DECREASING WITHDRAWALS WITHIN THE DUAL ENROLLMENT STUDENT POPULATION AT SOUTHWESTERN COMMUNITY COLLEGE: THE ROLE OF ADVISING

A disquisition presented to the faculty of the Graduate School of Western Carolina University in partial fulfillment of the requirements for the degree of the Doctor of Education

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October 2020

ACKNOWLEDGMENTS
Thank you to Dr. Gulley for supporting me in this endeavor. I truly appreciate all the effort you have put into this project. You have helped shape me into a more disciplined writer and researcher. I also extend my gratitude to my committee; your time is invaluable, and I am grateful for your dedication to this disquisition. Special thanks to Annette Kesgen for being a constant source of motivation and positivity.

I dedicate this disquisition to my family, without whom my doctorate journey would never have begun. I owe this degree to my grandfather, John Lewis Wyatt, as it is his dream to see me achieve it. I am so thankful for the love and support from my grandfather, grandmother, parents, and brother. The pep talks and dog sitting made this venture possible. Thank you for caring about my academic goals and helping me get to graduation. I would also like to thank Erica Muse and Cheryl Renfro for their uplifting spirit and constant encouragement.

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ABSTRACT

DECREASING WITHDRAWALS WITHIN THE DUAL ENROLLMENT STUDENT POPULATION AT SOUTHWESTERN COMMUNITY COLLEGE: THE ROLE OF ADVISING

Amanda Crisley Everhart
In selecting an area within education to focus on for my disquisition, I chose to focus on dual enrollment programs. Dual enrollment, a nationwide program allowing high school students to take college classes, prepares high school students to plan and organize postsecondary goals such as obtaining a degree from a two or four-year higher education institution. Preparation comes from earning college credit by taking classes related to the student’s major of choice. For the context of this disquisition, I narrowed the focus to the service region of Southwestern Community College in the western mountains of North Carolina (Appalachia).

In North Carolina, high school students can take college courses tuition-free. This makes dual enrollment particularly beneficial to students in the Appalachia region because most people in this area live below the poverty line and have a lower rate of obtaining degrees beyond the high school diploma (Lawrence & King, 2018). Through dual enrollment, students can earn certificates in fields such as business, automotive, and emergency medical science. This allows them to go straight into the workforce upon high school graduation (Cowan, 2017). Students can also receive credit toward two and four-year degree programs. This means less course work to pay for when the student graduates from high school and attends an institution of higher education for the purpose of obtaining a degree (Daley, 2017).

The tuition-free component makes dual enrollment undeniably advantageous. However, students are not always fully educated by college staff on how to best use this opportunity which creates long- and short-term difficulties for dual enrollment students later on. A particular issue creating problems has been students being withdrawn from a college course or courses.
In my experience, often when a dual enrollment student receives a withdrawal, the student does not fully understand what withdrawing means or that withdrawing has consequences attached, such as the withdrawal being recorded as an “F” on the high school transcript (Smith, 2018). After reviewing the problems I saw as a dual enrollment coordinator, working with students facing the aftermath of their withdrawals, I wanted to create a system that helped students better understand the consequences associated with being withdrawn. My goal was to lower withdrawal rates and alleviate repercussions from withdrawals by proposing an intervention that sought to introduce an advising component to the dual enrollment student population at Southwestern. This was my attempt to remedy a problem of practice and help students get more out of their dual enrollment experience.

Keywords: Dual Enrollment, Appreciative Advising; Lowering Withdrawals, Career Development

DEFINING THE DISQUISITION IN IMPROVEMENT SCIENCE

Within doctoral programs, it is customary for students to submit a culminating scholarly paper, typically, a dissertation. However, Western Carolina University’s doctoral program in Educational Leadership requires a disquisition. Aligning with the Carnegie Foundation for the Advancement of Teaching, Western Carolina’s Educational Leadership program centers on teaching the art of improvement science. As defined by the Carnegie Foundation, improvement
Science is defined as “a methodology for using disciplined inquiry to solve a specific problem of practice” (Carnegie Foundation, 2018, p.1). Advancing the scope of traditional learning, the disquisition is intended to blend research with practice. Students are asked to identify a problem of practice within their education-based work arena, then design an intervention to improve the situation and analyze the data to see if the planned intervention provided the desired outcomes (R. Crowe, personal communication, February 18, 2017). Another caveat of improvement science is that the change agent must test the improvement initiative through Plan, Do, Study, Act cycles, or PDSA cycles. The PDSA cycles keep the improvement intervention in a state of constant evolution towards progress as the change agent must stop and diligently evaluate the effects of the improvement before moving onward to the next cycle.

According to The Carnegie Foundation (2019), six core principles lead to a successful improvement initiative. These principles strive to ensure minimal to no negative consequences impact the system in which the improvement is taking place (Carnegie Foundation, 2018). Figure 1, pictured on the next page, shows The Carnegie Foundation’s six core principles for improvement.

1. Make the work problem-specific and user-centered.
2. Variation in performance is the core problem to address
3. See the system that produces the current outcomes.
4. We cannot improve at scale what we cannot measure.
5. Anchor practice improvement in disciplined inquiry.
6. Accelerate improvements through networked communities.
Figure 1 demonstrates a belief that to be a healthy and sustainable change, an improvement intervention must stem from feedback from those it would be affecting. The Carnegie Foundation strives to teach educators these six core principles to foster change plans that are adaptable and centered from within the organization instead of being externally forced by constituents (Mintrop & Zumpe, 2019).

Whereas dissertation writers are commonly referred to as “researchers,” disquisition writers are known as “change agents” (LeMahieu, Bryk, Grunow, & Gomez, 2017). The purpose of a disquisition is to improve an existing system. Therefore, when one writes a disquisition, they are, in fact, writing about studying the change they are trying to make. The disquisition writer conducts research, but they also research their own intervention design in practice—thus taking on the role of change agent instead of a researcher (Reeder, 2018).

Improvement science is the heart of Western Carolina University’s Educational Leadership program. Within the program, students learn to enact change initiatives that are both sustainable and have a positive impact. The success of an improvement science-driven intervention comes from following cycles in which the change agent plans an intervention, carries out the intervention, studies the intervention, and then acts to make necessary alterations on the intervention (R. Crowe, personal communication, February 18, 2017). Change occurs in revolving cycles. The change agent must stop and evaluate the effects of what they are doing.
then make adjustments before moving forward. Each cycle builds upon the last to most successfully reach the change agent’s goal.

Improvement science revolves around anticipating both the positive and negative effects the proposed change may have. The change agent endeavors to craft the intervention in a way that reduces negative effects, but unforeseen side effects can still occur. These unforeseen side effects are why the change agent has to observe the intervention and make adjustments (LeMahieu et al., 2017).

As a result, the intervention goes through several active adjustment cycles. The cyclical nature of improvement science has the intervention in a constant state of growth for effectiveness. Figure 2 below demonstrates the improvement science cycle of planning, doing, studying, and acting—also known as a PDSA system (LeMahieu et al., 2017).

Figure 2 outlines The Carnegie Foundation’s designated method for successfully implementing and monitoring an improvement. The change agent must first identify what they want to accomplish, then establish the changes they will implement to reach their goals. To
ensure change happens in a healthy and holistic manner, a benchmark has to be set to signify that the change actions actually improved upon the situation (Lewis, 2015).
Introduction

Figuring out life after high school can be overwhelming. America’s teenagers feel a great deal of pressure to choose a path to follow right after graduation, but teens do not always feel like they have been given adequate resources to make decisions about their future, such as whether it is better to go into the military, join the workforce, or attend a four-year institution right after graduating high school (Saunders, 2017). To help America’s youth better adjust to post-high school life, the United States Department of Education developed a dual enrollment program (Smith, 2017). Referred to nationwide as Post-Secondary Enrollment Options, or PSEO, the ability to take college-level classes while in high school began with the Vocational Education Act of 1963. The act was originally intended to focus on Career and Technical Education. High school students were granted the right to take college-level vocational classes to learn a marketable trade so they could contribute to the economy after graduating high school (Carey, 2015).

Over the next 26 years, as the PSEO initiative successfully cultivated community workforces, the government decided to expand offerings in order to grow the attendance at four-year institutions. PSEO was renamed and expanded to allow students to take classes, which prepared them to obtain bachelor’s degrees (Kanny, 2015). In this expansion, the focus of dual enrollment shifted to be more comprehensive. Originally, the sole purpose of dual enrolling high school students was to prepare them for the workforce. In opening the four-year preparatory dual enrollment option, the focus of dual enrollment grew into a multi-factored directive. The directive, as was intended with the addition of college preparatory classes, was to create a venue for students to fully explore all post-secondary options—career pathways and college transfer (Knesting & Waldron, 2006). Both options were opened to students so that they might try
college transferable courses and different career options to see what might be the best fit for them after graduation. The purpose behind this intent was not only that students might better understand majors and careers that were available to them, but that students might also be able to realize if a different path, such as joining the military or taking a gap year to travel, might suit them better after graduating high school (Kanny, 2015).

In expanding the scope of dual enrollment, the legislation was first renamed the Carl D. Perkins Act in 1984, and the mission of assisting “underserved students with substantial education needs” was added (Carey, 2015, p.1). Furthering the program’s expansion and fully shaping dual enrollment into what we know it as today, Ohio enacted its own specialized PSEO legislation in 1989. Ohio’s program took the Carl D. Perkins Act one step further and made it possible for high school juniors and seniors to take a multitude of college courses instead of having a solely vocational focus. Ohio decided to add college transferable courses in an attempt to diversify the workforce statewide by increasing the educational attainment level overall. Ohio’s legislation was widely adopted by other states and is the current operating structure for dual enrollment nationwide (Carey, 2015).

Today, dual enrollment programs allow high school students in the United States to take college courses at partner institutions of higher education, including community colleges. Each state sets the boundaries for how its dual enrollment program operates, including setting eligibility requirements for participation (Smith, 2017). Modern dual enrollment programs offer much flexibility in the options students have within the dual enrollment structure. Students can choose to take College Transfer courses to earn credit toward two and four-year degrees they might want to pursue and/or Career Technical courses that earn them a certificate in a specific career field such as Accounting or Welding (Gilbert, 2017).
Given that each state manages its own education systems and sets its own operating guidelines for dual enrollment, there is a vast amount of diversity in how dual enrollment programs are run. The variety is found in many factors, including eligibility standards and which programs and classes are offered to dual enrollment students. Students gain many positive benefits from participation in dual enrollment, such as building a portfolio that includes a college GPA and coursework that can be transferred to other institutions. Transferring coursework reduces the number of classes a student will have to take later on to earn a college credential, which means less time spent in the program and less money to pay (Siddiqi, 2018).

**Geographic Context**

Having grown in popularity since 2011, over 50,000 high school students in North Carolina were taking college classes as of 2018, according to research pulled from the U.S. Department of Public Education (2019). Many of those dual enrollment students, as research shows, had hopes of paying less tuition when they pursued post-secondary degrees after high school (Cross, 2018). Elizabeth Knox of Union County, North Carolina, was one such student. Cross (2018) featured Knox’s story of engagement with dual enrollment in The Daily Tarheel, the student-run newspaper at the University of North Carolina, Chapel Hill.

In 2018, Knox completed her bachelor’s degree at the University of North Carolina at Chapel Hill. She accomplished this in only three years. This is remarkable given that the average student completes their “four-year degree” in five years (Lawrence & King, 2018). Did Knox earn this degree with such speed thanks to an advanced IQ? Maybe.

However, Knox attributes her speedy success to the early start she received by earning college credits at South Piedmont Community College through North Carolina’s dual enrollment program while she was still in high school. These credits allowed her to move into more
advanced courses and meet her baccalaureate requirements more quickly. The college credits Knox transferred into Chapel Hill from South Piedmont gave her a head start toward meeting the coursework requirements associated with her college major, which meant less tuition for her to pay at Chapel Hill (Cross, 2018).

Knox is certainly a testament to the impact a positive dual enrollment experience can have on a student’s life. Knox’s story is one of accolades and triumphs, but it does not necessarily reflect the experience of every student who has participated in the North Carolina dual enrollment program. Not all students who participate in dual enrollment share Knox’s enthusiasm for the program because they could not transfer credits as Knox did.

Joe Warta, who participated in dual enrollment through Wake Technical Community College, considers his stint in dual enrollment “a waste of time” (Leef, 2017). Warta was disappointed because he thought he was gaining useful college credit, but when he enrolled in a four-year institution, Warta found that most of his classes could not be transferred to other institutions (Leef, 2017).

Why are these outcomes so very different? One clear difference in the students’ outcomes centers around the dual enrollment experience itself. Knox had support and guidance in the form of a dual enrollment facilitator who coached and advised her. Warta was simply signing up for classes. The difference was in how the dual enrollment facilitator at each organization chose to run their dual enrollment program (S. Loftis, personal communication, July 5, 2019).

Knox had the luxury of a dual enrollment coordinator who conducted admissions counseling and provided advising similar to what post-secondary students received (S. Loftis, personal communication, July 5, 2019). The institution where Warta did his dual enrollment
relied heavily on high school guidance counselors to monitor students’ dual enrollment registrations. Warta did not receive the same level of college-related advising that Knox received from her dual enrollment facilitator, and as a result, Warta took several courses that were not transferable to other institutions (C. Shields, personal communication, July 22, 2019).

**Problem of Practice**

The dual enrollment system is advantageous for high school students who participate, but it is flawed. Students have access to college courses, but not always college advising (Matthews, 2018). Advising is a structural component of college life, which provides students with guidance to make advantageous and sustainable choices regarding their college experience. At its most basic level, advising is about course selection, but true advising means teaching students big picture thinking they can use to build their future (Mintrope & Zumpe, 2018). The lack of a robust advising component in dual enrollment programs sets high school students up for failure (Miller, Williams, & Silberstein, 2019).

Allowing high school students to freely access college classes without advising them on selecting courses and building curriculum plans that lead to the achievement of their future goals often leads to failure and creates an environment where students “hop” through classes. Class hopping refers to students jumping through various fields such as criminal justice, business, or psychology just to try out classes. Class hopping frequently leads to students being in classes that are not a good fit for them since courses are affiliated with specific majors and associated with differing levels of credentialing (Cowan, 2017). An example of this would be that Eng 111: Writing and Inquiry meets the standard English requirement on most all Bachelor’s and Associate’s plans, but Mat 143: Quantitative Literacy only works for select Bachelor’s and Associate’s plans. A student could wind up taking unnecessary math courses because the one
they chose did not fit with a post-secondary academic program related to their career goal. When a student feels that they are in a class that does not match their interests, or they do not understand how the class’ content fits into their future life goals, they frequently withdraw from the course in the middle of the term. This results in wasted time and energy and can impact their time to completion of high school graduation requirements. Even more problematic, students earn an “F” on their high school transcript if they withdraw after a certain date of each term. Further complicating matters is the fact that many students do not bother to go through the withdrawal process at all (due to laziness, or more frequently, a lack of knowledge about such processes or implications of their actions) and earn an “F” by default.

This is detrimental because, in dual enrollment programs, students are developing their collegiate transcript while earning the necessary credits to graduate high school. On the college side, when a student is withdrawn, they receive a “W” on their transcript, and the college GPA is not affected. However, all withdrawals are tracked by the Federal government and are a determining factor in whether or not the student can receive financial aid. Dually enrolled students do not pay tuition, but after graduating high school, an inability to be awarded financial aid may become an issue.

As highlighted in the cases of Knox and Warta, adding a college advising component is the best practice for dual enrollment programs, which makes a difference in student success outcomes. Available research from the U.S. Department of Education suggests that proper mentoring of dual enrollment students can reduce withdrawals and failures due to withdrawal issues. To this end, some colleges that engage in dual enrollment programs employee staff to provide this mentoring. Similarly, some high schools embrace this mentoring more than others.
As the College Access Coordinator at Southwestern Community College, I recognized what I deemed as a particularly high number of students earning an “F” on their high school transcripts because of withdrawals. Most of these withdrawals were obtained by students from one particular partner high school, where positive dual enrollment practices were not robustly embraced. Given that the withdrawals were majorly deriving from one school and about 52% of every graduating class ended up attending Southwestern after graduation, students could be greatly set back and have to spend money on tuition to correct course discrepancies. In total, about 45% of each graduating class from that school that decided to attend Southwestern after graduation had participated in dual enrollment as of Spring 2018.

Upon researching how many students from that school suffered severe consequences due to dual enrollment withdrawals or receiving an “F” on their college transcript because they should have withdrawn, I learned that at least five had a delayed high school graduation over the past two years. The delayed graduation from high school for these five students was the result of not successfully completing a dual enrollment course in the second semester of senior year. By not completing the dual enrollment course, the student could not gain the elective credit they needed to graduate high school.

**Need for Improvement**

When a dual enrollment student withdraws or receives a withdrawal from a college course, they are given an “F” on their high school transcript. Many withdrawals actually occur because the student misunderstands or has no understanding of the college withdrawal policy. Being unaware of what a withdraw actually is and how it can affect them, students incur withdrawals and major negative consequences.
The negative consequences can certainly be reduced if students follow the higher education institution’s drop/add policy (He & Houston, 2017). The drop/add policy denotes a certain length of time in which students can drop a course without affecting their high school or college record (Smith, 2017). Properly dropping a course lets the student avoid negative repercussions associated with withdrawing, but many dual enrollment students are not aware of the drop/add period. Adding to the issue, students are not actively choosing classes with intent but rather selecting classes randomly. The random selection of courses leads to a loss of interest, which results in a high level of withdrawals.

In my own practice facilitating dual enrollment and learning how other dual enrollment facilitators across North Carolina operated, it became apparent that the focus of dual enrollment facilitation leaned more on the admissions side of bringing students into the program and the registration side of putting students in classes. However, there was no component created to teach dual enrollment students the fundamentals of choosing classes in terms of making sure the classes fit with a career goal or desired program of study in any future educational pursuits (Lawrence & King, 2018).

Traditionally, when students met with their dual enrollment facilitator on the college side, the standard practice was that the students told the dual enrollment facilitator what class they wanted, and the facilitator put the student in that course. This was the common practice for the state of North Carolina. The facilitator did not usually ask how or why the student chose the course (Smith, 2018). The problem with this practice was that the facilitator was not determining why the student chose the class, what the student’s goals were for after high school, and did not offer suggestions of classes the student should take in order to meet those goals (Lawrence &
King, 2018). The facilitator was not offering advice but instead expecting the student to be self-reliant in creating his/her own future (Saunders, 2017).

More often than not, students choose classes based on peer and parental pressure (He & Hutson, 2017). For example, mom wanted them to be a nurse and said they had to take Anatomy, or their best friend was in online Public Speaking and said they needed to be in online Public Speaking too (He & Hutson, 2017). Parents and peers suggested what they thought was best at the moment, but they were not always considering individual factors related to the student or their goals, such as—Mary does not enjoy science and has failed high school biology, so college Anatomy may not be the best fit (Saunders, 2017). Dual enrollment facilitators needed to help students be more successful by using advising to buffer out external pressures. An added focus on providing a career counseling component with basic college advising was that it would help to set boundaries for feasible goals based on the student’s own interests and abilities (Smith, 2018).

Asking a student simple questions such as “What would you like to do after high school?” or “Have you taken an online class before?” were vital in directing the student to think about their own needs instead of the wants of their parents and friends (Saunders, 2017). Students who selected classes based on outside pressure were more at risk for receiving a withdrawal because they did not pick the class of their own accord based on an interest or goal incentive, so they had no sense of investment in the course (He & Hutson, 2017). Having a sense of investment because the class aligned with a goal motivated the student to try harder (Smith, 2017).

Apart from potentially not graduating high school on time and getting a bad grade on their high school transcript, withdrawals also affected student’s abilities to receive financial aid
in the future if the student tried to attend the institution where they took the dual enrollment courses (Cowan, 2017). Financial aid was affected because the federal government tracks the progress of all students in college courses and revokes financial aid privileges for students based on withdrawal rates (Miller et al., 2019). In basic terms, the federal government does not want to pay for a student to take courses in which they are not successful. The government also does not want to pay for students to attend college who are not proving to be successful or on track to graduate and move into the workforce. To that end, they monitor a student’s progress towards a major based on withdrawals and failing grades, and they revoke aid privileges if certain percentages of success are not maintained.

**Proposing an Improvement**

As the College Access Coordinator at Southwestern, I wanted to explore ways that I might circumvent negative outcomes for dual enrollment students by helping the dual enrollment population avoid receiving a withdrawal and an “F” on their high school transcript. In exploring ways to avoid negative outcomes accrued from withdrawals received in dual enrollment courses, the solution became clear. I needed to address the number of withdrawals dual enrollment students were receiving and lower them.

In investigating the driving factors behind why the students were being withdrawn or withdrawing, I learned that most withdrawn students were not intentionally selecting courses. In addition, overall, the students were not being fully informed about withdrawal repercussions. In presenting a feasible remedy, I wanted an intervention that would lower withdrawals by improving dual enrollment practices.

I chose to improve dual enrollment practices by adding an advising component related to college practices and career coaching. I intended the advising component to educate students
about how to choose courses intentionally—being mindful of making selections that aligned with their post-high school goals and the collegiate drop/add period—in an attempt to combat students receiving withdrawals (especially non-attendance withdrawals). The improvement was necessary because withdrawals from college classes caused students to get Fs on their high school transcripts, potentially not graduate on time due to loss of credit, and be suspended from future financial aid.

Local Context

As the College Access Coordinator at Southwestern Community College, I coordinated dual enrollment operations. As such, I was the facilitator for Southwestern’s dual enrollment program. Withdrawals, particularly non-attendance withdrawals, were a common occurrence. There are 12 schools served by dual enrollment at Southwestern, the largest of which is three traditional public high schools that enroll over 800 students overall (Everhart, 2017). My intervention centered around these three high schools because the schools varied in how they carried out dual enrollment practices. The lack of uniformity created a tangible difference in performance, and students’ dual enrollment experiences, while all provided by me carrying out policies set by Southwestern and the state, fluctuated based on which high school the student attended.

Withdrawals proved to be a prime area for improvement because out of the 235 students participating in dual enrollment at Southwestern for the 2016-2017 academic year, 105 received some form of a withdrawal. Looking at the bigger picture, 44.7% of Southwestern’s total dual enrollment population did not complete the dual enrollment course/s they were enrolled in, 81% of those withdrawals came from students at one particular high school (Everhart, 2018).
Having one high school with a concentration of over 54 withdrawals in one academic year indicated there was some form of a discrepancy occurring with dual enrollment operations at that particular school. I saw this as a red flag and decided it would be best to focus on targeting lowering the withdrawal rate at that school. Given the high withdrawal rate, I thought that school would provide the best testing ground for the improvement intervention.

Southwestern serves three counties and the Qualla Boundary in the farthest reaches of western North Carolina. The area Southwestern serves is remote and difficult to access. Most of the area around the service region is national forest land. Aside from working there, I also chose Southwestern because it uses dual enrollment to stabilize its total enrollment, and all counties served are affected by poverty. The poverty element is a vital criterion because of the component of students losing their financial aid standing based on dual enrollment performance and then not wanting to continue with higher education because of that.

What I found in researching service area demographics is that there are a high number of high school-aged citizens but an overall low rate of residents continuing education after high school. Each traditional high school in the service region has over 100 students involved in dual enrollment. At least one of the schools has over half of its dual enrollment population being removed from college classes with some form of a withdrawal. Withdrawals can be student-initiated for any reason, faculty-initiated because the student has not attended in four consecutive days, or rendered based on the student’s failure to attend the first two class sessions (these are known as non-attendance withdrawals).

For the sake of anonymity, pseudonyms were used in this paper instead of the school’s actual identifiers. Delano High School, Swisher County High School, and Fort Pierce High
School hold the largest population of dual enrollment students amongst Southwestern’s service region (Everhart, 2019). At Delano and Swisher County, students are screened and vetted before being allowed to participate in dual enrollment (M. Greeble, personal communication, May 30, 2019). Swisher County and Delano both deny a student participation in dual enrollment if the student has had attendance or grade issues with the high school. In addition, Swisher County and Delano both require students taking dual enrollment classes online to go to a lab period at the high school, which is overseen by the media center coordinator. The media center coordinator supervises as students do their online coursework (M. Greeble, personal communication, May 30, 2019).

Fort Pierce High School operates its dual enrollment program differently (A. Copeland, personal communication, May 28, 2019). Fort Pierce students taking online dual enrollment courses are not required to be in a lab period at the high school, and high school educators do not vet dual enrollment students before they enter the program. This means that Fort Pierce students in online dual enrollment courses are left to their own devices and do not have a support resource at the high school, helping them navigate their coursework (A. Copeland, personal communication, May 28, 2019).

Dual enrollment students at Fort Pierce often become overwhelmed by their online dual enrollment course load and opt to withdraw from their courses (A. Copeland, personal communication, May 28, 2019). Figure 3 below provides a graph representation of the enrollment at Swisher County, Delano, and Fort Pierce with a look at the dual enrollment completion and withdrawal rates for each school. The figure reflects the withdrawal rates at the schools for the 2017-2018 academic year and shows the discrepancy between Fort Pierce’s completion rate in comparison to Delano and Swisher’s.
The practices at Fort Pierce—such as not vetting students, and allowing them to take online dual enrollment classes without a lab period for support, made a substantial impact on the school’s dual enrollment completion rates. Fort Pierce’s high dual enrollment withdrawal rate, and low completion rate, made the school a prime candidate on which to test the improvement intervention (Everhart, 2019). The high withdrawal ratio meant the school could benefit most from an intervention on dual enrollment practices (Everhart, 2019).

**Figure 3. Southwestern Dual Enrollment Partner Comparison.**

**Theory of Improvement**

To improve, address, and solve the problem of practice that was affecting Fort Pierce’s dual enrollment students, an improvement intervention was designed and implemented
(Mintrope & Zumpe, 2019). I planned to intervene for the success of dual enrollment students by introducing college advising with a career component into standard dual enrollment operations. Fundamentally, I designed an improvement to lower withdrawals among the dual enrollment student population at Fort Pierce by providing dual enrollment students with structured advising that created long-term sustainable resources for succeeding in college and offered a career exploration aspect to help students guide their dual enrollment course choices by aligning them to post-secondary goals.
Literature Review

After observing my own dual enrollment student population, extra advising seemed necessary to help students understand the negative effects of withdrawals and how to avoid them by using the drop/add period. I thought that if I taught students how to make better initial course selections—choose courses that aligned with the student’s actual future goals—that would make the student less likely to withdraw. What I observed was congruent with what I found in the literature that explored the effects of inconsistent advising. When I signed students up for classes, I was offering advising in the form of verbally addressing the drop/add policy with each student individually. This is what I was doing prior to the improvement. Conducting research for the improvement made me see that my methods needed to be expanded upon.

Generically verbalizing the drop/add date was not sufficient by advising standards because I did not explain the terminology specific to college. The dual enrollment students were unfamiliar with college terms, so they were not able to fully grasp the concept behind what I was saying. In addition, I ran into a lot of apathy regarding college course selection. Students did not really know how to research what classes were available or that the classes selected should match with the student’s post-secondary academic or career goals. I saw a lot of students who just picked a class at random because they thought “it would be easy,” and a parent “wanted them to take a college class.”

Guided by literature such as He & Hutson (2017), my intervention introduced the change to structured advising with an emphasis on career counseling (He & Hutson, 2017). The theory behind choosing that specific improvement was two-fold. I thought that if I used advising to create an environment where students actively chose their dual enrollment courses, they would be more invested in their classes. The point was to give students a sense of ownership over their
dual enrollment participation and have them choosing classes with intent. In my mind, intentionality equaled investment. Based on the literature around Stebleton (2017), connecting the students to their courses and those courses to their future goals by fostering a sense of investment would increase the likelihood of the student completing the course.

It was my belief that providing advising consistently as part of the dual enrollment practice would lower withdrawal rates among the dual enrollment student population and potentially have the added side effect of helping students perform better in dual enrollment courses. Statistics compiled by the U.S. Department of Education show that 87% of high school students feel underprepared for life after high school (National Center for Education Statistics, 2018). This is an alarming fact when you consider that there are approximately 15.1 million high school students in America, and more than half of them stated that they were struggling to identify what they are interested in doing after high school (U.S. Education Commission, 2016). This information indicates that a lack of advising for post-secondary life could result in a generation of drifters, people who cannot attain or sustain viable jobs (Lile, Ottusch, Jones, & Richards, 2018).

Dual enrollment students who encounter difficulty identifying career goals also struggle with defining academic plans. Dual enrollment students in this situation tend to “class hop,” which professionally interpreted means choosing classes at random with the hope that an interest in a specific subject emerges (Cowan, 2017). Dual enrollment students who “class hop” are more likely to withdraw or not attend courses as they lose interest in the course (Daley, 2017). This behavior leads to negative consequences later on, which could potentially be avoided if the student was properly advised on how best to use their dual enrollment experience.
Context

There were 1.4 million high school students in the United States participating in dual enrollment programs at the time research for this disquisition began (National Center for Education Statistics, 2018). About 700,000 of those students were slated to receive an F on their high school transcript, mostly due to receiving a withdrawal in a dual enrollment course (National Alliance of Concurrent Enrollment Partnerships, 2018). Putting that figure into perspective, half of the nation’s dual enrollment population faced negative consequences on their high school transcripts because of failure to complete their dual enrollment courses in the 2016-2017 academic year (Smith, 2018).

There is no withdrawal system on the high school side. State policy mandates dual enrollment students be given an F on their high school transcript for withdrawn dual enrollment courses unless the student properly withdraws during the drop/add period (Gilbert, 2017). Therefore, in the future, if North Carolina wants to appropriately serve dual enrollment students, dual enrollment facilitators need to focus on helping students understand the full implications of a withdrawal and the importance of dropping a class if the student feels early on that it is not the right fit (Smith, 2017).

Another facet of withdrawals is that there is a level of severity influenced by the student’s current grade level (Lawrence & King, 2018). Most dual enrollment courses count on high school transcripts as elective credits that go towards the student’s graduation requirements for high school. What this means is that a student in 11th grade, or junior level status, has sufficient time to redeem credits if they withdraw from a dual enrollment course (Smith, 2017). A student in 12th grade, or senior-level status, is in more danger (K. Anderson, personal communication, May 24, 2017). If a student at the senior year level needs the credits to be eligible for
graduation, the student might not be able to redeem those credits by the graduation deadline (Gilbert, 2017). An inability to reclaim credits counting toward a high school graduation requirement would result in the student not being able to graduate high school. This is a symptom of withdrawing that may not be understood by either students or dual enrollment facilitators.

Adding salt to the wound, withdrawals can impede a student’s ability to receive financial aid as a post-secondary student (Lawrence & King, 2018). On the higher education side, a withdrawal simply results in a W; it does not affect the student’s college grade point average (Southwestern Student Handbook, 2017). Unfortunately, collegiate course withdrawals do impact the student’s college record in other ways (Smith, 2018). Withdrawing shows a failure to complete a course and affects the student in the future if the student needs financial aid to pay for post-secondary academics (The Fastweb Team, 2017).

Withdrawals are recorded federally for financial aid purposes. Per federal standards, financial aid eligibility is contingent on the student maintaining satisfactory academic progress. Satisfactory Academic Progress (SAP) is determined by factors such as course completion (Gilbert, 2017). The federal government stipulates that in order to receive financial aid, a student must have achieved and maintained a 67% successful course completion rate at the institution they are attending (U.S. Education Commission, 2016).

How exactly does this affect dual enrollment students? Dual enrollment students do not pay tuition, so they are not eligible for financial aid while taking college courses as a high school student (Smith, 2017). However, the federal government does not distinguish dual enrollment students from post-secondary students in regard to the credits taken / credits earned calculation at the root of SAP policies. When a student is withdrawn from a course, a permanent record is
established. Once the withdrawal occurs, the student’s dual enrollment institution is responsible for monitoring the student’s academic progress and reporting the student’s financial aid eligibility status (Smith, 2018). Withdrawals are tracked through educational software; Datatel is used for the state of North Carolina’s community college system. Schools are required to submit enrollment reports every semester, which includes a list of withdrawn students.

What this means is that when a student in dual enrollment withdraws or is withdrawn from a course outside of the approved drop/add period, that withdrawal reports back to the federal government, just like it would for a post-secondary student eligible for financial aid (Lawrence & King, 2018). When a student fails to meet the 67% successful completion mark, the federal government places the student on a Satisfactory Academic Progress, or SAP report (The Fastweb Team, 2017). Fully illustrating this concept, suppose hypothetical dual enrollment student Kaitlin Jones signs up for one dual enrollment class in her last semester of high school. Kaitlin has never participated in dual enrollment before, so this is her first and only dual enrollment class. Unfortunately, Kaitlin withdraws from the course.

In this situation, Kaitlin committed to one college course, which she was expected to complete. After receiving the withdrawal, Kaitlin received a 0% completion rate for her college coursework. Being in dual enrollment and not having to pay tuition, Kaitlin has no immediate monetary punishments for her withdrawal, and her college GPA is not affected (Smith, 2018). However, fast-forwarding five months later, Kaitlin graduates from high school and wants to attend college at the same institution where she did her dual enrollment. This is where the consequences of that 0% completion rate kick in (Lawrence & King, 2018). Now that Kaitlin is attending college as a post-secondary student and eligible to apply for financial aid, she cannot
be granted financial aid because the 0% completion rate from her withdrawal places her on a warning list with the financial aid office (Smith, 2018).

Thanks to her withdrawal when she was a dual enrollment student, as a post-secondary student Kaitlin is in a position where she stands to lose the ability to receive financial aid (Smith, 2018). Kaitlin now has to prove to the federal government that she is not a liability—someone who will borrow money from financial aid, drop out of all their classes, and use that money for something other than school (Lawrence & King, 2018). Students on the warning list with financial aid have one semester to remedy the situation by improving their SAP score, or they will be suspended by the federal government and unable to receive financial aid (He & Hutson, 2017).

The silver lining to this is that SAP is specific to each institution; it does not follow the student from school to school. If Kaitlin gets suspended from financial aid from the college she attends, she can go to another institution and start over fresh in regards to receiving financial aid (Fink et al., 2017). However, switching academic institutions to have a clean slate with the SAP record might not be an option for every student because the process can be both cumbersome and expensive with institutional application fees, fees to have transcripts sent to new institutions, and the cost of commuting or potentially moving to attend the new school.

Not all students are able to switch educational institutions. Students frequently become restricted by their geographical location, access to transportation, access to quality internet, and the number of higher education institutions in their area (Lile et al., 2017). Students can also be barred from other institutions based on admissions criteria. Community colleges are often good options for local students because they typically do not have GPA or test score requirements for general admission (Lawrence & King, 2018).
Dual enrollment students who withdraw from multiple classes can potentially ruin their opportunity for financial aid at the institution they attended for dual enrollment (Gilbert, 2017). The SAP warning is specific to each individual higher education institution and does not follow the student if the student chooses to attend another institution (T. Cook, personal communication, May 24, 2017). As it turns out, however, dual enrollment students are more likely to give up on education altogether if their local academic institution denies them financial aid (Daley, 2017).

**Local Application**

For the improvement science associated with this disquisition, I chose to focus on a particular institution, Southwestern Community College, for a variety of reasons. Some of those are discussed here, and this rationale is further explained in Chapter 3. Dual enrollment students who live in isolated areas, such as the students of Southwestern’s remote service region, are the most at-risk for not pursuing higher education when faced with a financial aid issue (Mercer, Palmer, Samuels, Schrodt, & Zimmerman, 2014).

In densely populated regions like the central part of North Carolina, students have several community colleges within a short distance from each other. In more rural areas, such as the western region of North Carolina, county lines are set farther apart. The smaller population and longer distances between county lines allow for one community college to serve two or more counties (Tallant, Russell, Tennyson, Allison, Whinnem, & Kostelec, 2014). Multi-county service regions mean a student may have to commute over an hour, or resort to online courses, to attend another community college (Mercer et al., 2014).

As the mountainous terrain of western North Carolina makes internet service unreliable, and a majority of citizens live at or below the poverty line, attending an alternate community college is a challenge for many students in this region (Mercer et al., 2014). Residents of
Western North Carolina, especially, are more likely to seek out higher education if it is affordable and conveniently located (Allison et al., 2014).

Strong dual enrollment programs can make a positive impact in non-affluent rural areas such as the service region of Southwestern Community College (Lawrence & King, 2018). Located in Sylva, North Carolina, the community college serves Jackson County, Macon County, Swain County, and the Qualla Boundary, which is home to the Eastern Band of Cherokee Indians. The state of North Carolina has a population of 10.27 million people, with 20% of that population living below the poverty line (World Population Review, 2019).

North Carolina’s total percentage of people living in poverty is 20%, yet in the counties of Macon, Swain, and Jackson (where the population for each county is fewer than 42,000), a recorded 17% of the population in each county live below the poverty line (US Census Bureau, 2018). The Qualla Boundary, which is tribal land for the Eastern Band of Cherokee Indians, has a population of 9,613, with 27% of the population living below the poverty line. In the Qualla Boundary region, 83% of residents have a high school diploma, but only 12% have achieved a college degree (Eastern Band of Cherokee Indians, 2018).

There is an unemployment rate of 5.2% on the Qualla Boundary, which surpasses the state of North Carolina’s unemployment rate of 4.9% (Eastern Band of Cherokee Indians, 2018). Jackson, Swain, and Macon counties all have unemployment rates below the state’s average at about 3.2% per county (US Census Bureau, 2018). The high school graduation rates of these counties are similar to the Qualla Boundary, with about 88% of residents having their high school diplomas (Eastern Band of Cherokee Indians, 2018).

Jackson County is home to Western Carolina University, a four-year higher education institution and main employer for the area. In Jackson County, 30.5% of the population has a
bachelor’s degree; this rate is only slightly higher than Macon County, where 22.2% of the population has a bachelor’s degree or higher (US Census Bureau, 2018). In Swain County, a close neighbor to the Qualla Boundary, only 15% of the population has earned a bachelor’s degree or higher (US Census Bureau, 2018).

Adding relevance to the statistics presented above, there are approximately 3,000 students attending the 12 high schools in Southwestern’s service region (World Populace Review, 2019). Not all of these students are currently eligible for dual enrollment. Dual enrollment is only open to juniors, seniors, and early college attendees. However, all of these students have the potential to participate in dual enrollment when they reach the appropriate grade level or attend an early college (US Department of Public Education, 2016). As of the Fall semester of 2018, Southwestern’s dual enrollment program was serving 778 students, 317 through early colleges, and 461 through homeschools, private schools, alternative schools, K-12 institutions, and traditional public high schools (Everhart, 2019).

By the 2019 spring semester, 26% of the high school population in Southwestern’s service area was active in dual enrollment (Everhart, 2019). Looking at the county statistics for the region, getting the students to graduate from high school does not seem to be an issue. Most people living in these counties do have a high school diploma (US Census Bureau, 2018). The deficiency lies in the high school diploma achievement rates being in the 80% range, but the attainment of higher educational degrees being below 31% (US Census Bureau, 2018).

Looking at the data, I began to wonder why the citizens of Southwestern’s service region are not going on to complete higher education degrees and if the lack of higher education credentials contributes to the area’s unemployment rates, especially in the Qualla Boundary. Between the poverty line information and the low level of higher education degree completion,
the data seems to tell a story of people who cannot afford to continue their education. When I ran the numbers to see how many high school students resided in the area, I discovered that around 20% of each county’s population is comprised of people 18 and under (US Census Bureau, 2018).

After running the statistics for the area, I began to question how many students were unable to receive financial aid from Southwestern Community College due to withdrawing from a dual enrollment class. I dug deeper and found that over the past four years, 45% of students who participated in dual enrollment at Southwestern graduated from high school unable to receive financial aid from Southwestern (Everhart, 2019). The most common factor that affected these student’s SAP reports was that they had failed a course and then withdrawn from multiple subsequent courses. The withdrawals pushed their completion rate down and hindered their ability to recover from receiving the F. These students were now expected to pay out of pocket if they wanted to pursue an education from Southwestern after their high school graduation (Smith, 2018). Only 2% of these students did end up continuing their education with Southwestern after graduating high school (Everhart, 2019).

The majority of the 45% of students who were not eligible for financial aid at Southwestern due to a dual enrollment course were also unable to attend Western Carolina University because they were not on the college prep curriculum track in high school (Everhart, 2019). In reviewing the students’ records, I found that most were not designated on the college prep track in high school, which means they did not follow the college eligibility curriculum plan set forth by the state of North Carolina and were not able to be accepted to a North Carolina four-year college or university. The requirements regarding the high school college prep track are set by the North Carolina Department of Public Instruction and are found in the high school
graduation criterion policy provided to all public high schools by the state (US Department of Public Education, 2017). If the students did want to seek out education after high school and receive financial aid, they had to attend a neighboring community college—the closest two community colleges are both an hour away (Everhart, 2019).

If these students had received an advising component from Southwestern directing them on how to best use the dual enrollment opportunity, they might have applied the dual enrollment credit they earned and completed a college degree. Smith (2017) reinforced this notion with a study showing that statistically, 84% of students who participate in dual enrollment do try to move forward academically after high school. This information is relevant because it shows that dual enrollment students do have a desire to obtain college degrees. Knowing this, dual enrollment facilitators should feel a responsibility to ensure students are not hindered from pursuing higher education because of something that occurred during their time in dual enrollment.

**Theoretical Framework**

Smith (2018) collaborated with the Center for Community College Engagement to publish a study that found pro-active and tailored advising initiated early on increased student retention rates. In Smith’s study, students who received advising from a college representative were 78% more likely to return each semester until they completed their program of study. By comparison, 62% of students who were not receiving advising stopped taking college courses and did not receive a college degree.

Advising, especially advising related to career counseling, ensures that the student knows how to think about the future and has been guided on how to form a plan for life after graduation (Himerjick, 2017). Advising also makes students aware of the consequences of their actions,
such as withdrawing from a class and receiving an F from their high school, as well as the impact of that withdrawal on the SAP calculation during future collegiate endeavors (Lawrence & King, 2018). Career centered advising provides structure and removes the feeling of disenfranchisement associated with class hopping (Saunders, 2017). Tethering the student to a real objective provides motivation for course attendance, which leads to a reduction in withdrawals (Daley, 2017).

To have a positive impact on withdrawals in general and lower non-attendance withdrawals overall, high school guidance counselors need to collaborate with dual enrollment facilitators to bolster student success (Cowan, 2017). Realistically speaking, implementing an advising structure that promotes tailored class registration is an objective goal for improvement. Advising provides guidance, which helps the student actively select classes that complement their goals (Daley, 2017).

A direct tactic for addressing class hopping was to provide guidance counselors with the tools necessary to stop allowing students who were unable to identify a future career goal access to dual enrollment classes (De Palo, Monacis, Miceli, Sinatra, & Di Nuovo, 2017). This approach fostered a certain level of focus when students entered into dual enrollment. However, this approach seemed too exclusive and therefore was not an ideal solution. My concern regarding this approach was that it could yield an ulterior side effect of discouraging students who were undecided on a major from attending a secondary institution in the future (Daley, 2017).

The success of this improvement intervention lay in hinging Maslow’s (1943) hierarchy of needs with Lent’s (2013) career-life preparedness model then mixing in student empowerment based advising standards put forth by Bloom and Martin’s (2002) development of appreciative
advising. In thinking about making a positive change, I looked to scholarly works regarding completion rates, student development theories, and career counseling. All of the literature I pulled, including surveys and studies, supported adding an advising component as a helpful improvement plan to bring about lower withdrawal rates through providing students with a sense of purpose for the future. The heart of the intervention involved using college resources, particularly career counseling, to align dual enrollment class selection with the student’s postsecondary goals (Himerjick, 2017).

Shaping the scaffolding of the improvement began with a supportive foundation generated by Maslow when he introduced his Hierarchy of Needs concept (1943). The Hierarchy of Needs presents the theory that one can foster human growth and development through helping a person meet four internal needs, which are “1. physiological (food, shelter, etc.), 2. safety (employment, resources, etc.), 3. love and belonging (friendship), and 4. esteem (respect)” (McLeod, 2020, p.2). Being able to fulfill those needs leads the person to “selfactualize,” which fulfills the fifth and final humanistic need to “become the most one can be” (McLeod, 2020, p.). Maslow’s Hierarchy of Needs operates on the principle that growth and development do not happen if the aforementioned basic needs are not met, and that the needs have to be met specifically in the order laid out for self-actualization to occur. Therefore, a person whose needs are not met can never reach their full potential, but opportunities for development increase with each basic need that is met. While other theorists and researchers promote more fluid approaches, Maslow believed in a linear model because each step relied on completion of the one before it for total success.

Following the original Hierarchy of Needs five-stage model, if the student is going to be successful, his/her growth needs must be met (Maslow, 1943). Figure 4 provides a visual
representation of Maslow’s (1943) hierarchy. The goal is to help the student reach self-actualization, but first, you have to help them see how self-actualization matters, and you do that by advising them and showing them their potential for self-betterment.


According to Maslow (1943), a person succeeds if they are motivated to become their best possible self. Career counseling provides students a glimpse of not only what they could be, but what they could achieve (Sanders, 2017). Therefore, providing students with potential career
choices, and showing them the life they could have with each option, satiates the need for growth and discovery (Maslow, 1943). Satisfying growth needs will motivate students to put a better version of themselves forward, which leads to higher academic performance rates (Selingo, 2016). Expanding on Maslow’s theory I felt the need to belong could be a main intrinsic driver for students. Students give up and leave institutions when they do not feel a connection. I focused on the need to belong specifically when thinking about my improvement. Part of why I think my improvement can have a major impact is that having an advisor helps the student feel connected to their campus because they have someone actively interested in their education. So in turn the effort put into the student by college staff- especially the advisor- generates that sense of belonging for the student (Korpershoek, Canrius, Fokkens-Bruinsma, & De Boer, 2019).

Building up from Maslow (1943), Lent (2013) added specific career counseling ideology into the improvement framework that can be used regarding advising students. Using a socialcognitive career theory, Lent created a model for career-life preparedness. What that means is that Lent looked at the Social Cognitive Theory model of how people create their identity through their interactions with and reactions to their environment, and he designed a method of using that theory to get people to self-motivate themselves into more productive lifestyles in terms of their career trajectory (Lent, 2013).

In his model, Lent expresses that “workers should take greater control of their career development” (Lent, 2013, p.2). Flipping this notion to one of “students should take greater control of their education,” it is possible to use the career-life preparedness model to influence students positively (Himerjick, 2017). Figure 5 exhibits Lent’s (2013) Self-Efficacy Model.
Creating the mantra “Me Incorporated,” Lent helped instill a sense of ownership in those he observed (Lent, 2013, p.3). “Me Incorporated” turned individuals into investments in their own minds. People who think of themselves as an investment take tasks more seriously and outperform those who do not claim the mantra (Lent, 2013).

Lent surmised that individuals who see themselves as investments feel a greater duty to care for themselves. Therefore, this group puts more effort into maintaining jobs, advancing in jobs, and gaining raises. The group that did not see themselves as investments normalized “going through the motions” (Lent, 2013, p.6). This group was less likely to rebound after unexpected obstacles, such as losing their jobs. The disenfranchised group also had a higher capacity for switching jobs (Lent, 2013).
Expanding on this, Stebleton (2017) capitalized on Lent’s (2013) work and founded the role of cognizant thinking in career-life planning. Stebleton explores Lent’s concept through the scope of the class hopping student, or as he refers to them, “reasonable adventurers” (Stebleton, 2017). Highlighting that conscious planning, or “cognizant thinking” as it were, reduces uncertainty, Stebleton (2017) provides insight into why class hopping occurs.

Uncertainty causes the class hopper’s drifting mindset. Typically, students who class hop do so because they are overwhelmed by the responsibility of planning their futures (Stebleton, 2017). Stebleton states, “reasonable adventurers” have a hard time selecting one option because they do not want to miss out on what all the other options have to offer. Unfortunately, in seeking all options, the “reasonable adventurer” actually cheats himself out of opportunities by being pre-occupied (Stebleton, 2017). This notion matches with the purpose of adding a career centered piece into the advising component of the improvement intervention, which is to comfortably tether students to a goal, so they did not lose themselves (Daley, 2017).

Without guidance resources to make them feel safe, class hopping students explode with internal worry related to long-term decision outcomes (Himerjick, 2017). Questions such as “How do I know if I will like this?” or “What if I hate it, but I get stuck doing it forever?” consume the student’s thoughts (Saunders, 2017). The lack of knowledge regarding how to think critically about designing a career plan results in raised anxiety about making the wrong choice (Lile et al., 2017). The best way to describe this concept is by saying that the student does not feel like they have the authority to make life planning decisions (Daley, 2017). The hope was that by adding a career counseling aspect, the intervention would presumably instill confidence leading to students feeling more authoritative about their futures (De Palo, et al., 2017).
Overall, the literature I reviewed aligned with my thoughts that dual enrollment students would benefit from deeper and structured advising. Saunders (2017) supported my notion that a large causation factor driving the high withdrawal rates I saw from Fort Pierce was that the students really had no dual enrollment advising component to help anchor them to specific goals they could use to help guide their dual enrollment course decisions. As a result of that lack of tethering, the students were drifting in and out of classes because they felt lost. Lent (2013) and Stebleton (2017) gave me confidence that more robust advising with a career development element would help the students be able to not only tether but also self-motivate so they could successfully complete their dual enrollment classes.

**Methodology**

In my daily work as the facilitator for Southwestern Community College’s dual enrollment program, I noticed a large number of withdrawals amongst the dual enrollment population at a particular high school—Fort Pierce. In monitoring the student’s academic progress, I noticed non-attendance withdrawals, in particular, were incredibly high for Fort Pierce students. The other high schools in Southwestern’s service region only had one or two withdrawals per semester over a three-year span, but Fort Pierce had an average of 27 withdrawals in that same time span. Deeper investigation revealed that all of these withdrawals from the other schools were situations where the student felt overwhelmed mid-semester and asked to leave the course. Meanwhile, at Fort Pierce, at least 94% of the withdrawals were non-attendance withdrawals, meaning they happened simply because the student did not want to take the course or forgot they
were enrolled and did not attend the first day of the class. The high withdrawal rate, particularly the fact that it seemed to be concentrated from one specific school, was a concern.

I questioned if the dual enrollment students of Fort Pierce were being served correctly and how many of them were being held back because of the ramifications at the high school from having an F reported on their transcript as a result of a dual enrollment course withdrawal. Being student success focused, I wanted to explore how to lessen the consequences for dual enrollment students from receiving a withdrawal. I felt the best and most immediate solution that offered long-term sustainability was to reduce all forms of withdrawals. With non-attendance withdrawals specifically being the highest form of withdrawal received from Fort Pierce students, I thought it would be beneficial to focus on targeting non-attendance.

The aim of the improvement initiative at the center of this disquisition was to decrease dual enrollment course withdrawals at Fort Pierce, especially those resulting from nonattendance. I planned to accomplish this by adding career-focused advising to the dual enrollment student experience. Based on the available data and relevant literature, it seemed that having a better understanding of career goals would allow dual enrollment students to choose courses more appropriately.

Appropriate course choices to me were those made when students selected courses that aligned with the student’s career interest. I surmised, based on the literature, that the element of intentionality would help decrease withdrawals by anchoring students to the subject matter through their goals. I also wanted to use advising to train the students on how to choose courses by keeping their interests and skills in mind.

To explore if I could actually decrease withdrawals by adding more robust college and career-centered advising, I turned to improvement science. Improvement science is “a
methodology which incorporates short cycles for evaluating change that guides revision and development of an improvement program” (Collins & Weaver, 2018, p. 35). Utilizing this ideology, I was able to design intervention cycles using career-focused advising.

Following the improvement science model, I designed the intervention and then laid out a plan to test that intervention. Testing in improvement science involves implementing the improvement solution in phases. Cycle one is the attempt to follow the original plan to the letter. After cycle one, an evaluation period occurs to review the effectiveness of the original plan.

After the evaluation period, cycle two is drawn up utilizing the original plan and making adjustments based on the evaluative assessment before being put into action. Cycle two draws from the evaluation of cycle one and makes adjustments according to what went wrong. If there are any steps that should have been followed in cycle one that were not, or cycle one caused harmful unintended side effects, cycle two learns from that and makes changes in the hopes of making the intervention more successful. This chapter is an overview of the cycles I ran for my intervention.

Upon recognizing a large number of students from Fort Pierce getting an F on their high school transcript due to withdrawals, I explored a range of literature about the topic. I also researched quality practices in helping students avoid withdrawals altogether. This research put the wheels in motion for cycle one of the improvement. In conducting my research, I came to identify that dual enrollment students’ understanding of how their current educational pursuits align with their future goals can have a huge impact on the completion and success of current coursework.

Simultaneously, I recognized a lack of connection between what the dual enrollment students of Fort Pierce wanted for their futures and the courses they selected to take as part of
dual enrollment. I sought to create an intervention to address this gap. My hope was that I could increase intentional course selection to help Fort Pierce’s dual enrollment students match future goals in order to sustain enrollment in the course and lead to successful course completion.

The original improvement intervention design I created borrowed the idea of seeing yourself as an investment (Lile et al., 2017). This notion was rooted in the theoretical framework provided by Lent’s (2013) Self-Efficacy Model. Lent (2013) gave me the idea that I had to make student’s see themselves as investments, so in their minds having healthy goals and good grades raised their personal value, motivating the students to strive for success in their dual enrollment courses.

As it were, dual enrollment facilitators were not fully investing in students through engaged advising, so the students were not fully developing. Referring back to the literature, Maslow’s (1943) Hierarchy of Needs would say that the level of advising being administered was not sufficiently meeting the students’ needs. Going off of Maslow (1943) I reasoned that without a stronger advising component, the students would not be able to reach their full potential because their needs for growth and development were not being met.

My intervention shifts the dual enrollment facilitator’s role from flat registration manager, which has a tendency to make the students feel like a number, to an advisor who uses a combined self-actualizing (Maslow, 1943)/self-efficacy (Lent, 2013) model which encourages the student to learn why they should care about themself and their future career (Himerjick, 2017). The practical application of asking the students about their post-secondary plans, and making them assess themselves, is so they can anchor to a foundation. An anchored object cannot easily drift (Cowan, 2017). Therefore, students who are anchored to a goal will, in
theory, be deterred from selecting courses aimlessly and instead move toward conscious planning (Himerjick, 2017).

The framework for the improvement design was heavily centered around Lent’s (2013) career research and Maslow’s (1943) student success principles, but I also turned to Langley, Nolan, Nolan, Norman, & Provost’s (2009) work for guidance. Langley et al. focus on maximizing efficiency for the improvement by asking “fundamental questions which guide improvement efforts and the Plan-Do-Study-Act” cycles (PSDA). According to Langley et al. (2009), a team approach is best when designing improvement initiatives to create a problem-solving intervention. The development team is crucial to designing, implementing, and assessing the improvement intervention. Based on suggestions in Langley et al.’s work, I put together a team of people who could assist in honing the intervention design through their unique understanding of the problem’s solution, advising (Langley, Nolan, Nolan, Norman, & Provost, 2009).

Selecting members of the development team based on their experience in advising and influence at Southwestern Community College was important. In order for the intervention effort to be effective, it needed to be approved by the college’s administration. I recognized that key stakeholders would need to be involved to gain such approval, and noted that crucial to the success of the design, the college’s Dean of Students, Cheryl Contino-Conner, and Director of Enrollment Management, Mark Ellison should be involved.

In designing the intervention, I also drew input from Annette Kesgen, the Director of Upward Bound, and the colleges’ Success Coach, Tori Addington-Ellison, as employees who worked directly with student advising from a goal-oriented standpoint. I ran my improvement ideas by the development team and leveraged their involvement to get permission to move forward with the intervention idea. As I carried out the intervention, I reached out to the
development team periodically during the process for suggestions to improve upon the intervention design. I used feedback from Annette and Tori to make sure the advising components I was offering to my dual enrollment students were in line with the ones they offered to their students.

In our job structures at Southwestern, I was the only person that worked directly with registering high school students into dual enrollment courses, but Annette worked with high school students in a mentoring and tutoring capacity. Tori did not work with high school students; as a Success coach, she advised post-secondary students in order to help them identify goals and stay motivated to complete their courses.

Each member of the development team was helpful because they brought a unique insight into the design of the improvement. All parties followed a method of advising known as Appreciative Advising, which comes from an advising model created by Bloom and Martin (2002). Tori and Annette taught me how to tailor my personal approach so that I could better connect and relate with the students in establishing a solid rapport. Figure 6 below depicts Bloom and Martin’s (2002) Appreciative Advising structure, which was taught to me by Tori and Annette.

Bloom and Martin’s (2002) advising model incorporates a six-step process. The first step of disarming involves the advisor meeting the student at their level and making them feel safe. Disarming is incorporated through strategies such a smiling, greeting students at the front door instead of having them search for the advisor’s office, and decorating the advisor’s office in ways that are proven to be aesthetically soothing.

In disarming the student the advisor and advising office become a safe place for the student to comfortably interact. Steps two, three, and four - Discover, Dream, and Design-
involve the student working with their advisor to plan the future. Discover means learning about career paths related to academic options, dreaming relates to imagining how the student’s life could advance, and designing is where the student and advisor make a concrete plan.

In using this advising model the student is more likely to deliver by following through on completing classes and earning the degree they need to make their dreams come true. In following Bloom and Martin’s (2002) cycle the advisor tethers the student to goals, helps the student intentionally select a course plan, and in turn the student follows through because they now understand they do not have to settle.


Tori mentored me on disarming students. Following Bloom and Martin’s (2002) work, disarming is the key to effective advising. Disarming a student means you go out of your way to
make them feel comfortable in order to build trust. When a student trusts you, they are more likely to listen to you because you have their respect. This respect comes from showing an interest in the student that the student recognizes as being genuine and sincere (Bloom & Martin, 2002).

Annette worked with me on the Discover, Dream, and Design portion of Appreciative Advising. In her role as Upward Bound Director, Annette is incredibly well versed at meeting students at their level and helping them unlock and work toward their full potential. Annette and her Upward Bound team serve predominately as academic coaches who advise through helping students discover how to think about their futures, dreaming about the reality of overcoming their situations, and designing the future they want to have. This portion of Bloom and Martin’s (2002) Appreciative Advising model was exactly what I hoped to accomplish by advising my students about careers to set post-secondary goals.

Both women were positive guides for the delivery and not settling portion of Bloom and Martin’s (2002) Appreciative Advising method. I observed that both Tori and Annette had a high success rate, with about 95% of their students readily coming to meet with them and responding to their advice. Tori and Annette were so effective in their advising practices because they delivered on being consistent and treating all students as valued equals. The steps they followed in their advising met the student’s needs, so their students were able to develop and reach their full potential, just as Maslow (1943) presented.

Annette also incorporated some of Lent’s (2013) Self-Efficacy in the way she did career coaching with her students. As the Upward Bound Director, Annette worked with students who were at-risk of not pursuing higher education due to socio-economic status. To be eligible for Upward Bound, students have to be “first-generation,” meaning the first in their family to go to
college, or from a low-income family (US Department of Public Education, 2017, p.2). These students often struggle to imagine a life outside of what they currently have, so Annette helps them make strong investments in themselves by showing them attainable career choices that they can achieve through various forms of education.

In both Tori and Annette’s situations, having a healthy relationship with a school administrator who invests interest in the student’s success motivates the students not to settle for complacency. This was exactly what I hoped to accomplish in retraining students to aim higher and feel a sense of urgency about going to class, instead of accepting getting removed for nonattending. I wanted the students to strive to do better by using the drop/add policy to remove themselves from classes and avoid withdrawal repercussions.

In creating the intervention in accordance with Langley et al.’s (2009) methodology, the development team, under my leadership, had to map out the following questions in order to formulate direction.

*Question 1: What specifically are we trying to accomplish?*

*Answer:* Decrease withdrawal rates from dual enrollment students.

*Question 2: What change(s) could be introduced, and why?*

*Answer:* Provide an intentional advising component focused on helping students identify career goals, then teach them how to select and register for classes that directly align with those goals. Aligning courses with career goals should reduce class hopping and lower withdrawals by better connecting students with course content.

Explaining the process in-depth also needed a change. As stated previously in the document, it was not enough to simply state, “use the drop/add policy; the deadline is August 7.” High school students are not versed in college jargon, so it is vital to their success to elaborate on
processes and tell them what terms mean to build their comprehension. Elaborating on processes means telling the student what the thing is, how to do the thing, why the thing is important, and what happens if they do not do the thing.

Question 3: How will we know that the change was actually an improvement?
Answer: The intervention is actually an improvement if it lowers withdrawal rates.

In better understanding the purpose behind the questioning, Question One, “What specifically are we trying to accomplish?” set the purpose the development team was to keep in mind. Question Two, “What change(s) could be introduced and why?” prompted the development team to research which actions would help them accomplish their improvement goals best.

Question Three, “How will we know that the change was actually an improvement?” served as a reminder for the development team that they should act cautiously and have measures in place as to not negatively affect the population they were trying to serve. After mapping out the answers to these questions, the development team could then move forward into shaping the design of the improvement. This meant clearly defining what they would actually be doing change wise to solve the problem at hand.

**Design**

After agreeing on the basic questions above, I moved on to shape what I should actually do when interacting with the dual enrollment students to advise them. The development team agreed with me that moving from a strictly registration focused process to one that incorporated advising was the best course of action. Therefore, we decided to modify the registration process for dual enrollment students to introduce an advising component for them.
Reverting back to cycle one, which was eluded to at the beginning of the Methodology chapter, my goal was to enact a small, basic change and see how the students responded. I planned to revisit this design after cycle one and make adjustments that would be tested using the second cycle of improvement. The adjustments made are discussed in more detail in Chapter Four, along with the rationale behind the adjustments based on data collected in the first and second cycles. Figure 7 lays out the Plan, Do, Study, Act cycle followed in the first implementation of the improvement.

![Figure 7. Planning the Improvement Cycle.](image)

Before implementing the improvement, I had to work with the guidance department at Fort Pierce to get a student group I could test the improvement on. Getting the student group together involved speaking with Guidance at Fort Pierce to develop a system where I advertised
the dual enrollment program at the school, then all students who were interested met with the
guidance department. As it was designed, the original plan was as follows:

Guidance filled out a form with the student, which documented the student’s GPA and
test scores, to ensure the student met the eligibility requirements for dual enrollment set forth by
the state of North Carolina. After receiving the students’ forms, I eliminated all students who did
not meet eligibility requirements. I met with those students to go over eligibility with them and
then contacted all eligible students to set up a meeting. In my initial meeting with the qualified
candidates, I explained the dual enrollment program and how participation benefited them. Then
I went over the best practices for selecting courses; we wanted to select courses that
complemented the students’ career or education goals after high school. After that, the student
and I established what the student’s goals for after high school were.

In establishing the student’s post-secondary goals, I advised the student how best to think
about planning for life after high school, which meant considering factors such as, “Do you want
to stay in this county, or do you want to move? Are you going to need a place to live? Do you
have anyone else to support?” These questions helped me illustrate how to think about jobs in
terms of “Will I be able to have the lifestyle I want/need on this salary?” I also discussed the
importance of selecting a job with benefits like medical insurance. The purpose of asking the
student if they wanted to stay in the county was so I could show the student what careers would
be viable options.

At this point, the student either identified a direct goal or said they were unsure. When a
student could state a direct goal, we used Career Coach, a software that maps jobs in terms of
task, education requirement, salary, and employment projection, to help the student fully
understand what to expect. If a student was undecided, I asked them to take the assessment on
Career Coach to get some suggestions on career fields they might like. With both groups, the ones that identified a goal and the ones that did not, I would ask them, “Are you thinking you would like to go into the workforce right after school or go to college?” The point of this question was to help the students understand the schooling involved in their career choice. By discussing career fields in terms of education requirements, I helped the students gravitate toward fields that fit their needs more adequately.

Over the course of the advising for the registration process, which included the career and education discussions mentioned above, I met with the students three times. The first meeting set up what the dual enrollment program was, the second meeting went over how to think about post-secondary goals, and the third meeting would be centered on identifying goals so the student and I could pick dual enrollment courses that matched those goals. In the third meeting, when they had an idea of what their post-secondary goal might be, I provided course suggestions that included details on what was involved for each course.

Once the students selected their course choices, I registered them and let them know about the college’s drop/add policy. I let the student know what drop/add policy was, the deadline to drop a course, and how to drop the course within the given time frame. After the planning and doing pieces were complete, all that was left was to watch how my actions affected withdrawals, then meet with the development team to see what, if anything, could be altered and tried for cycle two of the improvement.

**Timeline**

The last phase in designing the intervention was setting a timeline. The timeline was necessary to keep me on track so that I could adequately deliver advising services while adhering to the deadlines set by the close of Southwestern’s registration period. Regarding the timeline,
the intervention was executed within the 2018 fall registration season, with the second PDSA cycle occurring in the Spring 2019 semester. The guidance office provided a finalized list of students for dual enrollment in late July, and Southwestern’s semester started the second week in August. A student group of 10 was chosen to run the improvement initiative on. Western Carolina University’s Institutional Review Board for research required that students and parents sign a consent form in order to participate, and only 10 forms were returned properly signed, so this determined the group. For further information on the planning and to see a chart that clearly defines the timelines, please see Appendices K-L at the end of this document.

Once the add/drop period concluded in August, withdrawal data was collected by running an enrollment report. The enrollment report provided a record of which students received a non-attendance withdrawal. The number of non-attendance withdrawals was counted and then compared with the number of non-attendance withdrawals at Fort Pierce for the previous fall semester.

After I reviewed the data, I met with the development team to discuss the findings. The development team then offered suggestions for adjusting the improvement for the second PDSA cycle. I then tried to implement all of the team’s suggestions in January. By February, I had new withdrawal data to review to compare the effects of both PDSA cycles. By the end of April, all qualitative data related to the improvement intervention would be collected and compared to determine success.

The design plan outlined above was built around fostering positive change. Using Lent’s (2013) Career- Life Preparedness model based on Maslow’s (1943) framework on the Hierarchy of Needs, the intervention centered around having me provide career centered advising to reduce withdrawals among dual enrollment students. We believed that this advising should focus on
career choice and post-secondary goals. Doing so would lead to dual enrollment students intentionally picking courses based on their post-secondary career ambitions. Based on this, the goals of the improvement were developed.

**Goals of Proposed Improvement Intervention**

1. A marked 3% decrease in withdrawal rates, especially non-attendance withdrawal rates, across the student population participating in the intervention. The decrease should occur in one semester’s time.

2. Eighty-five percent of all dual enrollment students participating in the intervention should be able to articulate career goals and plans related to post-secondary education associated with those goals going into the fall 2018 semester.

The development team decided upon the above goals because the goals seemed realistically attainable. The current situation with dual enrollment withdrawals at Fort Pierce indicated nonattendance withdrawals were the biggest concern because they had the highest average of all three withdrawal types. There was substantial room for growth in terms of reducing nonattendance withdrawals.

Since non-attendance withdrawals are obtained when the student fails to report to the first two meeting sessions of a class, they stand to be the most affected by using the drop add policy. Objectively, if the drop/add period was heavily promoted, a majority of students should be aware and using it within the first week of school. However, since promoting the drop/add cycle was a new practice, the development team felt like it might take two cycles of promotion to get students used to dropping classes instead of simply not attending.

Another factor of the improvement that would help reduce withdrawal rates was ensuring students had a vested interest in the class. With the dual enrollment facilitator now helping
students both identify a potential career and select courses related to that field, students could feel a sense of investment in their dual enrollment experience. The development team decided 85% was a reasonable rate for students being able to articulate career goals since they were now being provided with resources on how to do so. Still, in setting that percentage, the development team wanted to leave an appropriate amount of room for students that needed more time to identify a career pathway and did not want students to feel overly pressured to choose a career path.

Given the processes already in place, the logical time to add the advising intervention was during the registration periods. This created the best opportunity to interact with students. Engaging students in career-oriented advising prior to and during registration allowed me to have an impact on the alignment of course selection on the front end. It also allowed me to share policies related to course selection and drop/add when these issues were most present in the minds of students.

The thought behind the improvement was that adding an advising component would modify the registration process in a way that would help students take ownership of their dual enrollment journey. Below is an outline of how the registration process was modified in order to integrate the proposed advising component.

**Part I: Pre-Registration**

1. Before registering for classes, the dual enrollment facilitator asks the student, “Where do you see yourself after high school?” If the student does not have a direct answer, the facilitator asks the student, “Is there any particular career you have considered? What are you good at? What interests you?”
2. The student completes a Myers Brigg related career assessment to assist in discovering applicable post-secondary options.
3. The facilitator then goes over all dual enrollment options that match the student’s career assessment in terms of job function. Upon completion of this, the facilitator explains the purpose and utility of the Career Services Department/Office and asks if the student would like to make an appointment with a career counselor (or provided a career assessment if the school did not have a career counselor).

**Part II: Registration**

1. The student brings their career assessment to their registration appointment.
2. The facilitator discusses which dual enrollment certificates most closely match the career fields indicated on the student’s assessment.
3. The facilitator then asks the student to select the pathway that interests them the most. This sets the pathway for the student’s dual enrollment course choices. Students are given one to two days to review course choices before giving the facilitator a decision.

**Part III: Post Registration**

1. The facilitator issues an automated call to remind students about the start of classes.
2. The facilitator checks in with students during the drop/add period (first week of class) to verify students want to stay enrolled.
3. Students who express disinterest in their course, or courses, request to be dropped from the course or courses to avoid penalty.

In the new iteration of the registration process for dual enrollment students, a career assessment is introduced. The aspect of having dual enrollment students complete a career assessment is something the development team pulled directly from Southwestern’s Career Services department. The career services department at Southwestern utilizes software called Career Coach, which profiles career fields in Southwestern’s service region.
Taking a look back at Chapter Three, the methodology of the improvement was centered around an ideological framework, including Lent’s (2013) Self-Efficacy Model. The Self-Efficacy model promoted teaching students to see themselves as investments so that they would anchor to goals and be successful. Maslow (1943) provided the Hierarchy of Needs, which laid out five specific needs to help students meet, by touching on those components while advising them.

Following the teachings of Maslow (1942), thorough advising helps students learn how to complete themselves. The design of the improvement was crafted to encompass both models in a blend of career-related advising. The purpose of combining these frameworks was to create a solid anchor by solidifying healthy and attainable goals for after high school.
Implementation

“Improvement science uses multiple measures to ensure scholar practitioners are getting a complete picture of a complex system. These measures include outcome measures (did it work), process measures (was it implemented as planned), and balancing measures (did it disrupt other parts of the system)” (Reeder, 2018, p. 40).

This section reviews the intervention implementation by discussing the process and outcomes. While implementing the intervention cycle articulated in Chapter Three, the development team, under my leadership, collected qualitative data that would show whether or not our improvement was working. This data allowed us to continuously check-in with each other to guard against unhealthy impacts on students related to the changes being made.

In an effort to minimize any adverse effects, I consistently checked in with the development team with observations of what students were experiencing as a result of the intervention. While this data was not collected in a systematic way, it was regularly discussed by the implementation team. Simultaneously, I did collect data before and after each round of the intervention to determine the impact of my efforts on the desired outcomes.

Pre-Intervention Data

Before the improvement, I looked at dual enrollment statistics for Southwestern’s dual enrollment program. Out of the 235 students participating in dual enrollment at Southwestern for the 2016-2017 academic year, 105 received some form of a withdrawal. Looking at the bigger picture, 44.7% of Southwestern’s total dual enrollment population did not complete their dual enrollment course, 81% of those withdrawals came from students at one particular high school.

In the 2017-2018 academic year, Southwestern’s dual enrollment program grew to 435 students. By the end of the 2018 Spring semester, withdrawals had lowered across all large
traditional high schools except Fort Pierce. Fort Pierce had an 85% withdrawal rate from its 120-student dual enrollment population.

As mentioned throughout this work, Fort Pierce was the one school in Southwestern’s dual enrollment service region that seemed to really struggle with a high withdrawal rate. The figures below show the withdrawal situation at Fort Pierce as studied over a three-year period prior to the intervention implemented as part of this disquisition.

I used this information to gain deeper insight into why the withdrawal rate was higher at Fort Pierce than any other school in Southwestern’s service region. It stood out to me that it was not simply withdrawals that were high at Fort Pierce, but that one type of withdrawal, the nonattendance withdrawal, was prevalent. In the 2017-2018 academic year, non-attendance withdrawals comprised most of the withdrawals received by dual enrollment students at Fort Pierce. To gain more information into the students’ mentality behind the withdrawals, I polled students who received non-attendance withdraws from dual enrollment courses during the Fall 2017 and Spring 2018 semesters.

I began working at Southwestern in May of 2016, so the student base for 2017 was the first group that had fully interacted with me. This group was easily accessible to me, which is why I only polled them. While this was not part of the two cycles that make up this disquisition, this information significantly impacted my thinking around this work. Doing so allowed me to gain preliminary insight into the dual enrollment student mentality regarding non-attendance and withdrawals so I could better drive the improvement intervention design for the disquisition.

My polling consisted of speaking to Fort Pierce seniors who were dually enrolled and had received one or more non-attendance withdrawals in the Fall of 2017 and Spring of 2018. In the polls, many students stated they were unaware they were actually registered for a course. I
was not surprised by this because I figured students did not understand what they were doing when they registered for dual enrollment classes. As stated previously, this was a factor in why I wanted to offer an advising component as a solution to the withdrawal problem.

Figure 8 is the first chart in the series. As you can see, non-attendance withdrawals were the top form of withdrawal received by a dually enrolled student attending Fort Pierce. The chart also shows that non-attendance withdrawals had continuously risen over the past three years. This information provided the backdrop for the need to intervene.

Figure 8. Withdrawal Rates at Fort Pierce.

Following Figure 8, Figure 9 shows the reasoning behind why students were receiving withdrawals. Figure 8 is important because it proves intervention was needed, but Figure 9 is critical because it sheds light on why the non-attendance withdrawals were occurring. The information depicted in Figure 9 helped drive how to best serve Fort Pierce’s dual enrollment
students in terms of what to include in the improvement design.

Figure 9 evaluates the data of withdrawals related to non-attendance versus those withdrawals predicated on other issues. This data reflects withdrawals that occurred over a three-year period and further notes that 96.7% were due to non-attendance, while 3.3% were attributed to other reasons.

![Figure 9. Factors Leading to Non-Attendance Withdrawals.](image)

Figure 9. Factors Leading to Non-Attendance Withdrawals.
Figure 9 shows that 70% of students did not know they were even registered for a dual enrollment class. If they did not know, they did not go, and that is how their non-attendance withdrawal was incurred. This information directly supports adding an advising component because it shows that students are not fully grasping the responsibility they are taking on.

A large number of students saying they did not realize they signed up for a class is a problem because students sign a registration form giving their consent to be registered. If
students are signing official paperwork blindly, they clearly need more guidance on what they are signing and why it is important. The data in Figure 9 reflects the opinion of 25 out of 38 students given a chance to take the survey. Out of all students surveyed for this question, 13 opted not to respond.

Further showing the need to help students better connect with their dual enrollment experience, 25% of students received a non-attendance withdrawal because they decided they no longer wanted the class and just did not go. That 25% of non-attendance withdrawals could have been completely eliminated if the student had used the drop/add policy. This statistic also supports a need for advising to bring awareness because all of those students could have completely avoided the consequences of receiving the non-attendance withdrawal.

The third chart in the series is Figure 10. Whereas Figure 9 shows that a large number of students did not know they were enrolled in a dual enrollment course, Figure 10 shows that the majority of students dually enrolled also had no idea they received a non-attendance withdrawal. This information shows a lack of communication and awareness that could be improved upon through advising.

As seen in Figure 10, 96.8% of all students who received a non-attendance withdrawal did not know that it was on their record. This lack of knowledge had the potential to lead to a great deal of turmoil later. Imagine the anger and confusion when a student was surprised by their inability to graduate high school because they had a non-attendance withdrawal and did not receive a high school elective credit necessary for graduation.
Only 3.2% of the students knowing they received a non-attendance withdrawal exemplifies how deep the disconnect goes between students and their dual enrollment experience. Figure 10 is important because it drives home that there is a problem, and advising is needed to solve it. Figure 11 expands on this notion further by showing that 95% of students had no idea there was a consequence for their non-attendance withdrawal.

Figure 10. Non-Attendance Withdrawal Awareness.
Figure 11. Consequence Awareness.

The charts and graphs provide insight that I used to support the need for an advising component in order to reduce withdrawals. Figures 10 and 11 show a lack of student awareness regarding receiving a withdrawal and not understanding that withdrawal had consequences. This shows that the dual enrollment facilitator had room to educate students about withdrawals. Only 5% of students knowing there would be consequences for a withdrawal coincides with the information presented earlier. Clearly, students were not fully understanding registration and thinking they were not responsible for the course by not showing up.

Measures

Matching the questions provided in Chapter Three, the outcome measures related to question one, “What specifically are we trying to accomplish?” The answer to this question was lowering withdrawal rates, specifically those related to nonattendance. Therefore, our outcome measure was, did withdrawal rates, especially nonattendance withdrawal rates, lower at Fort Pierce? If withdrawal rates were lowering, then the desired outcome was being accomplished, which boded well for the intervention being successful.
The process measures were drawn from question two, “What changes could be introduced and why?” The answer to that question involved providing an intentional advising component focused on helping students identify career goals. The process here was in teaching dual enrollment students how to select and register for classes that directly aligned with their goals. To be effective, the advising had to be evenly delivered to each student. If the process was not consistently observed, then unintended side effects could have occurred, such as each student not receiving the full information needed to adequately test the intervention. Intervention success could have been greatly hindered by an uneven delivery of advising information.

The threat of an unequal process called for balancing measures. Inspired by question three, “How do we know the change is actually an improvement?” The balancing measures of having a set checklist to use for each student ensuring all steps were followed safeguarded the dual enrollment students from being severely impacted in a negative way by the improvement intervention. More information on the actual methods behind the measures can be found later in this chapter under the Formative and Summative Assessment headings.

**Plan in Action**

The information above showed a need for improvement and shaped how that improvement was designed. After fully fleshing out the improvement design, it was time to put the improvement ideas into action. I had high hopes for the improvement intervention since the research heavily supported the use of advising to combat withdrawal rates. However, I encountered several issues when launching the improvement.

In implementing the improvement methodology, the plan was not actually carried out as originally designed in the first cycle. There were several setbacks that caused the process to be rushed and spur of the moment adjustments to be made. However, from missteps made in the
first cycle, the development team was better prepared for the second cycle. Chapter four reviews what was learned in both cycle installments, beginning with cycle one.

**PDSA Cycle One**

Before implementing the improvement, the development team drew out what they thought the PDSA Cycle for round one of the intervention should look like. Figure 12 illustrates the actions the development team had hoped to do within the first cycle.

![Plan, Do, Study, Act Cycle One](image)

*Figure 12. Plan, Do, Study, Act Cycle One.*

All did not go according to the development team’s plan. Originally the development team had wanted to work with Fort Pierce’s guidance office to identify all potential dual enrollment students by May 2018. The development team had hoped to have the list of students earlier so that students could be contacted during the summer. Southwestern’s fall registration
opened in April, so working with students over the summer would have provided plenty of time to meet with students, administer the career assessment, and speak with students about course choices.

**Plan**

As it happened, Fort Pierce did not provide the list until the end of July/beginning of August. Originally, the timeline for collecting the list was set for late April/early May before school let out for the summer. At this point, Southwestern’s Fall registration had been open for four months and was about to close. A good deal of class offerings had already closed, which meant that there were no seats available for a lot of the classes.

This was a detriment because if a dual enrollment student did get excited about a course, they probably were not going to be able to take it. In light of this, I could not do my fully planned registration modification process in the first cycle. Instead, I had to quickly identify which students would be served by the class offerings still open and try to get them excited about enrolling in those.

I also deviated from the original methodology plan in that if students were undecided about future career ideas, I tried to encourage interest in one of the existing classes. Per the outlined improvement methodology set in Chapter Three, this action could potentially be seen as pushing students toward courses instead of using the prescribed career assessment to let them chose a course. I had a small concern that this action might actually raise the withdrawal rate, but I was under pressure to get students enrolled.

**Do**

Once the list of students was finalized, I had about a day to make sure they were all eligible. Ideally, I would have determined eligibility in May, so the registration process was not
slowed down. After narrowing down the list, I had 85 candidates left. An additional 15 students were later removed because they strictly wanted to take college transfer courses, but their GPA was below a 3.0 (which does not comply with North Carolina dual enrollment eligibility standards).

Once I had my eligible candidates, I met with them to explain the disquisition and hand out a consent form for participation. Due to the students being in high school, the Institutional Review Board for Western Carolina University required a permission form for all students participating in the intervention. Only 10 students completed the form properly and submitted it by the deadline. I was expecting a much larger group to work with and had anticipated at least 45 students. I did wonder if 10 was going to be a large enough group to effectively see change. Entering the pre-registration phase, the 10 students were all verbally asked, “Where do you see yourself after high school?” Students who were able to identify a specific major or career were given options of dual enrollment courses that aligned with their major or career based on what was still available. Students who did not know what they wanted to do or stated a generic goal such as simply “work” or “college” were asked, “Is there any particular career you have considered?” If the students did not have a response, I further prompted them with questions such as “What are you good at? What interests you?” It was my hope that these questions would help the student generate ideas that I could discuss with them.

If I could not discern a career from the student’s answers, I suggested classes based on what I had open and what I thought the student’s skills and abilities were. With the time crunch of registration only being open for about ten more days at this point, I mostly verbally assessed students but tried to incorporate Career Coach as much as possible.
Study

Going into the 2018-2019 academic year, Southwestern had over 800 students participating in dual enrollment across more than 10 schools. The growth of the dual enrollment program made me want to ensure all students were being served according to their specific needs, instead of generically through a one size fits all approach. I was hoping to follow the plan precisely and predicted that out of my test group, at least 85% would complete the Fall 2018 semester without withdrawing.

Out of the 10 students in the study, three were incredibly pro-active. These students were motivated by a need to support themselves after graduating high school. These students responded well to our meetings and were quick to email and call with questions. The other students I had to seek out more at first. One informal change related to the improvement was that the students who started out as less pro-active become more responsive through the advising they received.

For me, the biggest indicator that the students were increasing effort was that they started reaching out to me and communicating without me seeking them out. Previously, I had difficulty reaching students and would have to go to their high school and pull them out of class if I wanted to speak to them. Taking more of an advising centered approach seemed to create a stronger rapport that actually got the students excited about connecting with me. Informally, I also knew a change had occurred as a result of the advising because the registration process no longer felt one-sided. Before, registration involved just me, mostly placing students in classes. After the improvement intervention, the students began asking questions, having in-depth conversations with me, and actually coming to meetings with ideas of the classes they wanted to take.
A formal change that impacted my thinking was that the students started recruiting other students to the dual enrollment program. Five out of the 10 students I met with brought a friend or friends to see me so that they could learn about dual enrollment. I could clearly discern the intent of bringing their friends was to make their peers aware of dual enrollment because the students would ask me to tell their friends about the program and use phrasing such as “I brought my friends so you could tell them about the program.” If students were going to start relaying what they had learned in advising sessions with me, I wanted them to have a good experience and share the correct program information with their peers.

In reality, the improvement was carried out in a very rushed manner, which made things feel hectic. In the planning stages, I had given myself about four months to roll out the improvement. I was counting on receiving the student list by May, checking eligibility within a week, and then contacting students and holding meetings by mid-June. I wanted to run student meetings through June and July and have the students’ classes selected by the end of July. A lot of the proposed intervention was cut out due to time restraints. From this experience, the development team and I learned that we needed to expand the time frames, make deadlines for action items, and create a greater sense of urgency with Fort Pierce’s guidance office. The main takeaway from cycle one was that something was better than nothing because we did see results.

However, we all felt that a bigger improvement would be seen if the intended plan was more closely followed. Moving into cycle two, I had an existing base of students to work with, so I was not as reliant on Fort Pierce’s guidance office and could do more prep work. Prep work was needed because the inability to prepare was a major flaw the development team saw in the first cycle.
In cutting a lot of the process, I did go against the literature somewhat. All of the literature suggested the more communication that was utilized, the more successful my improvement would be. According to the literature, I should have been working more to cultivate my student population in terms of advising and career exploration.

In honesty, I did not want to go against the literature. With this improvement intervention being new, I wanted to follow the guidance from the works that shaped it to the letter. However, with unexpected delays, I had to be adaptable and figure out the best way to proceed quickly while still maintaining some semblance of the original design shaped by the literature. This is where the teachings of improvement science really kicked in. I think I was more successful because I made quick choices, but not rash decisions.

I thought out how best to adjust the plan, and I kept the pieces that the literature valued most, such as one-on-one conferences with the students. The one-on-one conferences would have been easy to cut because they were so time-consuming, but the literature stressed that interpersonal interaction was crucial to successful advising. I felt like not doing the one-on-one meetings with the students would negatively impact the improvement. The literature indicated that without interpersonal connection, I would most likely fail to establish rapport with the students. The literature also suggested that rapport fostered through advising sessions was a major factor in getting the students to invest in their academics. I felt like if I did not create a rapport through one-on-one advising sessions, I probably would not lower withdrawals to the degree I wanted.

**Act**

In preparing for the second cycle of implementation, the development team felt it necessary to redraw the PDSA map. In the study cycle, comparing the process measures to the
actual application showed the original process was not carried out as prescribed. The improvement was not carried out as intended, so action was necessary to enforce the process in the second installment.

Action, in this case, involved safeguarding the process by creating firm deadlines and holding myself accountable. Reverting to process measures, the team reiterated the purpose of the improvement in a clear and concise way. With so much deviation in the first installment, the development team was worried that balance measures had failed, and the improvement would upset other parts of the dual enrollment structure. For example, an automated call was planned to remind students about the drop/add policy.

This automated call was felt to be the lynchpin in lowering withdrawals because it was the forefront tactic in awareness for using the drop/add policy. The automated call was unable to happen, and it was a genuine fear that students would not remember being told about drop/add during their advising session. The development team thought that the lack of the reminder phone call would result in more students getting Fs on their high school transcript because of a withdrawal. Figure 13 demonstrates the updated PDSA cycle meant to keep the improvement on track and lower collateral damage to students.

**What specifically are we trying to accomplish?**

1. Stronger tethering to goals.
2. Advanced sense of purpose for the student.
What changes might we introduce, and why?

A. More usage of Career Services—

Career Services helps students choose potential career fields, but they also help students choose academic majors based on potential career options. Students who cannot identify a goal, or identify a generic goal, need to meet with Career Services before being advised for dual enrollment classes. If students cannot meet with career services they need to at least fill out a career assessment and discuss results with their dual enrollment facilitator.

Figure 13. Plan, Do, Study, Act Cycle Review.

PDSA Cycle Two

In cycle two, the main focus became ensuring that the intended career piece made it into the improvement. The improvement could not be fully assessed if it was not fully implemented. Cycle one may have introduced all of the proposed intervention components, but cycle two needed to follow through on actually carrying them out.

Plan

Per the action cycle from the first round of the improvement, going into the second round of implementation, I started planning much earlier. Southwestern’s spring enrollment started in October, so I took my existing list of students and looked at who had not done a career assessment. The first two weeks in October, before registration opened, I had these students take their career assessment then meet with me. This time I arranged for undecided students to also meet with Career Services so they would have an additional resource.

In the second iteration of the improvement, there was a larger availability of course offerings because we did not wait so long to get students registered. As a result of this, students had more time to review their career assessment findings and think about potential class options.
Students who knew what they wanted to do were also able to take their time in selecting classes. All students were given class options and allowed three days before they had to make a decision.

**Do**

An interesting discovery from the first iteration of the PDSA cycle was that when asked what they were good at and what interested them, students hesitated. The students all responded more readily with their interests than their abilities. This was interesting because I perceived the inability to discuss positive attributes about themselves as a lack of self-awareness based on information provided by Stebleton (2017).

My takeaway was that Career Services could properly relay how to recognize personal ability and match those abilities with career choices. I came to the conclusion that I needed to make the meeting with Career Services mandatory so as not to exclude elements important to the students’ development. In the second iteration of the PDSA cycle, all students who could not identify a goal, or had given a generic goal, had to meet with Career Services before they could select dual enrollment courses.

**Study**

Moving into Part II of the improvement, Registration, students who were not required to meet with Career Services did not arrange an appointment. The students who were required to meet with Career Services were energized and committed to a certain goal. They had identifiable options of dual enrollment courses they wanted to try.

Students who could not identify a goal, and were not required to meet with Career Services, struggled to choose courses. The students who could not identify a goal, and were required to meet with Career Services, appeared more tethered to their academics because of their enthusiasm from meeting with Career Services. The students who could not identify a goal,
and were not required to meet with Career Services, were noticeably less joyful than the students who met with Career Services. All students who met with Career Services made follow up appointments with Career Services and participated in ongoing career counseling.

**Act**

After selecting courses related to their goals, the students all moved into Part III of the improvement, Post Registration. The automated call reminding students that classes were starting did not take place in the second cycle either, but a letter was mailed out going over dual enrollment policies, so a tangible drop/add reminder did exist. Several technical glitches within Southwestern’s computer-based operating systems made it impossible to put forth the call, but the letter seemed like a solid back-up because it could be both mailed and handed out.

**Results and Impact**

After both Plan, Do, Study, Act cycles were complete, I collected qualitative data from the enrollment reports to see the results of the improvement. The impact of adding an advising structure was two-fold. Students did have a heightened awareness about what the drop/add period was, but they also showed a sense of urgency in using the drop/add period to drop their unwanted classes in a timely manner.

The results of the intervention testing were overall quite positive. The students reacted to the advising in the way I had anticipated. My results were in line with what the supporting evidence discussed in the literature review said they would be. The students did have a basic need for guidance and structure, and by advising them, I was giving them what they needed. Once the need for that level of support was met, the students were a lot more self-sufficient because I had taught them how to be in regards to college and academic/career planning.
Removing the ambiguity factor of not knowing how to use dual enrollment helped the students be more invested. The biggest impact I saw is that once the students were invested in their dual enrollment experience, they were excited about passing on what they learned and then wanted to teach their peers how to responsibly use dual enrollment to advance in their life goals.

The best way to illustrate the change I saw in the students is that pre-improvement, I had about two student meetings a week on average, meaning in one week, I would only speak to about two students about dual enrollment. During the improvement, my student meetings increased, obviously because I had a group of students I was seeking out, but after that portion of the improvement was complete, the students were coming to see me of their own volition and encouraging others to visit me. When students started doing unsolicited drop-in visits to my office, and my student meetings increased to 20 or more per week, I knew the improvement had a positive impact.

**Adjustments**

Revisiting the goals set forth in Chapter Three, the development team had wanted to reach a marked 3% decrease in withdrawal rates, especially non-attendance withdrawal rates. Non-attendance withdrawal rates at Fort Pierce went from being over 20 a semester to less than five in the first trial of the improvement. The significant drop in such a short amount of time showed that the improvement did work, and it was more effective than expected.

I realized that in setting 3% as an expectation, I might have set the bar too low. I was not sure how the students would react to the advising component, so I was wary about being too ambitious. I think if I had to do it over, I would set a 15 or 25% decrease as the goal so as not to underestimate the students and their responsiveness.
The other goal set for the intervention was 85% of all dual enrollment students participating in the intervention being able to articulate career goals and plans related to postsecondary education associated with those goals, going into the fall 2018 semester. What I learned is that I did not set up an acceptably tangible way to track this.

The non-attendance withdrawals were undisputedly shown as being lowered. The enrollment reports provided qualitative data, which was concrete. With the career piece, I needed qualitative data to show a correlation between that piece of the advising structure and students staying in their courses.

My objective with the career piece was to create a sense of investment, which helped the students choose classes more selectively. The purpose of this was that if students were choosing classes intentionally in relation to goals, they had a better chance of liking the class and not withdrawing. This is a very humanistic concept, so it needed to be qualified through student climate surveys to show the career advising had a deeper impact.

**Wrap Up**

In completing the intervention implementation, it was necessary to assess both Plan, Do, Study, Act cycles properly and thoroughly evaluate what happened. The assessment was necessary to understand if the improvement was good. A good improvement is distinct from a successful improvement because good means the intervention worked without causing harm. Successful means the goals were achieved. It is possible to achieve goals while causing damage, and in improvement science, you want to be as minimally invasive as possible. The whole
nature of improvement science is to holistically fix something in a long-term sustainable way, which benefits the intended population experiencing the improvement.

Following the standards set by improvement science methodology, the improvement must be run through a formative and summative assessment before it can be adequately evaluated. The formative assessment looks to make sure the improvement was actually helpful, and the summative assessment looks to see if the outcomes were verified through sufficient data. The section below outlines the formative and summative assessments.

**Formative Assessment**

Process measures are a formative model of assessing whether or not an improvement stayed true to its design. In formally assessing the improvement implementation, I learned that setting and adhering to a timeline is important. I did have a timeline for the improvement that I wanted to follow in terms of when I expected to get the dual enrollment list, when I expected to have the applications in, and when I expected to start meeting with students. However, in cycle one, my timeline was thrown off course. I wound up getting the list of student names from guidance later than expected, which really set off a domino effect. I had to rush to get all of the pieces of the improvement in.

This experience taught me that if the pieces are that contingent on each other, I maybe need to set earlier deadlines for the people I am working with. I think you have to bank on the fact that there will be some margin of delay on the school system’s part because they are overloaded with end of grade testing and graduation. In order to have time for fully comprehensive advising and be successful in establishing rapport with the students, you need to get the dual enrollment list around February or March for the fall semester and October for the spring semester. If I had gotten the list of names for dual enrollment that far in advance, I would
have been able to meet with students while they were still in school, and guidance probably could have worked more collaboratively with me.

In cycle two, I learned that a good balance measure would have been to provide surveys for the students so I could gauge what they were getting out of the advising experience. I think it is important to know if the students are actually getting what they want and need out of the advising. I provided advising that I thought was sound and met my needs in regards to what I wanted to improve, but in reality, to truly follow the mission of improvement science, I should have stopped to ask my constituents, the students, if that was what they wanted. The major purpose of improvement science is to ensure the people being affected by the improvement have a say in the improvement.

During the course of the improvement, I did check that the improvement was actually helpful, was being implemented properly, and that the improvement rendered the intended results. Process measures were put in place to make sure the methodology processes were carried out in an even and precise manner. The purpose of the process measures was to safeguard the improvement’s methodology (LeMahieu et al., 2017). In this case, an advising checklist was created to keep the improvement facilitator, me, on track. The checklist outlined the three parts of the improvement I was supposed to follow. Overall, the outcome measure guided the improvement towards reaching its desired results, but if I did the project over, I would promote the involvement of more student input (LeMahieu et al., 2017).

**Summative Assessment**

The project outcome of the improvement was to decrease withdrawals with a specific focus on lowering non-attendance withdrawals. Progress was easily determined by pulling the 2016-2017, 2017-2018, and 2018-2019 enrollment records and comparing the number of
withdrawals. However, a summative assessment was called for to make sure the data was correctly processed. I found elements such as intentional class selection, a defined career goal, and a satisfactory high school academic record to be leading variables that indicated the student was capable of committing to their dual enrollment courses (Prince, 2015).

What I learned in summatively assessing the improvement was that the student’s unweighted high school grade point average provided a leading measure predictive of success. By pulling the student’s high school transcript and checking for a grade point average of 3.0 unweighted before enrollment, I was able to gauge the student’s academic prowess (De Palo et al., 2017). I made the decision to classify the 3.0 GPA as an indicator of potential success based on guidance from the state of North Carolina regarding college readiness standards published in the dual enrollment guidelines.

The data generated from the intervention trial was solely quantitative. In looking at the enrollment and withdrawal numbers across the different academic years, I discovered that enrollment had increased by about 20% as of Fall 2018 and that in previous years a majority of classes were assigned because of the time they were offered and not intentionally selected by subject. I surmised that the lack of intentionality might have been a driving factor behind the high number of withdrawals because with advising leading to intentional course selection, withdrawals did decrease.

**Evaluation**

Finally, an evaluation of the overall process was given. Comparing the intervention group to the prior year’s dual enrollment group from the same high school showed if the improvement had made a difference. I learned that selecting a high school with a high rate of non-attendance withdrawals was vital because the high rate of non-attendance withdrawals made
change more evident when the non-attendance numbers did drop. The intervention group had fewer withdrawals than the previous group, so it was reasonable to say the intervention treatments, which included career counseling, increased communication, and intentional advising, did affect the withdrawal rate.

I had been the dual enrollment facilitator at Southwestern for the past four years. I had consistently carried out dual enrollment processes with the same results, so any positive changes to the non-attendance withdrawal numbers could reasonably be credited to the intervention changes implemented. If the intervention group had not had more non-attendance withdrawals than the previous group, the intervention would have needed to be altered in order to increase effectiveness (Christensen & Johnson, 2016). Of course, even in a successful improvement, there would still be room for tweaks to maximize positive results.

**Conclusion**

Originally, I was concerned that the success of the improvement hinged on the automated call reminder. I believed that students would not attend the first day of classes if they were not reminded of the start date. To my relief, all students were intrinsically motivated after their last advising appointment, and everyone attended their first days of classes. In cycle two, the addition of the letter also helped serve as a back-up reminder, which was beneficial to students outside of the study as well.

In cycle one, the outcome of all students attending class was especially surprising considering Southwestern started their semester on a Wednesday in the middle of the week. I had a suspicion that a mid-week start date, six days before the start of Fort Pierce’s semester, would confuse students. However, as a regular function of my normal job responsibilities, I had printed out each student’s schedule and handed it to them after their advising session.
Being given an individualized schedule was not a part of the improvement initiative, but it did make a significant difference in the overall success of the improvement. It should be noted that giving each student a copy of their schedule, along with the cycle two addition of a letter explaining the drop period and withdrawal policies, were warranted adjustments to the improvement design. This practice should be considered if the improvement were ever to be implemented on a larger scale.

Following the 100% attendance rate on the first two days of classes, no student in the intervention group wanted to drop their class. One student actually decided their chosen course would be easier than anticipated and moved to the online offering. However, in the Fort Pierce dual enrollment population outside the intervention group, there were over 20 changes made to class schedules.

Overall, the improvement did meet the goals that were set. The students who participated in the intervention group outperformed expectations, with all intervention group students attending and maintaining their courses. An unexpected side effect of the improvement was that the 10 focus group students mimicked my advising strategies when interacting with other dual enrollment students from Fort Pierce.

While there was a lot of schedule adjusting for the Fort Pierce population as a whole, only five students were withdrawn within the first 20 days of the semester. A record low of four students were withdrawn for non-attending, and one withdrew himself from the course. I observed students inside the intervention group relaying the information I had given them and actively coaching their fellow students outside the intervention group to use the drop/add period.

With the intervention meeting its goals, it could now be tested on a larger scale and potentially become a policy for dual enrollment advising across North Carolina. The
intervention aligned with North Carolina’s overall purpose for dual enrollment, as North Carolina had already designed new operating procedures to reduce class hopping. When dual enrollment was used as a college exploratory tool, students could “jump” freely between course pathways.

In addition, an interesting takeaway I learned from conducting the improvement was that the community college system is not always uniform in the software it uses and provides. A notable example was that I was using a career advising software known as Career Coach to run the career development portion of my improvement. Career Coach provides a Myers Briggs like assessment that profiles students based on individual personality traits, then generates job fields that fit with the student’s overall personality. While Career Coach is incredibly beneficial, it is a service schools must purchase in order for students to use. The development team felt that while they could use Southwestern’s Career Coach, if the improvement were incorporated statewide, it would be unfair to financially burden other schools with requiring Career Coach. In addition, the actual Myers-Briggs test would cost students $50 to take, so it was not a suitable back-up option. I researched free options that could be universally used and agreed that if the improvement was adopted on a state or nation-wide level, the Jung Typology was a suitable replacement for Career Coach. While the development team was contractually bound to use Career Coach because Southwestern had already purchased it for Career Services, the Jung Typology found at www.humanmetrics.com seemed like a decent option because it maps the student not just on personality but also on what job functions appeal to them most. Career Coach solely profiles students based on core personality traits such as introversion or extroversion. Regardless of the one chosen, a personality-based career assessment in any form helps students understand what career fields might fit them best. Having a suggested list of career fields the student may
find interesting is a good starting point for exploring individual career options the student can pursue. After the student narrows down their interests to a career field, the dual enrollment facilitator is in a good position to suggest relevant classes. Tying back to registration, the dual enrollment facilitator has a short window when the college’s registration period opens, so it would help to already have an idea of what the student was interested in so the student had time to think about their course options.

**Future Implications**

As of fall 2017, students were required to state a career goal and chose a pathway. These new policies stemmed from a strict emphasis on the completion agenda. Moving forward, if a student wanted to change pathways, the student had to provide a statement about why and show proof that the student was switching programs to match post-secondary goals (North Carolina Community College System Office, 2017). The intervention design displayed in this body of work was based on studies that reduced class hopping.

While the short-term focus of the intervention was to reduce non-attendance withdrawals, the long-term scope of the project was to help the dual enrollment program better serve students. Class hopping was a causation factor of non-attendance withdrawals, and the treatment in this intervention was designed to combat class hopping. The intervention tactic of using Career Services to help students set goals before choosing dual enrollment classes could be initiated on a statewide level to make sure North Carolina’s dual enrollment students were getting the most beneficial experience from their time in dual enrollment.

It is my hope that the North Carolina Community College system will adopt more structured expectations for dual enrollment facilitators. What I mean by that is, I think the current expectations for facilitators are too ambiguous. The state is really hinging dual
enrollment success on a self-sufficiency level on the part of the dual enrollment student, which simply does not exist without advising.

The problem with that approach is that these students are in high school and have never been taught how to think about college. There does need to be some form of a “training” component for dual enrollment students that helps mold the college mindset; this is what advising does. If the community college system did train dual enrollment facilitators to be advisors for their high school student populations, I think having that advising component would not only help students not get withdrawals but also increase the efficiency of dual enrollment overall.

The North Carolina Community College System office already has summits that bring dual enrollment facilitators together to discuss policy updates with community partners. My suggestion would be that the System Office use these summits to offer advising workshops where dual enrollment facilitators could get certified in various aspects such as career coaching. Additionally, the System Office audits each dual enrollment program bi-annually, so it would be easy to give each facilitator a checklist similar to the one used in my study.

Having the checklist as a statewide policy and part of the audit procedure would ensure balance and prevent students from having an advantage or disadvantage based on how their dual enrollment program was operated. The checklist would also help the facilitator better prepare for the audit since they would be running a clean and even system year long.

I think adding the checklist and having advising training would be appropriate changes that would be fairly low cost and easy to implement. In theory, you would not need to hire outside sources to run the training; the System Office could draw from existing resources and community college representatives who already advise and career coach high school students,
such as the Gear Up or Upward Bound staff to do workshops. Based on the literature I used for this study, I do believe it would help if the state tailored expectations for what dual enrollment facilitators should be building with dual enrollment students.

One of the benefits of this study is that the career minded advising piece could be used for post-secondary students as well. The intention of the project was the lowering withdrawals which is also an issue for post-secondary students. In working with admissions and retention for enrollment rates this study could be used by any two or four-year university. Advising teams could use the plan laid out in my disquisition to help their students understand intentional course selection, and strengthen student relationships with Career Services. I think the improvement plan could help stabilize and maintain enrollment in any student population by helping students tether to goals and complete their courses. In turn, this study would also positively impact graduation and completion rates for all student groups.

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Appendix A

Career and College Promise Description

Taken from the NC Community College System’s Web page for dual enrollment, I used this information to help give students and parents a better understanding of dual enrollment during advising meetings.

Career & College Promise

Success in today's global economy may require a two-or four-year degree, a certificate or diploma. Through Career & College Promise (CCP), qualified high-school-age students in North Carolina have the opportunity to pursue these options, tuition free, while they are in high school, allowing them to get a jumpstart on their workplace and college preparation.
If you are a community college faculty or staff member, please review the information below for additional insight.

CCP provides three pathways to help advance eligible students’ post-high school success:

**College Transfer** – College transfer pathways provide tuition-free course credits toward the Associate in Arts or Associate in Science that will transfer seamlessly to any public or participating private college or university.

**Technical Careers** – Earn tuition-free course credits at an NC Community College toward a job credential, certificate or diploma in a technical career.

**Innovative High Schools** – Begin earning tuition-free college credits as a high-school student by attending an approved Cooperative Innovative High School.

**Appendix B**

Southwestern’s Dual Enrollment Web page

Appendix B shows my rendition of the eligibility standards as set by the state of North Carolina which I communicated to parents and students on Southwestern’s Web site.
Appendix C

Eligibility Information
Appendix C is the Web page I designed to relay information to dual enrollment students and parents/guardians regarding testing requirements for dual enrollment eligibility.

Appendix D

Frequently Asked Questions

Appendix D is the dual enrollment Frequently Asked Questions Web page I created ahead of starting Cycle I in order to better communicate information to students and parents.
Both of these pages had a chat that was available during the workweek.

Appendix E

Cost

Appendix E is the Web page I created to show parents how they could save money on college by enrolling students in dual enrollment courses.
Appendix F

Textbook Information

Appendix F pairs with Appendix E to further demonstrate the cost effectiveness of dual enrollment in a student’s path to obtaining a college degree.
Appendix G

Application

Appendix G displays Southwestern’s application for dual enrollment.
Appendix H
Registration Form

Appendix H shows Southwestern’s registration form for dual enrollment.
Appendix I

Additional Dual Enrollment Information
Appendix I shows marketing material from the North Carolina Department of Public Education I would show to students in my initial meeting with them.

Appendix J is additional marketing material from the North Carolina Department of Public Education I would show to students in my initial meeting with them.
Appendix K

PDSA Cycle One Timeline
• Late July-Recieved list of Fort Pierce dual enrollment students from Fort Pierce's guidance office

• Late July to Early August- Met with students to provide advising and guide them through registration

• August (Exclusively the week before school started, and the week school started), student meetings occurred and classes were dropped as needed. Proceeding this, data was collected.

Appendix L

PDSA Cycle Two Timeline
• Data was collected from the start of the semester in August until the completion of the semester in December. All information on drops was reported by the end of August. The final data on withdrawals was recorded at the end of the semester, December 15.

• December-The data was reviewed and compared to data from past semesters. In looking at the data a discussion was had on what to change going into PDSA Cycle Two.

• January-Approved changes were put into action going into the start of the Spring 2019 semester.
Appendix M

Revised Process Measure Checklist (Post Intervention)

1. Determine that each student meets state dual enrollment eligibility criteria
2. Each student receives a new student intake meeting ensuring dual enrollment is fully explained
3. Each student receives a handout at their initial meeting recapping key dual enrollment information
4. All students are asked about their post-secondary goals and then introduced to Career Services
5. Every student meets with career services or has career counseling (in the event the institution does not have a career services team) before selecting and scheduling courses
6. The student selects and schedules courses with their dual enrollment advisor based on the outcome of the student’s meeting with Career Services/outcome of career counseling

Appendix N

Parent Packet

Appendix M is a demonstration of how I used the principles learned from the advising model and utilized them for dual enrollment materials at another institution.

Parent Packet

Thank you for choosing the Ashe County Early College! We are very excited your student will be attending in the Fall. Wilkes Community College and Ashe County Early College strive to deliver the highest quality education in an uplifting environment. Helping you and your
student transition into high school while forming the mindset of a college student is our main goal.

As your student begins their journey it’s important to note that your student will be taking college classes while they are doing high school course work. While you are already familiar with the operations of Ashe County Public Schools, the Wilkes Community College classes do work a little differently.

Here are some items to be aware of:

1. **FERPA** (Family Educational Rights and Privacy Act)
   Higher Education institutions are subject to a law referred to as FERPA. FERPA covers all students in a college course, regardless of their age.

   What does this mean?

   It means that your student’s college instructor will not call you to discuss your student’s progress in their course. It also means that the student and instructor need to be making direct communication with each other. A college instructor cannot communicate any information regarding the student’s academic progress to anyone other than the student or liaison.

   If you have a concern or would like to check on your student in their college course please go through your liaison, Amanda Everhart.

2. **College Grading**
   While the grades from the college courses do count onto your student’s high school transcript, you will not be able to see grades for college courses in Power School.

   How do you check college grades?

   All Wilkes Community College Courses will use an online learning management system known as Moodle. Since this is a college resource you will not have your own access. However, if you have your student log on to the Moodle page for their course, you will be able to see the grade and course progress.

   How do I do this?

   From the course’s home page scroll down to the bottom left hand corner, you will see a Dashboard tab. Clicking on that tab will take you to the gradebook.

3. **Grade Reporting**
   The Early College Liaison runs routine grade checks for Early College students enrolled in college classes and provides that information to the Early College Principal, Elaine Cox.
How often are grade checks conducted?

The liaison runs grade checks on the entire Early College group at the mid-term point (about two months into the semester), about three weeks after the mid-term point, and right before the semester concludes.

What happens with the grade information?

The liaison also adheres to FERPA but may speak with you about your student’s course progress and grades if your student is present either in an in-person meeting, virtual meeting, or over the phone. All grade information is passed on to the Early College principal and you may contact the Early College regarding grades at any time. The liaison is unable to call you directly to report issues with academic progress due to FERPA, so you will need to initiate contact with her regarding academic information.

4. Scheduling

We’re sure you have tons of questions about how scheduling college classes with the high school classes works.

Freshman begin their college experience Mus 110-Music Appreciation, and Com 120-Interpersonal Communications. The purpose of these courses is to provide a healthy introduction into expectations for college courses. Both courses will relate to your student’s Associate degree be it Associate of Science or Associate of Art.

Sophomores take His 131-American History I, and ACA 122-College Transfer Success. Again, both courses will relate to your student’s Associate degree be it Associate of Science or Associate of Art. The ACA course is designed to be a platform where your student learns how to critically think about making choices for life after high school.

Junior year students will move into core Associate’s requirements. Juniors will begin the sequencing for their college required English, Math, and Science courses. Courses taken at the high school level do not count toward college English, Math, and Science requirements. The high school courses prepare the student for the college level course content.

Seniors will work with the liaison to plan college coursework that matches with their chosen degree pathway. Students who are in band and ROTC may require a fifth year, as well as students who are unable to follow their set course plans for college.

There are additional documents in this packet that relay schedule information in more detail. Thank you for helping us create the best experience possible for your student! If you have any questions, please contact Amanda Everhart at (828) 903-3121 or aceverhart093@wilkescc.edu

Scheduling
Here’s what you can expect in terms of scheduling. Below is the course plan incoming freshman will follow throughout their time with the Early College.

**Freshman Year Fall Semester:**
- English I (High School)
- Math I (High School)
- Earth Science (High School)

**Freshman Year Spring Semester:**
- English II (High School)
- Math II (High School)
- Physical Science ((High School)

*Your student will also take a physical education course (PE), an ACT/SAT prep course through the high school, as well as Com 120 (Interpersonal Communications) and Mus 110 (Music Appreciation) through the college. These will be added into the schedule according to the semester in which they best fit.

**Sophomore Year Fall Semester**
- Civics (High School)
- Math III (High School)
- Biology (High School)

**Sophomore Year Spring Semester:**
- World History (High School)
- Personal Finance Class (High School)

*Your student will also take ACA 122 (College Transfer), His 131 (American History I), Art 115 (Art History Survey), and Psy 150 (General Psychology) through the college, these will be added into the sophomore schedule according to the semester in which they best fit.

**Junior Year Fall Semester**
- Eng 111 (Writing and Inquiry)
- College Math (Mat 143 Quantitative Literacy or Mat 171 precalculus Algebra)
- College Science (Bio 111 General Biology, Chem 151 College Chemistry I, or Bio 110 Principles of Biology)
- Spa 111/181 (Elementary Spanish I)

**Junior Year Spring Semester:**
- Full College Schedule-No high school course work
Eng-112 (Writing and Research)
College Math (Mat 152 Statistics or Mat 263 Brief Calculus)
College Science if needed (Bio 112 General Biology II, or Chem 152 College Chemistry II)
Social Science (Eco 251 Microeconomics, Soc 210 Intro to Sociology, or His 132 American History II) Spa 111/182 (Elementary Spanish II)

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<tr>
<th>Senior Year Fall Semester:</th>
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<tbody>
<tr>
<td>English IV (High School)</td>
<td>Elective Course-College</td>
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<tr>
<td>Eng 231 (American Literature)-College</td>
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</table>

*For the elective courses your student will have a list of choices, and be able to pick the classes off the list that best fits with their academic goals

An example would be if your student was interested in Business, they could use their elective courses to take Bus 110 (Intro to Business), Bus 115 (Business Law), Bus 137 (Principles of Management), and Cis 110 (Intro to Computers)

In this case those are also the classes for the Business certificate, so if used as electives your child could earn their Associate of Arts in Addition to a Business certificate.

In choosing elective courses the liaison will work with your student to determine what your student’s goals are for after high school (ex. Are they going to a four-year institution, into the military, or directly into the work force?) The liaison will help your student select elective courses that best relate to their goals.