enrollment was a less stressful environment for both the teacher and students. Martha also felt dual enrollment prepared her and made her less anxious about going to college. In addition, dual enrollment allowed her to know her professors and familiarize her with college resources in the college setting.

Martha also liked her counselors. They communicated well with her and made the process of going from one dual enrollment program to another at different colleges easy. The main reason she had decided to take part in the dual enrollment program had been because she wanted to get her AA degree at a faster pace. She stated, "I knew if I took those classes in

high school while I had the time, then I could complete a degree faster in college." Martha had no challenges to share about the program.

Martha had wanted to pursue an Occupational Therapy Assistant program when she had first started her dual enrollment program but then she had changed her major to education. This change of major had come about after she had taken a job at an elementary school and loved it. She shared that her heart was just not in Occupational Therapy, and becoming a teacher was the quickest way for her to work with kids.

***Natalie***

Natalie was a 20-year-old Hispanic female who was in a relationship and living with her parents, employed part-time, and earning less than $10,000 per year. She had between 12 and 24 credit hours of dual enrollment courses, and she was a part-time college student at a sophomore class level standing.

Natalie started a dual enrollment program part-time with courses – ENC 1101 & 1102 – at the high school and a psychology and history course at the college. She participated in a medical academy program and completed her high school requirements as well as participated in the dual enrollment program at her high school and on the college campus. Natalie liked dual enrollment at the college because the classes were more diverse, with people from different backgrounds, age groups, and with different ideas. She could work on her Associate of Arts degree and get ahead in her education. She also liked the independent work given by the instructors. She would recommend dual enrollment over other acceleration programs, because she had had such a good experience with dual enrollment.

Natalie could not think of anything negative about the dual enrollment program, but she did face other challenges. Natalie did not feel like her high school guidance counselors had been helpful or available to her. She felt that applying to dual enrollment "was a really tough process because we would have to check with our guidance counselors, and sometimes they weren't there." It was not until Natalie graduated high school and started to attend college that she met with a college counselor who introduced her to the option of pursuing the radiography program. In addition, Natalie did not feel like her high school dual enrollment courses had prepared her at all for college. She took speech later in college and felt as though her high school English courses just met the minimum requirements for the state of Florida. She now needs to learn a better format for writing papers in her current speech course.

Natalie's major of interest before dual enrollment was to be in the medical field and currently it is the radiography program. When Natalie first entered college, she wanted an AA degree and to transfer to an ultrasound program, but the ultrasound program at another school in Tampa required her to take a physics course before acceptance into the program. She did not want to move if she was not yet admitted into the program so, she stayed home and applied for the radiography program nearby. Natalie wanted to share with other students interested in dual enrollment was that they should stay on top of their courses.

***Norman***

Norman was an 18-year-old single white male living with his family, employed part-time, and earning less than $10,000 per year. He earned between 12 and 24 credit hours from dual enrollment and was a full-time college student at a sophomore class level standing.

Norman took part in the early college dual enrollment program where he took full-time dual enrollment courses on the college campus and online. He shared that he liked dual enrollment because he was able to start college early, the idea that he was going beyond his peers, and that he had felt older and more mature. Norman felt he had an easy transition from high school to college because of the dual enrollment program, and his guidance counselors had done a good job helping him with classes and transitioning him to college. He also liked the financial incentives that go with taking dual enrollment courses, such as the scholarships available to him.

Norman said dual enrollment program was difficult and not for everyone. Dual enrollment is a lot of work and can be a little stressful. Norman faced challenges in his pursuit of a major and a career. He shared that his struggles are more personal since he is indecisive about a career, and he felt like it is a big decision. He does not want to do a job he will not like.

Norman shared that he had not had a major or a career selected before he had started his dual enrollment program and he has not picked out a career path yet. He seemed to feel pressured to pick a career path soon. During the interview, Norman stated that, "personally, I haven't decided yet. I know it is a little late, but I don't know." I asked if Norman's guidance counselors had been helpful in assisting him with picking out a major and a career, and he responded with "yeah, they tried". Norman also shared that his mother had helped him with a lot of things related to college, such as picking his classes, because he gets confused easily. Norman wanted to share with others that they should get as many classes done as they can with dual enrollment.

***Randy***

Randy was a 20-year-old single white male living with his family, employed part-time, and earning less than $10,000 per year. He earned between 12 and 24 credit hours from dual enrollment and was a part-time college student at a sophomore class level standing.

Randy had taken part-time dual enrollment courses at his high school. He liked his dual enrollment program because the college credits earned were not based on one test alone; instead, they were based on performance across the entire year. He also participated in the AP acceleration program and felt results from dual enrollment were a little more accurate compared to other acceleration programs. Randy decided to take part in acceleration programs so that he could earn some college credits toward his associate degree. It meant that he could graduate college a little earlier, and there were also some financial incentives to taking part in a dual enrollment program.

However, Randy did not like that dual enrollment courses were more condensed and moved through content a lot faster. He felt that his high school guidance counselors had pushed him towards AP courses instead of dual enrollment courses. The guidance counselors had explained both programs, but his high school offered more AP courses, and the counselors had explained AP courses would relate to his long-term goal of studying biology. Randy felt prepared academically for college but struggled more with personal challenges such as time management and "balancing social and academics".

When Randy started his acceleration courses, he had wanted to go toward biology and veterinary medicine. Randy explained that after his first semester of college, he had changed major and "switched from veterinary medicine but I stayed on the biology path." Randy wanted to share with others to pay attention to the accelerated courses they take, because the receiving

institutions may not accept those credit hours or may not give equal credit toward the courses, they want them to apply for.

## Perceptions Regarding Acceleration Programs

For research question one, the inquiry was designed to gather former dual enrolled students' perspectives on acceleration programs. The goal was to explore the participants' views about the general value of an enrollment experience in acceleration programs. The analysis of the participants' responses led to the identification of two themes based on their enrollment experience bridging high school and college work: Acceleration programs represented an opportunity for students to get ahead on their education and experience what college life is like.

### *Acceleration Programs Represent an Opportunity to Get Ahead*

All participants shared the same perceptions about acceleration programs as a way to get ahead in their education and complete high school and college requirements at the same time. The concept of getting ahead in education is emphasized in the literature (Hunt & Carroll, 2006), and participants largely provided additional support about program participation as a means to accelerate the pathway to college. In addition, participants felt acceleration programs were also a way to get ahead by saving money, which also aligns with previous research (OPPAGA, 2009a). Saving money for education, appears to be an important incentive for participation in dual enrollment programs.

The participants were unanimous in their regard for participation in acceleration programs as a way to get ahead achieving college education. For example, Adam liked dual enrollment because he "got to go to college, earn classes, get ahead." Amber shared the same

sentiment that she was trying to get ahead by reporting that she, "liked the idea of finishing earlier, getting things done, going faster, and speeding up a little bit." Similarly, when Norman talked about his education during the interview he said, "I wanted to get a head start," which consistently supported the view of program participation to expedite the transition to college.

On a similar point, Callie shared that she liked dual enrollment because "you could already receive your degree while still in high school." In turn, James stated that dual enrollment "allowed me to complete multiple levels of education, high school and college at the same time." Further, Larry liked the idea that you can "attend your college graduation before you attend your high school," while Martha wanted "to get my AA at a faster pace." Likewise, Natalie shared that she wanted to "to continue working towards like my AA or something that would benefit me in the future." Randy also participated in dual enrollment to "try to get a few credits done, like maybe some of the general education courses out of the way early."

In general, all students interviewed had similar reasons for participation in dual enrollment programs, from getting ahead completing a few credits to earning an associate degree while in high school. Concurrently, students were also consistent in valuing the financial savings associated with participation in acceleration programs. In this regard seven out of ten participants talked about the financial advantages of acceleration programs. For instance, Amber said, "I did like the discount of [taking] college classes," since related tuition is covered as part of the dual enrollment program. Not having to pay for course registration was highly appreciated by students like Callie who shared that "it's really a great idea to save money also there are definitely financial perks" for participation in dual enrollment. James had the same perspective noting that one of the reasons why he took part in dual enrollment was to "offset the cost of things," while Jane said she took part in dual enrollment because "I would be able to take the college classes

you know for free." Additional support was provided by Larry, who stated, "you don't pay a cent and you're knocking out high school and college credits." On the same note, Norman talked about the financial incentives of dual enrollment when he mentioned "I have gotten some stuff from scholarships." Randy also confirmed the common view reporting that dual enrollment "would help financially getting out of like finishing college."

To sum up, the shared regard for enrollment in acceleration programs as an opportunity to get ahead in the quest to complete a college education while saving money was apparent regardless of chosen program. Whether students had participated in dual enrollment, AP coursework, or other options, they all shared the same perspectives on the value of participation.

### *Dual Enrollment Allowed Participants to Experience What College Is Like*

The participants also described dual enrollment and other acceleration programs as a way to experience college. The participants shared their experiences taking college level coursework and noted that they felt like an adult and more mature compared to their high school peers because they were taking dual enrollment courses. In general students expressed an appreciation for experiencing what it feels like taking college-level courses in terms of rigor and working with instructors. Students also viewed participation in acceleration programs as a means to experience what is like to take college-level classes and connect with older students as adults.

All participants appreciated experiencing college-level coursework while in high school. For instance, James talked about his experiences taking other acceleration programs and compared that with dual enrollment. As James stated:

> with AP, you have to take a test but dual enrollment, you take several tests. AP test determines your college credits. I just found it more, you know, more graceful, more adapting and more welcoming to students of all variety, ages and cultures.

In addition, James further reported that he "was determined and willing to do you know more higher-level learning classes more intensely, intensely captivating classes" because he wanted the college experience. Along the same lines, Martha stated that her experience with dual enrollment helped her with "building those relationships with professors before even going into a college." Martha also shared her experiences with taking dual enrollment courses in comparison with other acceleration courses and stated, "dual enrollment was my favorite, because with AP and AICE, there is that test at the end of the course that really, your credits depend on that test at the end of the course." In this regard, Martha experienced two program options and was able to see what they entailed.

Further, participants talked about the rigor of dual enrollment courses and the impact taking dual enrollment courses had on their college experience. For instance, Adam took advance math courses as part of his dual enrollment program and stated, "I realized calculus two was harder than I thought." In turn, Amber shared, "I'm an English person and I don't do well with math and science." In her case, Amber wanted the experience of taking dual enrollment courses on the college campus because she knew it would challenge her and she said, "you have to be able to work hard on the stuff you do have, so you can keep that grade up high." Likewise, Larry shared his experience with taking dual enrollment courses toward engineering and he stated, "engineering economics at the very end was rigorous, but I could do it if I were taking less classes." Natalie also shared her thoughts about taking dual enrollment classes and said, "honestly, the workload wasn't that bad as I thought it was gonna be just because it was like college classes." Further, Norman confirmed related perspectives sharing his experience reporting that, "Maybe to some people it could be a lot of work, I would say. Depending on how many classes you take or what you choose, it could be a little stressful."

In addition to having the opportunity to experience college-level work, students also appreciated to step away from the high school and feel more mature. For instance, Adam stated, "I got to get away from the high school and actually feel like I was an adult." Amber indicated that when she started to take her classes at the college "it kind of gets you in that mindset" of feeling more mature. In this regard, James shared that he faced challenges with the people around him being more mature in comparison to what he was used to, and he had felt like an outsider at first. However, James valued the experience because, as he noted, "I saw dual enrollment as the ability to allow me to meet new people and prepare myself for college." Jane further emphasized the benefit of dual enrollment as "Not being with other high schoolers" and act more mature. Norman agreed, and said, "I guess you can say you know it made me feel more of an older student. I guess you could say more mature." To this end, Natalie best summarized the shared perspective noting that:

> at the college there were different age groups and whenever we would have discussions it was just different, like hearing different responses and stuff because some people are wise, or some people were older. I really liked how diverse it was.

To recap, students also valued the opportunity to experience what is like to actually take a college-level course and allowed them to realize the challenges of some demanding classes, and what it takes to do well. At the same time, students also liked the chance to see what it is like to work with a more mature group beyond high school and feel like an adult.

**Decisions on Selecting Academic Major**

For research question two, the inquiry was developed to explore the participants' perspectives on selecting an academic major before and after their participation in an acceleration program. The analysis of participant responses led to the identification of two

themes based on what they described was their major of choice before entering a dual enrollment program and after participation in their program: Students had general ideas about their major choices before taking acceleration coursework, and career choices were altered after their participation in their program.

### *General Ideas About Academic Major Choices Before Taking Acceleration Coursework*

Before enrolling in accelerated programs, participants reported identifying their major and career choices in broad terms based on general ideas they had about career choices. In some instances, earlier interests were nested under the broad umbrella of STEM pathways associated with either specific or loosely connected academic majors such as occupational therapy, nursing, and engineering. In some cases, the initial choice of an academic major allowed for the exploration of relevant coursework and other related experiences. For instance, Martha initially wanted to pursue a STEM major, and she was particularly interested in occupational therapy. Martha stated:

> I knew that I wanted to work with kids so my end goal to this was occupational therapy. At first, I wanted to get my assistant degree or my assistant certificate and my AA through the SCF, and then I wanted to go on for my OT. I wanted to be an occupational therapist and then specialize in Pediatrics, so at first, I knew I wanted to work with kids, that was my end goal. So, I took a job, actually at the Engelwood Elementary School and I absolutely fell in love.

Martha began with a general plan to pursue an AA degree and pursue the Occupational Therapy Assistant program before she realized "the amount of schooling" and work that went into completing her education and eventually becoming a pediatric occupational therapist. In addition, Martha took a job at a school and sat in on a few classes. She said she spent, "A day in the life as a teacher and got to work with the kids." This job-related experience contributed to her change of major later on.

Likewise, Callie started off with the idea to pursue nursing and her interest in this major was reinforced by her experience taking dual enrollment classes. She emphasized this when she said, "I actually received more interest in wanting to do nursing because of the classes and how helpful the teachers were." Similarly, James also wanted to pursue the medical field and he shared that, "for the longest time, I very much have been into fitness and medicine and things like that" for a career path before taking dual enrollment coursework.

In turn, Randy wanted to be a biology major so he could pursue veterinary medicine, while Natalie wanted to work in the medical field and enroll in an Ultrasound program with the plan to complete her AA degree and transfer to a university later on. Likewise, Larry had a general idea about a career goal as he wanted "to be a pilot or construct any kind of vehicle or plane," so he was thinking about a major in engineering, math, or science before starting dual enrollment. Adam also wanted to pursue an engineering degree and shared that he had a related dream when he was in 4th grade. Only Norman, Jane, and Amber were undecided and were hoping dual enrollment would provide them with more concrete ideas about a career path.

To review, all participants had general ideas about their major of interest before entering their dual enrollment program informed broadly by early interests. In this regard, it was evident that participation in accelerated programs provided students with the opportunity to plan for and explore college level curriculum and other relevant experiences that either helped reinforce their choice of academic major or deterred them from their initial choices.

### *Career Choices Were Altered After Participation in Dual Enrollment Programs*

Before participants started their dual enrollment program, seven students wanted to pursue a STEM major and three were undecided. However, after program participation only four

of the seven were still pursuing a STEM major. Two students remained undecided, two changed their major to education, and two had changed their major to business.

As summarized in Table 4, the seven participants who indicated before dual enrollment that they had wanted to pursue STEM majors had had a general idea of a related major and career goals before entering college and the dual enrollment program. However, since their participation in their dual enrollment program, only two participants were still in pursuit of their specific STEM major, two had changed their STEM focus to something else, while two other changed from STEM to a business major and one changed to an education major. For the other three participants who according to their interviews had been undecided about their major and career goals before starting their dual enrollment program, two remained undecided and one had changed to an education major.

For example, Randy was a STEM major who changed concentrations and stated, **"**[A]fter my first semester of college, I kind of, sort of switched from veterinary medicine but I stayed on the biology path, biology major." Natalie was also a STEM major but changed her concentration from Sonography to radiography program to be closer to home an because she was not guaranteed entrance into the Sonography program. Martha changed out of STEM and into education after her dual enrollment experience and because she started working at an elementary school and loved the experience. Amber also changed from undecided to education because of her experiences with taking dual enrollment classes. Adam and James changed from STEM majors to business because of their experiences working with high school guidance counselors or because the courses were too rigorous. Callie and Larry's career path did not alter from STEM. Finally, Norman and Jane remained undecided after their participation in dual enrollment.

**Table 5.** Academic Majors Before and After Dual Enrollment

| Participant | Before Program Participation | After Program Participation |
|---|---|---|
| Adam | STEM Engineering major | Business and interest in a fire science program. |
| Amber | Undecided. Felt once in college, she would get an idea of a major and career. | Education and wants teaching as a career. |
| Callie | STEM Nursing major | Her interest in nursing grew after taking college courses from dual enrollment. |
| James | STEM in pursuit of fitness and medicine | Changed to business because he likes working with people and felt he is a good communicator but has not given up on going back to something medical. |
| Jane | Undecided but had a few ideas about a major in STEM and wanted to try different classes to see what might be interesting to study. | Still undecided and tells people anything because she felts like she has to say something. |
| Larry | STEM, with the goal to be a pilot or construct any kind of vehicle or plane, so he narrowed his major down to engineering, math, or science. | Decided to major in Mechanical Engineering after participation in a dual enrollment program. |
| Martha | STEM and wanted to pursue Occupational Therapy Assistant program because she wanted to work with kids. | She started working at an elementary school and loved it, so she changed major to education after dual enrollment. |
| Natalie | STEM because she was interested in the medical field and doing an Ultrasound program. | Changed her focus to a radiography program closer to home. |
| Norman | Undecided and he felt like he would figure it out as he was going along. | Still unsure. Feels like it is a big decision that he is struggling to make and feels pressured to pick something soon. |
| Randy | STEM Biology major with a career goal focused on veterinary medicine. | Changed after his participation in acceleration programs. |

In summary, seven out of the ten participants had an interest in pursuing a STEM major before entering their dual enrollment program and had a general idea of what they needed to do in order to pursue their academic major of choice. However, participation in dual enrollment helped clarify their thoughts about their major and career path and that understanding impacted their decision to continue or change their chosen career path. All participants agreed taking part in dual enrollment was a good idea and most participants felt it was helpful in getting them ahead in their education and saving money that would have been spent on classes.

## Factors Impacting Major and Career Choices

For research question three, the inquiry was developed to explore a former dual enrolled student's thoughts about factors that impacted their decision to pursue a major and/or career. The analysis of participant responses led to the identification of two themes based on what participants shared during their interview. The role and impact of participation in dual enrollment programs was identified as an important factor, along with the role of counselors.

### *Role and Impact of Participation in Dual Enrollment Programs*

In general, the role and impact of participation in dual enrollment programs was acknowledged by the majority of participants one way or another. For some, it helped confirm their initial interest, while for others it allowed them to realize they were interested in something else. For example, Amber who was indecisive about her major and career before taking dual enrollment classes, stated:

> I didn't know, all I knew is that I wanted to go to college, and I figured once I got started I would kind of get ideas of where I wanted to go, which is exactly what happened. My first semester, I took an English class and the teacher made everyone get up in front of the class and give a speech and once I was up in front of the classroom it hit me that I could teach, and I could do something like this and. It started off small, just like an idea, but as I kept taking more classes things I enjoyed. Uhm, it's developed now into a career that I'm pursuing.

Similarly, Callie wanted to pursue a nursing major and taking dual enrollment helped confirm her decision to do so. Larry also knew he wanted to pursue an engineering major since first grade. He always wanted to become a pilot or construct a vehicle or plane, but knew he had to narrow things down because "I didn't want to make the same mistake that other students were making and taking, like unnecessary classes" and having to switch his major. To that end,

narrowing things early and taking dual enrollment helped him stay focused and pursue his engineering major.

Martha's participation in dual enrollment also helped her realize that her "heart was not into occupational therapy." Natalie lost interest in transferring to a Sonography program when she realized she was not guaranteed acceptance into the program. Similarly, Adam switched to another major after his participation in dual enrollment because he struggled "with time management and was a procrastinator." Randy also lost confidence that he could get into a veterinary program when he struggled with "personal challenge, it was more of like a time management and being in college with a lot more social interaction and stuff like that, a lot more balancing social and academic." For him, and as for others, participation in a dual enrollment program allowed him to determine whether his initial interest was the right pathway to take.

Additionally, participation in a dual enrollment program allowed students to experience the logistics and a variety of issues related to pursuing a particular academic pathway. For instance, Natalie wanted to complete her AA degree and transfer to an ultrasound program at another community college, but the program was far away and required her to complete a four-credit physics course. Natalie said "it just wouldn't work for me to go and start to live in Tampa and take this one course and then apply if I even get in." Further, she was not guaranteed acceptance in the program, so she chose to pursue a radiography program closer to home.

In the case of Martha, she realized the time and commitment it would take her to work with kids as an occupational therapist would be an obstacle for her, so she took a more direct path by becoming a teacher. In turn, Adam shared that after leaving his dual enrollment program, "I transferred to FGCU and then that's kind of where it changed, and then I came back to SCF." For him, the issue was academics, and he switched to another major because as he put

it, “I realized calculus two was harder than I thought.” Along the same lines, Randy went to college after dual enrollment and struggled academically his first semester. As a result, he switched from veterinary medicine but stayed on the biology path. Overall, Randy shared that he struggled more with personal things and less because of academic challenges and said, “so yeah, it was kind of my fault.”

Similarly, James started off wanting to pursue medicine looking up to his mother as a role model. In that regard, he noted, “My mother was actually a nurse awhile back, so that kind of also fueled the fire” to become interested in medicine and he “just rolled with it.” However, James has now transferred his career interests into a business degree, as major he realized he likes more. In general, James' experience, as well as that of others', confirmed the role of and impact of participation in a dual enrollment program on a student's decision to stick with or change majors while in college.

### *The Role Counselors Play*

The participants also talked about their perceptions and their interactions with their college and high school counselors. Generally, students appreciated the role counselors play and the support they provide with guidance, scheduling, and making everyone comfortable about the transition from high school. However, students also reported inconsistencies in advising and wished counselors would explain all accelerated program options rather than promoting only certain alternatives.

Regarding the general support provided by counselors, Amber shared that she had a great experience working with both her high school and college counselors and stated, “I think the guidance was really helpful getting into the classes that I needed to get into.” Norman agreed,

reporting “I think they did a pretty good job in showing me things that would help me from going from high school. Martha further talked about her interactions with her high school counselor and said, “She was really, really good at making sure that the process was easy going from the different colleges that I dual enrolled in, so I dual enrolled in FSW and SCF and her communication with both of those colleges and me back and forth, making sure that I'm enrolled in those classes was pretty seamless.” In addition, Martha said, “I had a really good experience with my counselor. I had a more of a personal relationship with my counselor. Which might have made it a little bit more beneficial because she knew what I wanted to go into, she knew my career path.” Adam also had a good experience with his dual enrollment counselors from high school and college. “Everyone helped me,” he said, adding that his high school counselors explained “it's a huge jump from high school to college.” In turn, Callie shared that “advisors and even my guidance counselor was working with one of the advisors at the college to make sure that everything went smoothly.”

Albeit the general appreciation for the role of counselors, students also noted some inconsistencies in related assistance. In this regard, Jane talked about her perceptions regarding college counselors being more knowledgeable than high school counselors. She stated, “the college, they knew directly what courses were about and the requirements you know for the graduation, so that's probably why the college is more of a help.” As such, participants voice a desire for more consistency when it came to advising. For instance, Randy commented that his counselor talked about all acceleration programs but pushed only a few programs. Randy explained, “my school pushed for a lot of AP. They didn't really go for the dual enrollment, and they tried to steer students towards Advanced Placement rather than the dual enrollment. So, they didn't really guide me too much as far as trying to convince me to go to dual enrollment

over others." He further added, and "I didn't have a necessarily a specific, um, advisor or counselor in high school." James had a similar experience with his guidance counselors and stated:

> I had some scenarios where I had my guidance counselor in the high school setting stray me away from certain activities or steering me away from certain courses, and now, not being in the dual enrollment. And you know, fortunately there is scholarships and plenty of there, there are plenty of things out there to assist students financially, I find myself having to go back and retake prerequisites because they just weren't what lined up or what were things, they weren't things that I did need at the time.

Likewise, Natalie struggled with getting in touch with her guidance counselor for assistance with the dual enrollment process. She said:

> Honestly, that was a really tough process because we would have to check with our guidance counselors, and sometimes they weren't there. It was always like going back and forth, uhm? I remember there was one time that someone from SCF came to our class and talked about this stuff that SCF has to offer like programs and stuff like that, but our guidance counselors really didn't focus on what we wanted to do once we went to SCF, like what careers.

Given the multiple accelerated program options, it is not surprising that the role of counselor is seen as valuable for students while in high school and as they navigate the college experience. By the same token, the inconsistency with related advising is not surprising either as counselors wear many hats as reported in the literature and thus the wish for better assistance in high school and college.

**Conclusion**

In conclusion, ten former dual enrolled students shared their experiences with taking accelerated coursework. Several themes were identified from their responses to a survey and interview questions. When reflecting on what was discovered in the findings, the researcher discovered that participants had general ideas about their career and major pursuits and were

focused on the benefits of dual enrollment, such as getting ahead in their education and experiencing college, but many career pursuits changed after their participation in their program. In addition, interactions with counselors also impacted career and major pursuits for participants. The next section is a discussion and recommendations based on these findings.

# CHAPTER FIVE:

# DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to explore the student perspectives on their participation in dual enrollment programs and decisions choosing a major and/or career. Using a snowball sampling approach, 10 students who met the criteria of a former dual enrolled student with 12 or more earned credit hours from an accelerated dual enrollment program were asked to take part in the study. They each filled out a survey and took part in a virtual interview. The researcher used an exploratory research approach to gather information from the participants relating to demographic information; dual enrollment and other acceleration programs; and using retroactive reporting gathered major and career pursuits before and after participation in one or more acceleration program. The participants shared their perceptions regarding dual enrollment and other acceleration programs, decisions on selecting an academic major, and factors impacting their major and career choices.

A discussion of key findings is reported in this chapter using relevant literature and the SCCT framework for reference. Implications to practice and recommendations for further research are also suggested in this chapter.

## Research Question One Findings

There were two themes that emerged based on what participants shared was their perceptions of acceleration programs. For the ten participants that took part in one or more acceleration program, dual enrollment represented an opportunity for them to get ahead on their education. In general, getting ahead in their education was completing a few credits towards a

degree while in high school and/or getting ahead by saving money on tuition. When reviewing other scholarly research, the benefits of dual enrollment programs highlighted in the literature review aligned with financial incentives and getting ahead in school are an advantages of acceleration programs **(**Hunt & Carroll, 2006; OPPAGA, 2009a).

Dual enrollment programs were also an opportunity for the students to experience what college life is like. The participants shared their experiences taking dual enrollment courses and some students felt more mature compared to their high school peers. For example, Norman said, "I like being able to start college work early as a high schooler" and them stated, "I felt like I was going beyond everyone else, I guess you can say it made me feel more of an older student. I guess you could say more mature." Students valued their experience of taking college-level courses in terms of rigor and working with instructors. Students also viewed their participation in acceleration programs as a way to take classes and connect with older students as adults. The rigorous coursework from dual enrollment used to help broaden curriculum options, increase depth of study, prepare students for college, and reduce a student's time to degree was also mentioned in the literature review (OPPAGA, 2008, Kanny, 2015)

**Research Question Two Findings**

Two themes emerged after interviewing the participants to learn more about their major and career choices before and after their participation in a dual enrollment program. Students only had general ideas about their major choices before taking acceleration coursework but career choices for participants were altered after their participation in their program. For instance, seven out of the ten accelerated students who participated in a dual enrollment program began as STEM majors, and five of those seven changed their major after participating in a dual

enrollment program. Two of the original STEM majors changed to another STEM concentration, either because they were unclear how the major would lead them to their career goals, they had left their initial college and transferred to a school closer to home that did not offer the program, or because they had initially planned to transfer to another school, but there were no guarantees that their coursework would be transferrable or that they would be accepted into the new school's program. Three STEM majors changed to another area of study such as business or education. This was either because they had found the STEM coursework too difficult, they had had a change of heart about their major, they had decided it would take too long to obtain the degree, or they had taken unnecessary courses.

Study findings derived from the analysis of question two largely aligned with relevant literature as well. For example, previous research has identified "Transfer Shock" as an issue often affecting enrollment decisions and choice of majors. Transfer shock involving a dip in GPA, is more common among math and science majors (Cejda, 1997). In the study, transfer shock affected some of the participants who had started off as STEM majors, but then changed their STEM concentration or their overall major to something else. For example, Adam, who started as a STEM major but then changed to a business major, shared that after he transferred to the university is when he changed his major. Adam stated, "I realized calculus two was harder than I thought." Adam's coursework had been rigorous which forced him to change his major. Transfer shock in conjunction with other factors mentioned in the literature review such as credits lost, lack of support, and other institutional barriers at their receiving school were shared by the participants and had an impact on almost all of the participants and influenced their decisions to change their STEM major or to not choose a major at all.

In summation, seven out of the ten participants were in pursuit of a STEM major before entering their dual enrollment program and had an idea of what was required to pursue their academic major of choice. Some participants assumed they would do well academically, and others thought they could easily transfer and be guaranteed entrance into their intended major. However, their participation in dual enrollment helped clarify their thoughts about their major and career path. Once participants experienced college coursework through dual enrollment, they developed an understanding of what they needed to do to pursue their career path and that impacted their decision to continue or change their major.

**Research Question Three Findings**

Drawing from former dual enrolled student perspectives, there are two themes regarding factors that impacted major and career choices for participants. Students' participation in dual enrollment programs allowed them to determine whether they were on the right pathway or to give some participants an idea of a career path to follow. However, career choices were revisited due to unforeseen obstacles, while taking part in a dual enrollment program. For example, one participant would have to take additional courses after they transferred to their new school and they were not guaranteed admittance into their desired program, so they switched to another program closer to home. Experiences with guidance counselor and advisors also impacted career choices for participants. For instance, one participant shared that the high school counselor was not knowledgeable about the courses required for their major, so the student took unnecessary courses and later decided to change their major. On the other hand, another student had a positive experience with their advisors which helped confirm her career path.

Some participants took part in other acceleration programs. Larry shared that his previous experiences taking AP courses helped prepare him for dual enrollment. On the other hand, James said there were conflicts between his administrators of AP, high school, and dual enrollment. James stated "how rigorous the high school was and how Collegeboard and the high school administration kind of were butting heads." This impacted his dual enrollment experience and in the end he changed his major to business.

The findings related to participation experiences regarding the role of institutional factors align with literature on related topics. In general, it was evident that students faced institutional barriers such as inaccurate advising and a lack of support through the transfer process (Taylor & Jain, 2017). To this end, the extant research on institutional barriers, inconsistent advice, and students feeling socially and academically unprepared for college (Rodriguez, 2013; Taylor & Jain, 2017) is corroborated by some of the participants' responses. For instance, Natalie shared her uncertainty about the prerequisite courses she needed to take and her acceptance into the transfer school program as a reason she decided to pursue another STEM concentration closer to home. Natalie, Jane, and James shared that their high school counselors had not been available, helpful, or knowledgeable about the courses they needed to take for college. Randy felt he had not been prepared by his high school dual enrollment program to go away to college, while James felt immature compared to his college peers.

A lack of consistency and some overlap between acceleration programs also had an impact on the participants. For instance, James shared that he struggled with managing high school, AP, and DE program expectations simultaneously and felt that there had been conflicts between each program's requirements. Similar struggles with multiple programs were mentioned in the literature as a challenge (Estacion et al., 2011). Randy shared his struggles with DE and

the accelerated coursework that did not transfer to his receiving college, and both lost and had duplicate coursework. Randy's experience is consistent with a report illustrating the duplication of coursework taken by students in acceleration programs, which has led to a loss of time and money for both students and the state of Florida (OPPAGA, 2009a). These challenges can influence a student's decision to change major or not choose a major at all.

Other themes discussed in the literature review also aligned with the data collected from the participants. James, Adam, Amber, Larry, Jane, and Norman talked about the rigorous coursework being a challenge, something that was also mentioned in the literature (Tobolowsky & Allen, 2016). When multiple sets of data collected from both the literature and the research participants lead to similar themes, we can conclude that this triangulation of data contributes to the trustworthiness of the findings.

Finally, themes emerged from the participants which also aligned with the literature review regarding the role of counseling/advising. According to Hunt and Carroll, high school guidance counselors will direct students to Advanced Placement courses instead of dual enrollment because of university preferences toward AP students (Hunt & Carroll, 2006). Randy also experienced a push from his counselors to take AP coursework over dual enrollment. He explained, "my school pushed for a lot of AP. They didn't really go for the dual enrollment, and they tried to steer students towards Advanced Placement rather than the dual enrollment."

**Connection to Conceptual Framework**

According to the SCCT framework, self-efficacy, outcome expectation, and personal growth are all interrelated and essential in the career decision-making process for a student (Lent et al., 1994). The SCCT framework suggests that a career path for a person is based on cognitive,

environmental, and personal factors. In previous research, SCCT has been used to explore the career choices of various groups but has never been applied to accelerated students from various dual enrollment programs in Florida. In short, the SCCT model implies that each student experience is different, which aligns with a constructivist paradigm.

The SCCT framework was broadly used to highlight the importance of cognitive, environmental, personal factors in the process for deciding to participate in an accelerated program and choose a particular pathway. Students who participated in an acceleration program such as dual enrollment pursued majors of interest, they presumed would lead to a successful career outcome. Many of the participants in this study entered their dual enrollment program with the cognitive belief that by doing so they could achieve a degree in STEM, save money, and get ahead in their education. Dual enrollment was also seen as an opportunity for personal growth. Taking dual enrollment classes was a way for them to get away from high school, feel more like adults, and meet new people from diverse backgrounds.

Participants in this study shared information about their environment when taking part in DE courses. For Instance, they shared information about their various learning experiences with dual enrollment, from part-time programs at high school and/or college to full-time at college, multiple dual enrollments, and/or simultaneous acceleration program learning. Amber, James, and Martha participated in part-time DE programs first at the high school, which helped ease their transition into the college environment. Adam, Jane, and Norman took part in a full time DE program at the college and seemed to struggle more with the rigorousness of the coursework and with their transition into the college environment. Randy took part in dual enrollment at the high school and struggled when he went away to college. The participants also shared information about themselves and their living environment such as they were all between the

ages of 18 and 20 years old; they all lived with a parent/guardian/relative; and most of the participants were single.

The participants in this study also shared personal factors that impacted their decisions to steer away from their initial majors and career choices. Some of those issues included not performing well in their coursework, not feeling assured that their coursework would transfer, and not feeling assured that they would be accepted into their major program of interest. All of these factors (cognitive, environmental, and personal), such as their belief in their ability to succeed, personal growth opportunities, and the challenges they faced, played a role in their career decision-making process.

**Implications for Practice**

All of the participants in the study started out with the belief and expectation that they were going to complete a particular major in STEM or decide a major of interest by taking part in a dual enrollment program. All of the participants felt that their experience of dual enrollment had been a good one and that it had helped prepare them for college. Most also indicated that their dual enrollment experience had helped them decide on their future career. And yet in the end almost all of the participants had changed their major and/or remained undecided about their career path. Some of this may be attributable to unforeseen obstacles such as taking unnecessary courses and inconsistencies in the interactions between participants and their high school guidance counselors, as reported by some of the participants. Some students felt that their high school guidance counselors had been good at explaining the differences between the different acceleration programs and helpful in guiding them through each step of the dual enrollment process. However, other students reported high school guidance counselors had been unavailable

to the participants or lacking knowledge about college major requirements. Poor or lack of guidance from high school counselors led to some students taking unnecessary coursework and being reluctant to use the college counseling department. This is where administrators can make the most difference, by working collaboratively and on a statewide level to establish consistent standards of knowledge that high school guidance counselors and college advisors must possess when working with students interested in acceleration programs.

Dual enrollment and other acceleration programs have grown so quickly in Florida. An established base of training and knowledge for all guidance counselors advising students taking accelerated coursework would save the state of Florida money spent on duplicate and unnecessary coursework. Incentive funds from the state could go toward training for guidance counselors and college advisors on acceleration programs. They could also be given to counselors with demonstrated success guiding their students toward a career path.

Other ways administrators can make a difference is by providing more clarification, support, and structure for students in pursuit of STEM pathways. Participants in this study only had general ideas about their STEM major of choice. Their major was altered after taking dual enrollment coursework and because of unforeseen obstacles students encountered in pursuit of their STEM major. Improving on guided pathway resources for STEM majors such as more specific information on degree requirements and career development support for students can yield more students success with degree completion. In addition, for community and state colleges, it would be beneficial for their advisors to work more collaboratively in their efforts to support dual enrolled students by working more closely with high school guidance counselors. This concept of ongoing supervision of students by counselors is also highlighted in previous literature (Kanny, 2015)

**Recommendations for Further Research**

The themes developed from the collected data could be examined in more depth in future research. For instance, themes such as indecisiveness and unrealistic expectations about major and career pursuits could be usefully explored in greater detail. This suggests the possibility that the participants might have been struggling with their cognitive development. It would therefore be interesting to explore a participant's career readiness through use of various career assessments to see how results align with intended career pursuits. It would also be beneficial to conduct a longitudinal study, interviewing participants prior to entering their dual enrollment program, again after they have completed the program, and a final time a few years after they have completed college and settled into a career. That type of research study would require a greater commitment of time for the researcher, but the data collected would give a more accurate idea of the participants' perspectives and developmental stages at each point in time.

Challenges arose during the timeframe in which this study took place, making it difficult to find a more diversified group of participants. For instance, the COVID-19 pandemic restricted the researcher's access to a college campus, which would have allowed them to recruit a more diversified group of participants. A snowball sampling process was used instead, and word of mouth helped provide the researcher with names and numbers of people who might be willing to do an online survey and a video-conference interview. Only two of the participants indicated that they identified with an ethnicity other than white and one of these two mentioned that one of the benefits of dual enrollment was to have been exposed to a more diverse population of students with different ages and backgrounds. For the future, this study could be conducted again on a

larger and more ethnically diversified representation of the dual enrollment population to see if different themes emerge for students from different ethnic backgrounds.

During this study there were a variety of ways dual enrollment was offered to students. Students could partake in a full-time, part-time, online, in-person at their high school, and in-person on the college campus dual enrollment program. For some participants in this study, they participated in more than one type of dual enrollment program. For future research, it suggested to narrow down the study to students who took part in a specific dual enrollment program. In addition, deeper interviews can be conducted on the participants to obtain a thicker description of their dual enrollment experiences.

Finally, future research can explore in more depth the impact high school and college counselors have on a dual enrolled student's major and career pursuits. What role do college counselors play regarding a dual enrolled student's college and career readiness. Further studies can also explore the impact of parental input as high school students ponder different accelerated program options.

**Conclusions**

This study examined the perceptions of ten former dual enrollment students regarding their selection of a major and a career path. The data collected from this exploratory study confirmed that almost all of the participants changed their major for various reasons or remained undecided. They all pursued dual enrollment to get ahead in their schooling and to take advantage of the financial incentives of the dual enrollment program. Those who participated in dual enrollment at the college campus benefited from getting away from their high school and interacting with a more diversified group of students of different ages and from different

backgrounds. These students entered the dual enrollment program with a strong degree of self-efficacy and had clear expectations that were not all realistic. Many felt taking part in the dual enrollment program helped them with personal growth, and this finding aligns with the SCCT framework.

There were personal and environmental factors that influenced most of the participants' decisions to change their major and career paths. The students struggled with indecisiveness, time-management, and inconsistent advice from their high school guidance counselors. As a researcher who was also a former dual enrolled student with accelerated coursework, I can relate to struggles with time management and feeling unprepared for college. Accelerated coursework at the high school helped with understanding college curriculum but not with transitioning into the college environment and eventually I change my career path.

In the future, a collaborative effort in Florida between administrators from school districts, state colleges, and universities would help to establish standards for guidance counselors and college advisors to follow. Some major takeaways that were highlighted from the study are the importance of consistency in guidance for accelerated students. Consistency would help these students find a career path. Another important takeaway is the importance of educating potential accelerated students on the specifics of their chosen career path. Educating accelerated students on the specifics of their career choice and providing them with consistent career advising will ultimately save the state of Florida money currently spent on unused and unnecessary coursework, as well as helping Florida develop an effectively trained workforce.

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**APPENDIX A:**

**CONCENT FORM**

## Informed Consent to Participate in Research Involving Minimal Risk

**Title:** An Exploration of Accelerated Student Career Planning Experiences on a Florida College Campus
**Study # 000081**

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**Overview:** You are being asked to take part in a research study. The information in this document should help you to decide if you would like to participate. The sections in this overview provide the basic information about the study. More detailed information is provided in the remainder of the document.

Study Staff: This study is being led by Jennifer Meier who is a doctoral student at the University of South Florida (USF) in the Department of Leadership, Counseling, Career Adult and Higher Education. This person is called the Principal Investigator. She is being guided in this research by her major professor Dr. Johanna Lasonen.

Study Details: This study is taking place virtually where interviews with students will be conducted over the internet. The purpose of the study is to explore the career planning experiences that accelerated dual enrolled students have when in pursuit of a major and a career. The students asked to participate in the study must have been a former dual enrolled student with 12 or more earned college level credit hours from dual enrollment. The selected students will be given a one-time, 10-minute online survey followed by a 40-minute virtual interview that will be used to collect background and career related information from the students who choose to participate in the study.

Subjects: You are being asked to take part because you are identified as a student who participated in an acceleration program such as dual enrollment and have earned 12 or more hours toward a college degree.

Voluntary Participation: Your participation is voluntary. You do not have to participate and may stop your participation at any time. There will be no penalties or loss of benefits or opportunities if you do not participate or decide to stop once you start. Your decision to participate or not to participate will not affect your student status, course grades, recommendations, or access to future courses or training opportunities.

Benefits, Compensation, and Risk: We do not know if you will receive any benefit from your participation. There is also no cost for you to participate in this study. You will be compensated with a 10-dollar gift card to Publix or Starbucks, if you choose to participate in the study. This research is considered minimal risk. Minimal risk means that study risks are the same as the risks you face in daily life.

Confidentiality: Even if the findings from this study are published, we will keep your study information private and confidential. Anyone with the authority to look at your records must keep them confidential.

## Why are you being asked to take part?

The reason for this study is to gain a better understanding from an accelerated student's perspective about their experiences exploring a major and a career. This qualitative study explores career pursuit experiences for accelerated dual enrolled students with 12 or more dual credit hours from a mid-size college in Florida**.** Policymakers support accelerated dual enrollment programs because these programs promote a more streamlined pathway for students who want to earn a degree and transfer into a four-year college with credit hours. As we learn more about acceleration programs from the student perspective, college administrators will be able to better assist these students with their major and career choices. Since you are a student who meets this criterion, your feedback will be helpful to future students who want to participate in an acceleration program.

## Study Procedures:

The study will take place online. All participants will be asked to meet with the researcher virtually using a program such as Microsoft Office 365, Teams at a time that works out best for the student. Students will need to set aside an hour of their time (10-minutes to fill out the online survey and 40-minutes for an interview) with the researcher. To protect the privacy of the participants, names will be removed after completion of the data collection process. All interviews will be recorded and listen to by the researcher, Jennifer Meier to ensure accuracy of the information collected.

During the one-time visit, participants will be asked to:

- To complete a 10-minute online survey that will collect basic background information related to age, gender, siblings, ethnic background, home status, relationship status and origin and this will be gathered before the interview.
- To complete a 40-minute semi-structured virtual interview with the researcher, Jen Meier that will be recorded and later transcribed by her. After the interview, the names will be removed, and the collected information will be kept locked away in a safe for five years after the submission of the final report to IRB. When the time comes the collected data will be destroyed by shredding paperwork, deleting computer documents and recordings.

## Total Number of Subjects

10-12 individuals who met the criteria will be asked to take part in this study.

## Voluntary Participation / Withdrawal

The selected participants do not have to participate in this research study. They should only take part in this study if they want to volunteer. They should not feel pressures to take part in the study. They are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits that participants are entitled to receive if they stop taking part in this study. A participant's decision to participate or not to participate will not affect their student status, course grade, recommendations, or access to future courses or training opportunities.

## Benefits

We are unsure if participants will receive any benefits by taking part in this research study.

## Risks or Discomfort

This research is considered minimal risk, which means the risks associated with this study are the same as what a person might face every day. There are no known additional risks to those who take part in this study.

## Compensation

You will be compensated with a 10-dollar gift card to Publix or Starbucks if you complete both the survey and the interview.

## Costs

It will not cost participants anything to take part in the study.

## Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. These individuals include:

- The research team, including the Principal Investigator, the program coordinator all other research staff.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, and staff in USF Research Integrity and Compliance.

A participant's information or samples collected as part of the research, even if identifiers will be removed, will NOT be used or distributed for future research studies.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

## Consent to Take Part in Research

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____ _____

Signature of Person Taking Part in Study Date

_____

Printed Name of Person Taking Part in Study

## Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

_____

_____

Signature of Person Obtaining Informed Consent Date

_____

Printed Name of Person Obtaining Informed Consent

## APPENDIX B:

## INTERVIEW OUTLINE

### Interview Outline - Accelerated Student Experiences

**Interview Guide**

**Topic:** An Exploration of Accelerated Student Career Planning Experiences on a Florida College Campus

**Purpose:** The purpose is to develop an understanding from an accelerated dual enrollment student's perspective of the challenges they may or may not encounter as they pursue a major and a career.

The students asked to participate in the study must have been a former dual enrolled student with 12 or more earned college level credit hours from dual enrollment. There are three research questions that will be addressed during this portion of the study and they are:

1. What perceptions did former dual enrolled students have regarding acceleration programs?
2. Using retrospective reporting, how did former dual enrolled students describe their major and career choices before and after their participation in an acceleration program?
3. From the former dual enrolled student perspective, what factors impacted their major and/or career choices?

A survey will be given to the participants prior to the interview. Demographic information related to age, gender, siblings, ethnic background, home status, relationship status and origin will be gathered through questions from the survey.

1. Types of questions during the interview will include:

- Can you talk to me about your experiences in high school taking dual enrollment courses for example, what were things you liked about the program?
- What were things you disliked about your dual enrollment program?
- Did your dual enrollment courses take place at the high school or on the college campus?
- Did you participate in any other acceleration programs or more than one program at the same time such as (AP, IB, AICE, DE).
- If yes, how did these other programs compare to your dual enrollment program?

- Did you feel like your high school prepared (for instance, academically) for your dual enrollment program? Why or why not?
- What were some of the reasons you choose to participate in an accelerated dual enrollment program? (Financial, scholarship, academic, etc.)
- Did you have a chosen major and career goal before you started to take your dual enrollment courses?
- What do you remember about the guidance you received from your high school selecting classes toward your major/career of interest, after you enter your dual enrollment program?
- During your first semester as a full-time college student, what was your major of interest and career choice?
- Why did you choose that major/career?
- Did your major remain the same or did it change after you left the dual enrollment program?
- Did you experience any challenges with pursuing your major of interest/career choice, after you moved on with accelerated credit hours?
- Anything additional you would like to add about your experience and share with a new student interested in pursuing a dual enrollment program?

**APPENDIX C:**

**STUDENT SURVEY**

# Accelerated Student Career Planning Experiences

Please take a few minutes to fill out the survey below.

Required

1.Type in your initials followed by your birthday, month and year. (example: JM - 10/1974)

2.What gender do you identify with?

- Male
- Female
- Prefer not to respond

3.Ethnicity (or Race): Please specify what you identify with.

- Nonresident alien
- Hispanic of any race
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White

- [ ] Race or Ethnicity Unknown
- [ ] Prefer not to respond
- [ ]

4.What is your relationship status?

- ○ Single
- ○ In a relationship
- ○ Married
- ○ Separated
- ○ Divorced
- ○ Widowed

5.Housing: Which of the following is applicable to your living situation?

- ○ Live alone
- ○ Live with other students
- ○ Live with other non-student residents
- ○ Live with parents/guardians/relatives
- ○ Live with spouse
- ○

6.What is your estimated annual income?

- ○ Less than $10,000
- ○ $10,000 - $20,000
- ○ $20,000 - $30,000
- ○ $30,000 or more

7.How many hours do you work a week at your paid employment?

- Not working
- Less than 5 hours
- 5-10 hours
- 10-20 hours
- 20-30 hours
- Full-time

8.What is your enrollment status?

- Not enrolled in college classes
- Part-time student (12 credit hours or less)
- Full-time student (12 credit hours or more)

9.How many dual enrollment credits hours did you complete?

- less than 12 credit hours
- 12-24 credit hours

10.What was your major area of interest when you began to take college courses?

- Education
- Science, Technology, Engineering & Math (STEM)
- Business
- Social Science
- Arts & Humanities

- Undecided

11.What was your most recent or is now your current major in college?

- Education
- Science, Technology, Engineering & Math (STEM)
- Business
- Social Science
- Arts & Humanities

12.If you are or were enrolled in classes, what is your class standing?

- Freshman
- Sophomore
- Junior
- Senior
- Senior Masters/Doctoral
- Continuing/Technical Education student
- Non-degree seeking

13.Future plans (select all that apply)

- Work full-time
- Work part-time
- Complete a degree

- [ ] Continue on toward a graduate or professional degree
- [ ] Mission or Volunteer service work
- [ ] Travel
- [ ] Military
- [ ]

14.Please add any additional information here that you would like to share about your background.

## APPENDIX D:

## CITI CERTIFICATE

## APPENDIX E:

## IRB APPROVAL LETTER

UNIVERSITY OF SOUTH FLORIDA

EXEMPT DETERMINATION

January 30, 2020

Jennifer Meier

Dear Mrs. Meier:

On 1/29/2020, the IRB reviewed and approved the following protocol:

| | |
|---|---|
| Application Type: | Initial Study |
| IRB ID: | STUDY000081 |
| Review Type: | Exempt 2 |
| Title: | An Exploration of Accelerated Student Career Planning Experiences on a Florida College Campus |
| Funding: | None |
| Protocol: | • Accelerated Student Protocols, Version # 1, 1-16-20.docx |

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

UNIVERSITY OF SOUTH FLORIDA

Sincerely,

Various Menzel
IRB Research Compliance Administrator

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| | | | |
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| **Title** | An Exploration of Accelerated Student Career Planning Experiences at a Florida College Campus | **Institution name** | University of South Florida |
| | | **Expected presentation date** | 2021-06-30 |
| **Instructor name** | Dr. Johanna Lasonen | | |

### ADDITIONAL DETAILS

| | |
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| **The requesting person / organization to appear on the license** | Jennifer Meier |

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| | | | |
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| **Title, description or numeric reference of the portion(s)** | Figure 7.2 Model of how basic career interests develop over time | **Title of the article/chapter the portion is from** | Chapter 7: Social Cognitive Career Theory |
| **Editor of portion(s)** | N/A | **Author of portion(s)** | Brown, Duane. |
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