

LESSONS LEARNED FROM RETURNING SECOND  
YEAR TECHNICAL STUDENTS: A CASE STUDY

By

ADAM SCOTT ELLIS

Bachelor of Science in Career & Technical Education  
Oklahoma State University  
Stillwater, Oklahoma  
2011

Master of Teaching, Leadership and Learning  
Oklahoma State University  
Stillwater, Oklahoma  
2012

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Dissertation Approved:

Mary Jo Self

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Dissertation Adviser

Kerri Kearney

---

Penny Lou Cantley

---

Jon Loffi

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Abstract: This qualitative case study explored how a theory could explain how outside contributors could influence a student's decision to return for the second and final year of their academic career program. Using Holland's person-environment fit theory as the theoretical lens, this study contemplates how specific contributors, such as family and friends, surroundings, and others contributors, could have an influence on the student's overall well-being and career decisions. Finding suggest that the students personality summary code does align with their chosen academic career program. Also, certain outside influencers or contributors has an effect on their choosing an academic career program or career path.

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## CHAPTER I

### INTRODUCTION

The Morrill Act of 1862 was the impetus for the early development of America's two-year colleges, also known as junior colleges. These early colleges often became technical colleges over time, focusing on specific two-year associate degree programs (Drury, 2003; LaFord, 2015). This type of institution is based on the concept that students can choose their desired career, enter an academic career program, and earn a certificate or a degree that leads to employment (Dalporto & Tessler, 2020; Glenne et al., 2020; Kim & Tamborini, 2019). The mission of technical colleges is to provide the leadership and resources and implement a pathway using a business-like way of thinking and put it into action across North America (Coronado, 1996; Hahn & Gangeness, 2019; Manyika, 2017; McKee, 2022).

The global workforce relies on emerging technologies and trends, and many of these new technologies require specialized or specific training, typically obtained through technical colleges (Dymitrowski & Mielcarek, 2021; Milanovic, 2016; Trimberger, 2019). Recognizing the need for the United States to remain competitive, in 2010, former

President Obama introduced a plan to double the number of Americans who held skilled trade certificates or technical degree's (Kotamraju & Blackman, 2021). Along with business and industry stakeholders, leaders in post-secondary education view technical colleges as the avenue to fulfill the current labor markets with highly skilled workers. (Dalporto & Tessler, 2020; Maple, 2019; Sublett & Tovar, 2021). Oklahoma is not immune to this need to provide highly skilled workers for a constantly evolving workplace. This need is evident in many technical colleges due to the changing economy and new emerging technologies (Andes et al., 2017; Mize, 2020; Contractor, 2022).

The American Association of Community Colleges (AACC) (2021) has identified over 1100 post-secondary institutions that operate as community or technical colleges. A community or technical college is defined as an institution accredited by a regional accrediting body, where an associate degree is the highest degree awarded at the college (AACC, 2021).

The technical college's mission is to promote student enrollment with diverse backgrounds and needs. Many of these colleges have less stringent enrollment policies, lower tuition costs, and online or flexible scheduling of classes that fit a student's needs that otherwise would not be able to attend college in a traditional format (AACC, 2021).

Based on a need to validate their academic programs and offer more than just a certificate of completion, technical colleges began to offer various types of college degrees. Common among technical colleges is the Associate of Applied Science degree (A.A.S.) (Coronado, 1996). The A.A.S. degree curriculum focuses on preparing to enter the work environment by completing a program and a college degree. Although the main focus of the A.A.S. degree is preparing to work, specific general education courses are

required. The general education courses would transfer if the student decided to continue on with a four-year degree (Coronado, 1996).

To be successful completer in any two-year technical college, students must return for their second and final year of training. The national average for technical college students returning for their second year is slightly above 50% and varies among fields (Hirschy, 2011; McKim et al., 2018; Ruhland & Brewer, 2001). Additionally, lower student retention and graduation rates are on the rise in many technical colleges, which has caused an increase in awareness for college administrators to research and find solutions to these rising rates (Mathers, 2019; Reed, 2016).

This study will provide an explanation why students return for the second year of training, and what contributors affect their returning. The Oklahoma Technical College (O.T.C.) selected for this study has high and low numbers of students returning for their second year of training, depending on what technical program. Despite higher than national averages of second-year returning students, this institution could benefit from understanding contributors that affect retention rates. Understanding why students return for the second year of training and what contributors influence this decision could assist the institution in making appropriate program policies in the future (Oklahoma State University Institute of Technology [OSUIT], 2021).

Understanding why students have chosen to return for their second year of training and ultimately complete their academic career program begins with the basic needs (e.g., acceptance, belonging, and some sense of community) being met (Aruma & Hanachor, 2017; McKim et al., 2018). Once a student completes their technical program in this technical college, the result is a job in the workplace and a two-year Associate of

Applied Science (A.A.S.) degree (OSUIT, 2021). However, some contributors directly influence the student whether they complete or not, and one of those contributors is building a sense of community, which often develops through a students' relationships with their teachers or peers. These relationships can directly influence a student's academic career program, and the instructor is often the single influential factor that impacts a student's academic career (Chetty et al., 2011; Jorgenson et al., 2018). Building these relationships seems particularly true with many rural American students' in technical colleges, which are more accustomed to having closer relationships with their teachers and peers (Furrer et al., 2014).

Research suggests other contributors might influence a student's return for their second year of training in their chosen academic career program (Moore & Shilock, 2009; Reed, 2016). Some of these contributors could be explained by the theory of person-environment fit (Holland, 1966, 1985a; Holland et al., 1973; Holland & Holland, 1977; Smart et al., 2006). Holland's theory proposes that student's must feel the "fit" to be satisfied in their academic career program or career choice. Additionally, there must be congruence with career change and persistence (Donohue, 2006; Kemboi et al., 2016; Nauta, 2010). Students are more likely to be successful with an academic career choice and complete their multi-year training when they perceive harmony between themselves and the career environment. Harmony in the career can lead to success academically, personally, and ultimately longevity in a chosen career (Donohue, 2006; Gander et al., 2020; Lattimore & Borgen, 1999; Smart et al., 2016).

In addition to a student's choice with a career choice, other external contributors, such as a student's lifestyle, levels of freedom, and college experiences, can exist. These

key components would help a student identify and choose a career program that would fit the student and build higher second-year retention rates, in academic career programs, and lead to higher success in the work environments (Antaramian, 2017; Bailey & Snyder, 2007; Lounsbury et al., 2009; Sholeh, 2017).

### **Problem Statement**

An essential part of one's life is employment, and the average nationally for individuals to work is 42 to 45 years (U.S. Bureau of Labor Statistics, 2020). Each individual looks for a career that is congruent with what they enjoy and what they believe will lead to the likelihood of a more prosperous life personally and professionally (Astin, 1993; Moore & Shillock, 2009; Park et al., 2004; Smart et al., 2006). A student's personality type can often drive a career choice, and certain personalities tend to align with certain careers. Students seek out specific environments that have congruence with their personality type (Holland, 1966, 1973, 1977, 1985a; Kemboi et al., 2016; Nauta, 2010; Smart et al., 2006; Spokane et al., 2000).

During their college careers, students may question their choice of program and whether or not they want to finish the program (Ackerman, 2020; Morales-Rodrigues et al., 2020; Smart et al., 2006; Spokane, 2000). Although traits could be identified in career inventory assessments, many technical colleges are not using assessments before or after entering their academic career program and simply rely on the students' stated decisions (Alyahyan & Dustegor, 2020; Lattimore & Borgen, 1999; Lounsbury et al., 2009; Spokane, 2000).

Identifying the contributors why students initially chose their academic program could influence the use of resources by the institution to attract students (Hassel &

Ridout, 2017; Kuh et al., 2006; Sovet et al., 2013; United States Department of Education, 2017). Other research suggests that understanding the lack of congruence between the student's personality and the work environment may be an underlying cause for other social and psychological variables to emerge (Brown et al., 1987; Deil-Amen., 2011; Gander et al., 2020; Prevatt et al., 2011; Van Vianen, 2018).

### **Purpose of the Study**

This qualitative study examines the reasons students initially chose their academic career program and why they return for their second year at the O.T.C.

### **Research Questions**

1. Why did the students originally select their academic career program?
2. What contributors led to students returning for their second and final year of training?
3. Does Holland's person-environment fit theory explain or fails to explain these decisions?

### **Epistemological Perspective**

The epistemological perspective of constructivism guided this study. The view of constructivism aligns with qualitative research and case studies. According to Crotty (1998), constructivism is defined as "all knowledge, and therefore all meaningful reality as such is contingent upon human practices, being constructed in and out of the interaction between human beings and their work and developed and transmitted within an essentially social context" (p.42). To elaborate more, participants have 'constructed' knowledge of the career from their interactions and experiences in the program. The study examined the participants' knowledge as it has been constructed through interacting



and compiling data on a select set of participants with a survey instrument and a purposeful sampling for an interview.

Qualitative researchers often use surveys, interviews, and case studies. Creswell (2014) defines these processes as ways to construct meaning from the selected participants' responses. In addition, identifying a theory can be done before or after the study, and this study's theory was identified before the study began and provided the foundation and framework for analyzing the data (Creswell, 2009).

### **Theoretical Framework**

Holland's person-environment fit theory will serve as the lens to analyze the collected data in this study. Holland developed this theory in response to other theories on college students' post-secondary retention, experiences, and success (Holland, 1966, 1985a, 1997; Holland et al., 1973; Holland & Holland, 1977; Feldman et al., 2001; Smart et al., 2006). Additionally, Holland's theory has been used by other theorists such as Astin (1970a, 1970b) and Tinto (1975, 1993) for many years to validate that congruence between personality types and work environments increases the likelihood of college students experiencing academic success (Nauta, 2010). Other theorists have used Holland's theory hundreds of times in studies, giving scholarly credibility and providing a theory-based approach to researching a student's personality types and career choices (Kemboi et al., 2016; Smart et al., 2006). Consequently, Holland's theory is one of the most influential and cited contributions to research literature (Nauta, 2010; Smart et al., 2006; Van Vianen, 2018).

Holland's theory is based on an individual's personality, interaction with the

environment, and the congruence or lack of congruence between the personality and environment (Kemboi et al., 2016; Nauta, 2010; Smart et al., 2006). Holland's theory suggests that students seek out environments that fit their personality types and engage in activities that align with their abilities or environments (Holland, 1997; Kemboi et al., 2016). In addition, Holland's theory assumes that students can be classified into one of six personality types, realistic, investigative, artistic, social, enterprising, and conventional (Smart et al., 2006). Holland's theory suggests that a specific personality type will lead to a particular career path (Feldman et al., 2001; Smart et al., 2006). Holland's theory also suggests that when students have congruence between their personality and work environment types, they will experience job and life success (Gander et al., 2018). Additionally, other research supports the idea that congruence between personality and environment fit will support college students' returning to complete their academic career programs, performance, career change, and career persistence (Donohue, 2006).

Holland's work in the person-environment fit theory led to the development of the Self-Directed Search (S.D.S.) assessment tool, which identifies specific personality types that align with specific occupations, which will help to identify a student's career choice (Kemboi et al., 2016; Smart et al., 2006). Developed for vocational planning, Holland's S.D.S. assessment tool is self-scoring and self-administered. O'Connell and Sedlacek (1971) provided a series of studies that tested and retested Holland's S.D.S. assessment tool to collect supporting data to validate the tool used in educational and vocational planning. An illustration of Holland's Hexagonal Model, which identifies the six personality types to environments is provided.

Holland's theory aims to identify one of six personalities types that match a specific work environment, and will help guide students to a successful academic career program or career choice. Furthermore, Holland's person-environment fit theory will be used as a framework to help understand why students return for their second year of training (Kemboi et al., 2016).



*Figure 1.* A Hexagonal model representing personality types in academic environments. Adapted from "John Holland's Hexagonal Model. Representing the Congruence Component that Reflects the Interactions Between Individual Personality Types, and Work Environments (Smart et al., 2016).

## Procedures

The research design for this study is a qualitative case study. Merriam and Tisdell (2016) explain that a case study distinguishes characteristics and focuses on a bounded system where a particular phenomenon cannot be separated from the context. A case study was selected for this study because of my commitment to understanding contributors that affect a student's return for their second-year, in their academic career program. Additionally, understanding career inventory assessments will provide valuable data to help develop career advising plans for students, and give them the needed information when deciding on a career choice. Case studies provide detailed explanations about the participants and where the study occurs. Merriam and Tisdell (2016) define a qualitative case study as "an in-depth description and analysis of a bounded system" (p. 39).

The two instruments used in this study were the Ruffalo Noel Levitz student satisfaction inventory (R.N.L.S.S) and Holland's self-directed search (S.D.S.) assessment tool. The R.N.L.S.S inventory is a forty-question assessment inventory on levels of importance and satisfaction on services offered at this O.T.C. The inventory is administered to every student on campus, at the end of their first and second-year semester. The assessment is available online for specific institution types, such as secondary and post-secondary schools (<https://www.ruffalonl.com/enrollment-management-solutions/student-success/student-satisfaction-assessment/student-satisfaction-inventory/>).

The second instrument is Holland's self-directed search assessment tool (<https://self-directed-search.com/what-is-it/>). The assessment tool is a self-administered,

self-scored, and self-interpreted counseling tool. Also, the S.D.S. measures the degree to which the individual aligns with each personality type. Participants were asked questions that identified their activities, interests, and occupations (Bullock-Yowell et al., 2011; Holland & Rayman, 2013).

The face-to-face interview asked each student a series of questions, collected the needed information about their decision to choose a specific academic program or career, explained contributors that have affected their decisions to return for their second year, and gathered family information on their perspectives on college. Their results on Holland's S.D.S. were also discussed during the face-to-face interview.

### **Significance of this Study**

#### ***Significance to Research***

This study examined the contributors that affected the student's return for their second-year of training. A face-to-face interview with a selected group of students helped me understand some of these contributors. Additionally, the student's responses were compared and aligned with Holland's person-environment fit theory, which supports the idea that specific personality types can help guide a student's academic career program or career choice. Consequently, understanding the alignment of specific personality types supports the idea that Holland's theory understands human well-being and how they promote motivation at work (Moran et al., 2012). Understanding this study will give knowledge for future studies regarding student career advisement, contributors, and how these will affect a student's decision to return for their second year of training (Kemboi et al., 2016).

### ***Significance to Theory***

Holland's person-environment fit theory supports the understanding and identifies specific personality types that drive a student to choose a specific academic career program (Nauta, 2010; Smart et al., 2006). Past theorists have failed to identify specific personality types that promote a student's academic success or drive motivation and growth (Smart et al., 2006). Recently, studies have focused on certain motivational factors that identify specific personality types that define one's success. Holland's development of the Hexagonal model supports this idea and validates identifying specific personality types that support success in specific academic and work environments (Smart et al., 2006).

### ***Significance to Practice***

This study could potentially offer more opportunities to make a difference in students' lives. Additionally, the study could provide additional data to identify specific contributors that directly affect a student's success and understand why some students return for their second and final year of training. Moreover, this study could encourage others to develop individualized educational plans based on a student's personality type that aligns with their academic or career choice. Understanding this data on personality types and career choices would benefit all technical college learners on many different levels.

### **Definition of Terms**

*Academic Career Program.* An academic career program is a group of career or technical courses required by a college or university to receive a degree or certificate.

These degrees will have specific core classes along with several elective courses. Typically, these degrees are in a career or technical area, and an individual can earn an associate of arts or sciences in the chosen field of study. Generally, the State's Board of Regents governs these requirements (Sovet et al., 2013).

*Completion.* The point at which a student completes the goals they set at the beginning of their college experience, usually the completion of their degree and employment (Tinto, 2012).

*Community College or Technical College.* A college accredited by a regional accreditation body and awards an associate's degree, which is a two-year degree in arts or sciences (Hodes & Kelly, 2014).

*Technical or Occupational Education.* Hodes and Kelly (2014) point out that technical colleges (T.C.) prepare students for careers in the trades and technical workforce. T.C. also instills career-ready skills and specific industry training to fulfill business and industry needs (Hodes & Kelley, 2014). The new generations of T.C. will fulfill future new technologies careers, develop training for emerging trends, and keep the United States workforce globally competitive (Dalporto & Tessler, 2020).

*Person-environment fit theory.* John Holland developed this theory, which assumes that the choice of a career or college major is an expression of personality, and most people can be classified into one of six personalities types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (Smart et al., 2006).

*Ruffalo Noel Levitz Student Satisfaction Inventory Survey.* The Ruffalo Noel Levitz student satisfaction (R.N.L.S.S.) inventory measures student importance and

satisfaction in services provided by the college. The R.N.L.S.S. inventory is available in online and paper formats with versions for specific institution types. There are 77 questions on the inventory. There are 40 questions that participants respond to with a rating on the importance and student satisfaction utilizing a Likert Scale ranging from 1 to 7. The questions cover academic advising, admissions and financial aid effectiveness, campus climate, campus services, instructional effectiveness, registration effectiveness, safety and security, and student-centeredness (Ruffalo, 2018). The remaining questions are blank placeholders for institutions to customize the inventory and basic demographic questions.

*Holland's Self-Directed Search Tool.* Holland's self-directed search (S.D.S.) tool was developed using his work on the person-environment fit theory. This tool is a self-administered, self-scored, and self-interpreted counseling tool. The S.D.S. measures the degree to which the individual aligns with each personality type. After this, the S.D.S. will produce a summary and a three-letter code that represents the complexity of your personality type (Holland & Rayman, 2013). The summary code is driven by the six personality types in Holland's theory- realistic, investigative, artistic, social, enterprising, and conventional, and these personality types also apply to work environments (Smart et al., 2006). Because personalities and occupation types can be classified using the same system, a person can use their three-letter summary code to find an occupation that best aligns with their personality type (Holland & Rayman, 2013; Smart et al., 2006).

## **Summary of Chapter I**

This case study's main focus was to find and identify some contributors that



influence why students return for their second and final year in their academic career program. Chapter I provides an introduction and explains the significant components, including the problem statement, the purpose of this study, and the four research questions. The case study methodology examined how contributors affect a student's decision to return for their second year of training. This chapter also covered the theoretical framework used in this case study. This study's theoretical framework is supported by Holland's person-environment fit theory (Smart et al., 2006).

Additionally, this study examined if the person-environment fit theory and specific personality types positively influence technical college student's choice in their academic career program or career choice.

Chapter II provides an in-depth review of the literature that explains the topic in this study. The topics are addressed: Person-environment fit theory, congruence, specific personal and environment types, and technical education. Finally, chapter II concludes with why some technical college students return to complete their second year of training.

## CHAPTER II

### REVIEW OF THE LITERATURE

This qualitative case study aims to identify contributors that influenced students to return to complete their second year of training in their academic career program. The literature will pay close attention and give clarity and understanding why the student made certain academic or career decisions, and whether there were any influencers that affected their continued enrollment in their two-year program until graduation. Additionally, the review of the literature illustrates the importance of the student completing their academic career program, and expresses the need for this study. The literature review for this study covered several vital topics relevant to this study. The key topics in this literature review include: (1) technical college design, (2) technical college culture, (3) student well-being and contentment in life, (4) person-environment fit theory, and (5) student academic career program success.

#### **Technical College Design**

Technical colleges provide programs that have been a part of post-secondary education since the early 1900s. Additionally, the structure and framework of technical

colleges are considered premier models replicated across many states and worldwide (Makela et al., 2015). Since World War II ended, these colleges have been training individuals with career-ready skills and industry-specific training to prepare students to enter the work environment (Bergson-Shilcock, 2019). Recent studies have provided supporting data that technical colleges provide necessary career-ready skills through academic career programs, directly benefiting a learner's work environment success (United States Department of Education, 2019). In the 21st century, Moore (2015) has expressed that today's workers will need more than a high school diploma or a non-technical degree to be competitive in the global workforce. Currently, technology is changing rapidly, and much of the industry finds it difficult to keep up with these new emerging technologies, which puts more pressure on technical colleges to develop programs to fill the need of these markets (Moore, 2015; Brown, 2015).

Technical colleges offer career pathways and opportunities in work-based learning, job shadowing, internships, and clinical experiences that will ensure students receive career-ready skills to enhance their success in their academic career programs (Moore, 2015). The top priority of these technical colleges is to prepare students with the necessary industry-specific skills to enter the work environment and be successful while providing industry partners a pipeline for a skilled, ready labor force (Bergson-Shilcock, 2019). The U.S. Department of Labor has conducted surveys across the United States and found that career technical education programs are in almost every public school district. In addition, the surveys did provide specific data stating that students who participated in these programs continued to succeed at a post-secondary institute and received a degree (Labov, 2012; National Center for Education, 2013).

Recently, Oklahoma has addressed these concerns and has written legislation on the "Individual Career and Academic Plan (I.C.A.P)." The I.C.A.P. is an individualized career plan developed by the student and the student's parent or legal guardian (Gilstrap, 2019). This plan includes collaboration with school counselors, administrators, teachers, and other educational stakeholders. The idea of the I.C.A.P. is to build an education plan, set a benchmark for personalized academic and career goals, and explore career opportunities, such as career and technology programs, apprenticeships, and the military (Gilstrap, 2019).

Today, the legislation. I.C.A.P., and the need for a robust system for student career advisement and identifying career paths, has given me the purpose of exploring the person-environment fit theory and determining if this theory will help students understand their congruence between personalities and the work environment.

The overarching mission of technical colleges is to provide the leadership, resources, and implement a pathway using a business-like way of thinking and put it into action. However, the technical colleges needed to validate their academic programs, and the colleges did this by instituting an Associate of Applied Science degree (A.A.S.) (Coronado, 1996). The A.A.S. degree curriculum focuses on preparing to enter the work environment with more than just a certificate of completion. Students who are enrolled in either an Associate of Arts (A.A.) or Associate of Science (A.S.) degree typically continue their education on to a four-year degree (Coronado, 1996; Labov, 2012). Although the main focus of the A.A.S. degree was preparing to work, specific general education courses were required and would transfer if the student decided to continue with their four-year degree (Coronado, 1996).

Today, technical colleges provide post-secondary learners the opportunities to explore career options, remain engaged in school, and gain valuable skills and experience in the labor market (Gustman & Steinmeier, 1982; Nauta, 2010). Another aspect of most technical colleges is that some type of internship is associated with these programs. Students benefit because it gives valuable work experience, which otherwise would not be offered until they are employed (Griffen et al., 2021). Besides the program internships, another advantage is many of their instructors are from industry, and offer a plethora of practical knowledge, which gives the student a competitive edge in the labor market. These instructors can obtain an alternative teaching certification, which means an individual can teach an academic career program without a traditional teaching degree if they have industry experience and certifications (Nauta, 2010).

### **Technical College Culture**

The U.S. Department of Education (2019) stated that the technical skills gap and employee shortage in the United States have grown over the last several years and continue to grow as the workforce struggles to replace retiring workers and find workers prepared with career readiness skills. One study suggests that unless new programs are implemented to train and build a workforce, the United States will not be competitive in the global workforce markets (Hodes & Kelly, 2017). Business and industry partners understand this need firsthand and pressured technical community colleges to add new programs, and recruit students from many culturally diverse backgrounds. This demand and pressure have caused a shift in campus cultures across many of these colleges, and colleges have begun to understand the diverse communities and their needs (Hodes & Kelly, 2017).

In Austin, a study conducted by the Education Research Center (ERC) at the University of Texas, was conducted to help find how the campus culture and students' perception of their college experience since the global markets and communities have changed (Cassidy et al., 2020). In this study, a survey was given to faculty and students, and the survey data was collected in these areas: (a) did students find the academic career programs offered were relevant to current and future workforce needs, (b) do students feel they are ready to be competitive in a global market, (c) lastly, were the students satisfied with current academic career programs. The collected and analyzed data suggests that students felt the programs were relevant to industry needs, but did not think they could be competitive in a global workforce (Cassidy et al., 2020). Further analysis of data, showed that students, mainly white and Hispanic males, were from rural areas. Many lived close to family while attending schools and felt they were not diverse enough to be competitive (Cassidy et al., 2020).

As college student bodies become more diverse, and as a better understanding of what is needed to be competitive in the global workforce emerges, the idea of a student's "fit" becomes critical. If technical colleges can recruit effectively, this will be an essential piece in understanding how the person-environment-fit intersect (Smart et al., 2006). With the growing numbers of students enrolling in technical colleges, it would be assumed that the labor market would have a solid flow of needed employees. However, current data suggests that retention rates are lower for second-year returning students, directly affecting a student's completion of programs (Cagle, 2017; Reed, 2016; Ruhland, 2001).

## **Students' Well-being and Contentment for Life**

Well-being is a psychological idea that is viewed as a life well-lived and, from a student's perspective, a level of success in school and life is assured (Morales-Rodriguez et al., 2020). To understand a college student's well-being and contentment for life, one must first examine the idea that specific traits can lead to well-being and contentment in life. It is speculated that character traits are part of all human's internal makeup and are a biological evolutionary process that drives many of their actions, perceptions, and outcomes during life (Park et al., 2004; Smart et al., 2006). Morales-Rodriguez explains that the constructs include ideas of self-acceptance, positive relationships, autonomy, environmental mastery, personal growth, and contentment for life. Additionally, these constructs related to well-being will directly affect a student's life, and the ability to grow their social skills and interpersonal relationships with the environment. Overall, if students do not have fulfillment or success in these areas, students are less likely to have academic success (Morales-Rodriguez et al., 2020).

Current literature suggests that students' well-being and contentment directly correlate with their career choice or academic career program (Antaramian, 2017; Nauta, 2010; Smart et al., 2006). American psychologist Seligman has theorized five elements to experiencing well-being: engagement, relationships, accomplishment, meaning, and positive emotion (Cagle, 2017). College students experience each of these elements throughout their school experience, and while some students grow in these areas, others experience the negative side of these elements (Morales-Rodriguez et al., 2020). In addition to these elements, theorists and psychologists agree there are character or personality types that determine what makes life most meaningful, worth living and may

influence what type of career an individual chooses (Lowenstein, 1994; Park et al., 2004; Peterson & Seligman, 2004; Seligman & Csikszentmihalyi, 2000).

Lastly, one must be diverse in today's global workforce, understand other cultures, and effectively collaborate and communicate with others. Studies identify what personality types promote positive psychology and if specific character strengths can promote well-being or contentment (Lounsbury et al., 2009; Park et al., 2004). Current psychologists and researchers have been working on classifying certain personality types that align with specific careers (Gander et al., 2018). If patterns can be identified, these personality types can be enhanced and built into education advisement plans to give students another tool to succeed in their academic career program, work environment, and, most importantly, contentment in life.

### **Person-Environment Fit Theory**

Aristotle's philosophy is centered on the idea that the best thing for humans is happiness. In *The Nicomachean Ethics*, Aristotle states, "Happiness, then, is at once the best, noblest, pleasantest thing in the world, and these are not separated" (Aristotle & Peters, 2015, p.21). Aristotle further explains that happiness, in this sense, is not an emotion but rather a reference to a good life and someone flourishing in a community (Aristotle & Peters, 2015). New studies and research have recently focused on specific personality types that promote academic performance, well-being, and personal well-being (Gustems & Calderon, 2014). Gustems and Calderon (2014) explained that certain personality types and understanding of a student's well-being could positively affect students' studies and work environments.



Studies on students' personality and environmental types have been the center of attention for many years, and many of these studies have been conducted by theorists such as Astin, Feldman, Tinto, and Holland, to name a few (Feldman et al., 2001; Smart et al., 2006). Furthermore, these studies suggested strong evidence that certain personality types were more defined in certain occupations than others. This study will focus on the premise that specific personality and environmental types influence a student's academic career program, career choice, well-being, or life contentment.

Over 50 years ago, a paper written by American psychologist Holland appeared in the *Journal of Counseling Psychology* titled "*A Theory of Vocational Choice*." Little did anyone know that Holland's work would start a profound understanding of personality and environmental types that could influence a student's career choice (Ackerman, 2020; Nauta, 2010; Smart et al., 2006). The premise of Holland's person-environment fit theory was a simple gesture of helping people make a career choice. The understanding of vocational personalities that aligned with work environments came out of Holland's work. Holland believed these vocational personalities could be aligned with specific work environments through a classification chart (Ackerman, 2020; Morales-Rodriguez et al., 2020; Smart et al., 2006).

Holland developed a classification of these types, which was made up of six specific personality types: realistic, investigative, artistic, social, enterprising, and conventional. In addition, Holland's definition of these personality types are as follows (Feldman et al., 2001; Smart et al., 2006):

- Realistic people prefer explicit activities, ordered and systematically manipulated

objects, tools, machines, and animals.

- Investigative people prefer observational, symbolic, systematic, and creative activities of a physical, biological, and cultural phenomenon.
- Artistic people prefer ambiguous, accessible, and un-systematized activities that involve manipulating physical, verbal, or human materials.
- Social people prefer manipulating others to inform, train, develop, cure, or enlighten others to avoid explicit orders and systematic activities involving materials, tools, or machines.
- Enterprising people prefer activities that involve manipulating others to attain organizational goals or economic gain and avoid scientific, intellectual, and abstruse activities.
- Conventional people prefer activities that involve the explicit, ordered systematic manipulation of data, such as keeping records, filing, and reproducing materials.

Once the identification and classification of these six personality types, Holland then identified and classified the six-model environment types (Nauta, 2010; Smart et al., 2006):

- Realistic environments emphasize practical activities, machines, tools, and materials, including careers: Public Health, Veterinarian, or Dentist.
- Investigative environments emphasize analytical or intellectual activities aligned with creating and using knowledge, including careers: Epidemiologist, Environmental Health, or Health Services Researcher.
- Artistic environments emphasize ambiguous, accessible, and un-systematized activities that are emotionally expressed interactions with others, including

careers: Public Health or Communications.

- Social environments emphasize activities that involve mentoring, treating, healing, or teaching others, including careers: Health, Educator, or Health Promotion Specialist.
- Enterprising environments emphasize activities that involve manipulating others to attain organizational goals or economic gain, which could include careers: Public Health, Policy Maker, or Health Planner.
- Conventional environments emphasize explicit activities, ordered, systematic manipulation of data to meet demands or specific standards, including careers such: Biostatistician or Data Administrator.

After classifying and aligning the personality and environmental types, Holland developed a self-directed search (S.D.S.) assessment tool, a self-administered, self-scored, and self-interpreted counseling tool (Smart et al., 2006). The S.D.S. measures the degree to which the individual aligns with each personality type. After the assessment, a summary and three-letter code are given, which represents the complexity of an individual's personality type (Holland & Rayman, 2013). The code is driven by the six personality types in Holland's theory: realistic, investigative, artistic, social, enterprising, and conventional. These types also apply to work environments (Smart et al., 2006). Because personality and occupation types can be classified using the same system, individuals can use the three-letter summary code to find the occupation that best suits their personality type (Holland & Rayman, 2013; Smart et al., 2006).

The S.D.S. has been administered to thousands of high school and post-secondary students for career counseling to help match their personality interests with a career

choice. The assessment of interests in career counseling has important implications for students in deciding on a path for their career (Bullock-Yowell et al., 2011).

Respondents can rate their activities, competencies, preferences, occupation, and self-estimate in the search tool in terms of Holland's six identified personality types (Bullock and Reardon (2008, 2021). The S.D.S assessment's validity has been demonstrated in over 500 investigations to support the use of the S.D.S. tool (Bullock & Reardon, 2008, 2021).

Additionally, Holland identified personality and environmental types, and the S.D.S. tool helps align and find the relationship between a person's personality types and their work environment and whether or not the relationship is congruent (Bullock & Reardon, 2008, 2021; Donohue, 2005; Nauta, 2010).

A.A.S. degrees are foundational to the mission of technical colleges. This research is solely focused on these degrees, which are designed for immediate employment without further education. Using the academic career programs at O.T.C., which are A.A.S. degrees only, the chart represents Holland's identification of the six personality types, compared to those degrees and illustrated in Table 1.

**Table 1**

*Holland's Six Personality Types Compared to the O.T.C.'s Programs.*

Holland's Theory Personality Types	Personality Types Description	O.T.C.'s Academic Career Programs
Investigative	Observational, symbolic, systematic, and creative activities of a physical,	Information Technologies (A.A.S.), 3-D Modeling & Animation (A.A.S.), Graphic Design (A.A.S.).

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	biological, and cultural phenomenon. Thinkers.	
Artistic	Ambiguous, accessible, and un-systematized activities involve manipulating physical, verbal, or human materials. Creators.	Graphic Design (A.A.S.), 3-D Modeling and Animation (A.A.S.), Information Technologies (A.A.S.).
Social	Inform, train, develop, cure, or enlighten others to avoid explicit orders and systematic activities involving materials, tools, or machines. Helpers.	Nursing (A.A.S.), Information Technologies (A.A.S.).
Enterprising	Attain organizational goals or economic gain and avoid scientific, intellectual, and abstruse activities. Persuaders.	Engineering Technologies (A.A.S.), Civil Engineering/Surveying Technologies (A.A.S.).
Conventional	Explicit, ordered systematic data manipulation, keeping records, filing, and reproducing materials. Organizers.	Power Plant Technologies (A.A.S.), Instrumentation Engineering Technologies (A.A.S.).
Realistic	Ordered and systematic manipulation of objects, tools, machines, and animals. Doers.	Culinary Arts (A.A.S.), Construction Technologies (A.A.S.), Industrial Maintenance Technologies Transportation and Heavy Equipment (A.A.S.).

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*Note.* Associate in Applied Science (A.A.S.). Adapted from the Degree's at the O.T.C., 2022.

Holland's person-environment fit theory has produced over 40 years of cited work in this area and has been a significant component of the research literature. Additionally, hundreds of studies have supported the validity and credibility of Holland's theory

(Bullock-Yowell, 2011; Nauta, 2010; Smart et al., 2006). Holland's theory also supports a theory-based examination of a student's success in college programs or career choices while studying any psychological and sociological components while looking at the college environments (Nauta, 2010; Smart et al., 2006).

Holland's theory has two components that undergird his ideology. One is the personal psychological assumption based on the idea that an individual's choice of a career or college major expresses their personality and can be identified into one of six personality types. The second, the environmental, sociological assumption, is based on the idea that six analogous environments reflect society's physical and social settings (Smart et al., 2006).

Essential fundamental assumptions of Holland's theory suggest that choosing a career or college program is the student's personality emerging (Holland, 1977). This representation of personalities can be categorized into one of Holland's six personality types, realistic, investigative, artistic, social, enterprising, and conventional. Holland also suggests that both qualitative and quantitative research can identify a person's personality and explains that a qualitative study will examine a person's personal choice for a career. In contrast, a quantitative will give some measurement on a scale. Holland does point out that there is no one right way to identify a student's personality type or career choice (Nauta, 2010; Smart et al., 2006).

Holland's person-environment fit theory assumes that a student's success is from the congruence of their prominent characteristics, and Holland explains that all individuals have a dominant personality type that has a congruence to both their

psychological and sociological orientations (Ackerman, 2020; Morales-Rodrigues et al., 2020; Smart et al., 2006; Spokane, 2000). The underlying congruence logic of "fit" assumes that students will generally be more successful if they develop dominant characteristics that align with their academic or work environment (Ackerman, 2020; Smart et al., 2006).

Holland (1997) also states that as people change careers, they will move to careers to find congruence in their environments. Additionally, a person whose personality is not aligned with their work environment will usually change careers more than those aligned (Donohue, 2005; Smart et al., 2006). Although there have been many articles on Holland's theory, there are still mixed results if certain personality types can be classified and compared to a work environment and if this affects a student's career choice (Spokane, 2000).

Smart et al. (2006) explains the congruence and "fit" between personality and environments through the lens of the Hexagon model. Smart explains three assumptions about Holland's theory, individuals, environments, and congruence. First, there is the self-selection assumption that college students can choose an academic career program that matches their personality types. In contrast, the socialization assumption rewards the student for their choice in an academic career program or major. Lastly, the congruence assumption suggests there has to be stability and "fit" between the college student's academic career program choice and work environments (Donohue, 2005; Gander, 2020; Smart et al., 2006).

One such study examined male college students to find out if there was congruence between their vocational choice and if they completed their study.

Additionally, the study suggested that those with congruence were likely to complete their programs of study. Another study wanted to examine if female college students had congruence between their beginning vocational choice and any changes in their four-year programs. The study found that approximately 40 % stayed in their beginning selected program, which suggested that congruence was a predictor of a career choice (Donohue, 2005).

### **Student Academic Career Program Success**

Defining academic career program success is essential to fully understand why students return for their second year of training. Past literature has tried to identify contributors that influence a student's academic career, and the factors in predicting academic success. One such definition states to have academic program completion, one must understand prior academic achievement, student demographics, psychological and physical attributes, and their environments (Alyahyan & Dustegor, 2020; Schreiner & Nelson, 2013).

Technical colleges understand the importance of a student's academic career program success, and how this directly affects students returning for their second year of training (Labov, 2012; Nelson, 2018). In response to understanding how college students defined success with their college experience, Levitz developed an instrument to examine further the level of importance and satisfaction of their college experience (Nelson, 2018).

The R.N.L.S.S. inventory is available in online and paper formats with versions for specific institution types. There are 80 questions on the inventory. The questions ask



participants to utilize a Likert Scale ranging from 1 to 7, with one being the lowest rating, and seven being the highest. The participant taking the survey will rank each survey item on a level of importance and a level of satisfaction. The questions cover academic advising, admissions and financial aid effectiveness, campus climate, campus services, instructional effectiveness, registration effectiveness, safety and security, and student-centeredness (Ruffalo, 2018). Community and technical colleges have used some form of the R.N.L.S.S. inventory to evaluate student importance and satisfaction on their college experience (Servi, 2017). The latest data in 2017, indicated that more than 5,500,000 college students have taken the R.N.L.S.S. inventories at approximately 2700 campuses across the nation (Servi, 2017). The R.N.L.S.S. has been used to identify contributors that have an effect on a student returning to finish their college experience. (Miller, 2015; Schreiner & Nelson, 2013; Servi, 2017).

Psychologist Antaramian (2017) points out the importance of a student experiencing success in life, social and work environments, and how this is tied to the students' academic career completion. Antaramian states that a student that experiences success is linked to many positive outcomes, and students who experience multiple areas of success have stronger social relationships (Alyahyan & Dustegor, 2020). Lastly, Alyahyan (2020) states that Diener and other researchers have studied specific personality types related to college students' academic program completion, and examined certain personality types that directly relate to a student's returning to complete their academic career program (Lounsbury et al., 2009). Astin (1977; 1993) viewed a student's success in an academic program as a positive outcome for higher education institutions, leading to higher student program completion rates.

Prevatt et al., (2011) state that students drop out of college for many reasons; research suggests some of those reasons are self-confidence, personal issues, parental evolution, home life, peer pressures, academic failure, and changes in career choice. Therefore, understanding specific contributors to these dropouts and failures would be beneficial in helping students overcome these and complete their academic career programs (Prevatt et al., 2011).

### **Summary**

The purpose of this qualitative case study is to identify contributors that influence students in their decision to return to complete their second year of training in their academic career program. The literature gave clarity and understanding why the student's made certain decision's or took specific actions in their continued enrollment into their second year of their two-year program. The literature review for this study covered several vital topics relevant to this study. The key topics in this literature review include: (1) technical college design, (2) technical college culture, (3) student well-being & contentment in life, (4) person-environment fit theory, and (5) student academic career program success.

Chapter II explains and details Holland's person-environment fit theory, and how a simple gesture of helping people make a career choice, became the alignment of vocational personalities and work environments. Holland believed these personalities could be aligned with specific work environments through a classification chart (Ackerman, 2020; Morales-Rodrigues et al., 2020; Smart et al., 2006).

Additionally, psychologist Antaramian (2017) explained the importance of a student experiencing success in life, social and work environments, and how this is tied to their academic career program completion. Antaramian states that students who experience positive outcomes have much higher success rates (Alyahyan & Dustegor, 2020).

Chapter III explains this study's research methods and procedures, including participant selection, data collection, and analysis. The chapter ends with a discussion on the trustworthiness of findings, and ethical considerations are addressed. In addition, the limitations of the study are discussed in this chapter.

## CHAPTER III

### METHODOLOGY

Technical secondary education presents many opportunities and problems worthy of investigation. In 2007, Gordon stated that students without direction in a chosen field "were unwilling, unable, and not ready to decide about their vocational education" (Ellis, 2014). Merriam and Tisdell (2016) both express qualitative research gives understanding and meaning to the study. As the researcher, it is a privilege to be given personal details about a person's life and find out their views or their experience in life. As it relates to this case study, many students enter a post-secondary educational institution without any knowledge or fit of their chosen academic career program. Post-secondary education is far too costly in finances and time to use as a career exploration vehicle.

#### **Problem Statement**

An essential part of one's life is employment, and the average nationally for individuals to work is 42 to 45 years (U.S. Bureau of Labor Statistics, 2020). Each individual looks for a career that is congruent with what they enjoy and what they believe will lead to the likelihood of a more prosperous life personally and professionally (Astin,

1993; Moore & Shilock, 2009; Park et al., 2004; Smart et al., 2006). A student's personality type can often drive a career choice, and certain personalities tend to align with certain careers. Students seek out specific environments that have congruence with their personality type (Holland, 1966, 1973, 1977, 1985a; Kemboi et al., 2016; Nauta, 2010; Smart et al., 2006; Spokane et al., 2000).

During their college careers, students may question their choice of the program and whether or not they want to finish the program (Ackerman, 2020; Morales-Rodriguez et al., 2020; Smart et al., 2006; Spokane, 2000). Although traits could be identified in career inventory assessments, many technical colleges are not using assessments before or after entering their academic career program and simply rely on the students' stated decisions (Alyahyan & Dustegor, 2020; Lattimore & Borgen, 1999; Lounsbury et al., 2009; Spokane, 2000).

Identifying contributors why students initially chose their academic program could influence the use of resources by the institution to attract students (Hassel & Ridout, 2017; Kuh et al., 2006; Sovet et al., 2013; United States Department of Education, 2017). Other research suggests that understanding the lack of congruence between the student's personality and the work environment may be an underlying cause for other social and psychological variables to emerge (Brown et al., 1987; Deil-Amen., 2011; Gander et al., 2020; Prevatt et al., 2011; Van Vianen, 2018).

### **Purpose of the Study**

This qualitative study examined the reasons students originally chose their academic career program and why they return for their second year at the O.T.C.

## Research Questions

1. Why did the students originally select their academic career program?
2. What contributors led to students returning for their second and final year of training?
3. Does Holland's person-environment fit theory explain or fail to explain these decisions?

Table 2 provides evidence for the research questions and where the data will be obtained.

**Table 2**

*Research Questions.*

Research Questions	Interview Questions	Documents
Why did the student originally select their academic career program?	IQ 1,2,3,4,12	Face-to-Face Interview S.D.S. Tool
What contributors led the students returning for the second and final year of Training?	IQ 5,6,7	Face-to-Face Interview
Does Holland's person-environment fit theory explain or fail to explain these Decisions?	IQ 8,9,10,11,13	Face-to-Face Interview

*Note.* IQ- Interview Questions.

## Research Design

The epistemological perspective of constructivism will frame and guide this study. The view of constructivism aligns with qualitative research and case studies.

Crotty (1998) defines constructivism as, "all knowledge, and therefore all meaningful

reality as such, is contingent upon human practices, being constructed in and out of the interaction between human beings and their work, and developed and transmitted within an essentially social context" (p. 42). Additionally, constructivism considers that each person's views and personal experience be examined and respected (Crotty, 1998).

Constructivists believe they need to understand where they live, work, and develop their point of view from their experiences with objects or things (Creswell, 2014). These beliefs were applied to this study because the researcher provided data that supports students' ideas to understand where they live and work. Their social experiences guided them with a career academic program choice. This study is a qualitative case study and complements the constructivist epistemological perspective.

Merriam (1998) defines a qualitative research design as selecting a population sample, collecting and analyzing data, providing validity, reliability, and staying ethical throughout the research process. Merriam defines a case study as an empirical inquiry that investigates a phenomenon in-depth within a real-life setting (Yazan, 2015). In this case study, the researcher constructed the knowledge by interacting and compiling data on a select set of participants with a survey instrument and a purposeful sampling for a face-to-face interview.

This study is a qualitative case study because a quantitative study does not measure the values, beliefs, or other contributors that affect a student's decisions or challenges (Merriam, 2009). This case study emulated the understanding, reasoning, and procedures Merriam has detailed (Merriam, 2009). A qualitative case study was valuable for this study and provided the researcher with a more defined understanding of a student's beliefs, social environments, or outside contributors that directly influenced

their career choices. Ultimately, this gave the researcher valuable data, which provided a better understanding of the student's choice in their academic career program and work environment (Yarbrough, 2002).

The phenomenon in this case study provided support in understanding why students return for the second year in an academic career program. However, it could only be done with understanding contributors that influenced a student's choice in their academic program.

Additionally, a theoretical framework was identified before data collection and analysis. Furthermore, Creswell (2014) states that identifying a theory can be done before or after the study. In this study, the theory was identified before the study began and provided the foundation and framework for analyzing the data.

## **Methodological Procedures**

### ***Case Selection***

The Oklahoma Technical College used in this study was founded in 1946 to train returning World War II veterans. The purpose was to train the veterans in a skill set to enter the workforce (Kowarski, 2022). O.T.C.'s evolution has grown to become one of the most well-known technical schools across the country (Kowarski, 2022). Industry leaders rely on the school to provide students with the knowledge needed to succeed in the global workforce. The O.T.C. enrolls students who have graduated from high school or adults wanting to earn a degree in a specific career field after completion. The students have to meet specific criteria for enrollment, which consist of filling out an application, providing high school and health documents, and completing a school and program tour.



### *Participant Selection*

The O.T.C. student population used for this study has approximately 1400 returning second-year students that are distributed into various degree programs, which include Applied Associate of Science (A.A.S.), Associate of Science (A.S.), and a Bachelor of Technology (B.T.) degree (OSUIT, 2021). In my study, I used three characteristics to determine my sample participants, only students who are in a traditional hands-on with lab, no online program was utilized, and students who are enrolled in an A.A.S. degree program.

Out of those 1400 students, approximately 650 attend programs offering a traditional hands-on component with lab time. The hands-on programs are the more traditional in format and delivery, and allows for more interaction between the instructor and students. I choose not to include online students because course delivery is much different and does not include the traditional hands-on lab provided in other programs. I further narrowed the population by only including those in an A.A.S. program which leads to a job, not to further education. These A.A.S. degrees were the original degrees that embodied the mission of the technical colleges and the foundational piece of O.T.C. My sample included the current remaining 519 students that are enrolled in an A.A.S. degree program, who are participating in a traditional hands-on format while physically located on the O.T.C. campus. Out of those 519 potential participants, only 367 actually completed the R.N.L.S.S. inventory, which at the bottom of the R.N.L.S.S., question 78, asked if the student would like to participate in the case study. There were 22 participants that affirmed to participate in the case study. In summary, 1400 students are second year returning, of that number, 650 are in a traditional hands-on format. Of that 650, 519 meet

the boundaries set for the case study, of the 519, 367 completed the R.N.F.S.S. inventory, and of the 367, 22 responded and affirmed to participate in the case study.

Most of these students are from rural towns, and only a small percentage are from urban areas and other countries. In addition, there is a 75% male to 25% female population, and the ethnicities include Native Americans, white, black, Hispanics, and Asians. The student population also includes many single first-time college students (First Generation college students), married, and single parents. The population also serves Military Veterans, which adds complexity, diversity, and decision-making and directly affects the campus culture and needed student services (OSUIT, 2021). Table 3, identifies the demographic characteristics of the O.T.C.

**Table 3**

*Demographics Characteristics of the O.T.C.*

Baseline Characteristics	Participant Sample
Class size	
First-year	2300
Second-year	1400
Gender	
Female	25 %
Male	75%
Race	
Caucasian and Native American	74%
African	5%
Hispanic	18%
Asian and others	3%
Household commitment	
Rural	60>
Suburban	40<
Live on campus	50>
Age	
Female	23
Male	23
Employment Status female and male	
Full-time	81%

Part-time	11%
Non-employed	8%

*Note.* Statistical data from O.T.C., 2021.

### ***Purposeful Sampling***

This study provided a rich, holistic description of the context, and this case study relied on the strategic use of purposeful sampling. Merriam (1998) explains that purposeful sampling "is based on the assumption the researcher wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p.61). Patton (2002) agrees with the idea of purposeful sampling. Merriam (1998) states that two levels of sampling are usually required in qualitative case studies. First, you have to select the case to be studied. Additionally, unless you will interview, observe, or analyze all the participants, activities, or documents within the case, you will need to do sampling (pp. 64-65).

As students affirmed on question 78, of the R.N.L.S.S., I began the process of data collection. The purposeful sampling of students gathered qualitative data to determine why students chose their academic career program, and why they chose to return for the second year of training. As a researcher, I was fortunate with a strong response rate.

### **Data Collection**

Before the study began, I introduced myself to all of the classes that were eligible to participant in the study, by email or a personal visit and explained the study. I kept the study transparent about why I am conducting this study. Data was collected from multiple

sources, Holland's S.D.S. tool, and a face-to-face interview. Additionally, Merriam (1998) states, "data collection in a case study is a recursive, interactive process in which engaging in one strategy incorporates or much lead to subsequent sources of data" (p.134). In addition, data was collected in a "natural setting," which is identified by Creswell (2014) as a characteristic of qualitative inquiry (p. 175).

My first step in selecting the students for a face-to-face interview was to identify students who wanted to participate in the study, using the O.T.C.'s student R.N.L.S.S. inventory report (Ruffalo, 2018). The report provided an opportunity for students to participate in the case study. It also gave a broad representation of all of the A.A.S programs across campus. These 22 purposeful sampled students were given, Holland's self-directed search (S.D.S.) tool. Those students were then interviewed face-to-face.

### ***Ruffalo Noel Levitz Student Satisfaction Inventory***

Today's students drop out of college for many reasons; some of those reasons are academic failure, personal issues, and changes in career choice, which are just a few. Therefore, understanding specific contributors why students do not return for their second-year of training would benefit students and colleges (Prevatt et al., 2011). Many colleges try to understand and identify other contributors directly affecting a college student's experience. This O.T.C. administers and analyzes the student responses to identify areas of concern or supporting areas through the results of the Ruffalo Noel Levitz student satisfaction inventory.

The R.N.L.S.S. inventory measures responses to two broad areas: level of student importance and satisfaction. A student would respond with two ratings for each of the 40

items on the inventory. One rating for the level of student importance, and the other is the level of student satisfaction. Each student makes a total of 80 responses. The inventory includes academic advising, admissions and financial aid effectiveness, campus climate, campus services, instructional effectiveness, registration effectiveness, safety and security, and student-centeredness (Ruffalo, 2018).

For both levels of importance and satisfaction, the inventory includes the same 40 items with a Likert Scale of 1-7. If a student perceives an item as unimportant to them, the appropriate rating is 1, and if an item is perceived as very important to them, the appropriate rating is 7 (Labov, 2012; Nelson, 2018; Ruffalo, 2018; Servi, 2017).

Questions 41-50 are blank placeholders for institutions to add questions and customize the inventory to their context. Responses to questions 51 -58 provide information about the importance of various factors to the respondent when deciding to enroll in a specific institution. Questions 59, 60, and 61 compared the college experience to what might have been expected as their overall satisfaction rating and the likelihood of re-enrollment in the institution. Questions 62-70 gather information on gender, age, ethnicity and race, primary enrollment status, class load, class level, GPA, educational goals, and employment. Responses to questions 71 and 72 concern housing arrangements. Question 73 asks the participant if the institution was the first choice, and Question 74 asks if they plan to transfer to another institution. The number of campus organizations the respondent might belong to is covered in question 75. The primary source used by the student to pay tuition and fees is indicated in the respondent's answer to question 76. A numeric identifier, if requested by the institution, can be added. Question 77 asks for the major code provided by their institution. I used this four-digit code to identify the

participants' academic career program. Question 78 was utilized for the participant to leave their name and contact information if they wish to participate in the study.

### *Holland's Self-Directed Search Tool*

Holland's self-directed search (S.D.S.) tool was developed using his work on the person-environment fit theory (<https://self-directed-search.com/what-is-it/>). This tool is a self-administered, self-scored, and self-interpreted counseling tool. The S.D.S. measures the degree to which the individual aligns with each personality type, then compares to a career path.

After completing the S.D.S., a student receives a summary three-letter code that represents the complexity of their personality type (Holland & Rayman, 2013). The code reflects the six personality types in Holland's theory: realistic, investigative, artistic, social, enterprising, and conventional. As indicated in Figure 1, each type applies to various work environments (Smart et al., 2006).

Because both personality and occupation types can be classified using the same system, a student can use the three-letter summary code to find the occupation that best fits their personality type (Bullock & Reardon, 2008, 2021; Bullock-Yowell et al., 2011; Donohue, 2005; Holland & Rayman, 2013; Smart et al., 2006).

I am not researching the validity of the survey or the academic program's effectiveness. I used the R.N.L.S.S. inventory as a tool to select my participant's if the sample size was too large. Holland's S.D.S. tool was addressed on several questions during the face-to-face interview. The COVID-19 protocol was lifted, and I conducted all of my interviews face-to-face. However, Students were given the option to wear face

masks, or keep social distance. No zoom interviews were done.

### *Interviews*

Face-to-face interviews provided a reliable source of data for this case study. Interviews are one of the most vital data collection tools when the researcher needs to understand "what is in and on someone else's mind" (Patton, 1990, p. 278). It will be imperative to capture the perspectives and conduct the interviews ethically. Creswell (2014) and Merriam (1998) suggest guidelines for conducting face-to-face interviews, which include: (a) a minimum of six to eight participants to gain an understanding of the topic, (b) asking open-ended questions, and (c) connecting with the participants and have a conversation.

The 22 participants were asked to complete Holland's self-directed search instrument, and the face-to-face interview. The purposeful sampling of students gathered qualitative data to determine why students chose the program they did, why they chose to return for the second year, and if students were satisfied with their chosen academic career program. Additionally, during the face-to-face interview, the researcher discussed the results of Holland's self-directed search tool instrument with the interviewee to uncover whether or not the participant believes the results accurately represent their personality type.

The results were compared and analyzed to uncover some contributing factors that led the student to return and complete the second and final year of their training program. I continued to use Holland's person-environment fit theory as a lens during the study to aid in interpreting the data and findings.

## **Data Analysis**

Creswell (2014) stated there are multiple areas to consider when analyzing and reporting data, keeping it ethical and checking the data constantly for accuracy. It is important only state the facts, and not add any content to the participant's responses. Additionally, the researcher must be careful when reporting all findings and not disregard any collected data. Creswell (2014) states that researchers must listen to the story being told and not add their feelings or interpretations to the participant's story. Additionally, proper research protocol indicates that the researcher should not hide any discovered data and report all findings as they are presented. Participants should be communicated with clear terminology, and in such a way that they understand the study being conducted and any potential risks. Researchers should protect the participants and sites by using pseudonyms and changing the names of the sites (Creswell, 2014).

After completing the data collection on Holland's S.D.S. tool and the face-to-face interview, I analyzed the data and recorded the findings. I kept the study transparent with the central administration office for their support before, during, and after the study. Protecting the stored data and data security techniques will be outlined in Table 3 later in this study.

### ***Organize, Prepare, and Read Data***

The data that was collected for this study was a qualitative inquiry. Finding the best way to analyze data can be a significant endeavor and become much skewed if the researcher does not represent the data the way it was given. Patton (2002) states that no definite rules exist, so as a researcher, do your best to represent what was conveyed by



the participants through the study. Merriam and Tisdell (2016) write that data analysis is the most critical and complicated procedure in a qualitative study. Creswell (2014) also suggests that data collection continually reflects and asks questions about the study.

### *Code Data or Themes*

The qualitative case study provided data that was organized and coded. The data was collected from Holland's S.D.S. tool and face-to-face interviews (Holland & Rayman, 2013; Ruffalo, 2018; Nelson, 2018). Creswell (2014) suggests that one must collect, analyze the data, and find similarities between the data streams to find common themes. Once the data themes have been identified, I triangulated the data, code, interpret the findings, and develop figures and tables.

The results were compared and analyzed to uncover some contributing factors that could lead to students returning for the second and final year of their training program. Additionally, the results were compared to validate if Holland's person-environment fit theory supports the idea that specific personalities, and environmental types influences a student's academic career choice. During the study, I used Holland's person-environment fit theory as the lens to help interpret the findings.

## **Researcher Role**

### *Researcher Bias*

I am employed at a technical college and have been in the technical education environment for over sixteen years. I have taught programs and advised students on career choices. Additionally, I attended a vocational program in high school and have

been involved in the technical workforce and education environments. I have gained valuable insight into how certain beliefs and social economics directly affect students choosing a technical community college or career. Today, many students face these variables in their choices, and I am skeptical that these are not being addressed before their introduction into a higher education setting. Therefore, not addressing these concerns could directly influence the students' academic career program choice or success.

As a product of vocational education, I experienced taking a career inventory assessment during high school. The assessment was an advising tool that did steer me toward a career choice. The choice aligned with my fit and continues to open opportunities in my chosen career field. Student advisement is a challenging area for all stakeholders. In larger and rural schools, advisement needs to give students more information on deciding if a college path versus a career path is best for the student (Mathers, 2018).

My college and personal experience throughout my life add to the interpretations of expertise that comes with working in the industry and obtaining a college degree. My decision to conducting a qualitative case study provides an opportunity to gather data from individuals, and understand their perspective on their choices to enter a specific technical field or why they want to obtain a college degree.

To understand a study of this nature, a researcher must engage with the students that participate. Creswell (2013) states that researchers will bring biases and values into the research, but must discuss these biases openly so they will not influence the research outcomes.

In today's society and industry needs, it is imperative to understand why students return for the second and final year of their technical program. Tinto (2004) explains that the best advice for students happens in an undecided student's first year of college. For example, a student may have decided on one specific program of study, but once he or she has entered the program, they may or may not intend to pursue a career in that area of study (Ellis, 2014). Although I have similar experiences, I will be mindful of how the data is collected and analyzed as presented by the students (Merriam & Tisdell, 2016).

### *Ethical Considerations*

Ethical considerations must be made to protect the students and the collected data. In order to ensure trustworthiness and credibility, ethical considerations were utilized regarding data collection, analysis, and interpretation. The following will ensure all ethical considerations that will be made.

### *Data Collection Ethics*

While conducting qualitative research, areas need to be addressed to preserve the data collection. Creswell & Creswell (2017) explained different ethical produces used in case studies:

1. All participants must be informed of the study and sign a consent form before the study is conducted. Prepare the participant's consent form for the survey and interview.

2. Institutional Review Board (I.R.B.) approval is required before researching human subjects. These I.R.B. procedures will ensure and protect human subjects from any harm.

3. Building trust, honesty, and transparency with the study's site. Do not give

inaccurate information or make any false pretenses about the information in this study. Visit the site selected for the study, and get approval to conduct the study.

4. Ensuring the subjects and site are disguised with pseudonyms will ensure the participant's privacy. Maintaining transparency between all participants and allowing them to share experiences.

5. The American Psychology Association suggests keeping data stored in a safe place, Moreover, do not store the data for more than five years (Creswell, 2014).

While conducting the study, the researcher must ensure that there is no pressure on any human subject to sign a consent form, explain that the study is entirely voluntary, and that the data collected will not harm any subject. If a participant shares harmful information, the researcher must keep it private and confidential (Creswell, 2014). The information gained from the research study will be reported in aggregate. All interviews were recorded and then transcribed using a program called Otter. The transcriptions were unclear, and I had to transcribe all of the interviews, then use a member to check and verify the transcriptions to be accurate of their individual responses.

### ***Data Storage and Security***

Data storage and security will be imperative for protecting the participants during and after the study. According to Creswell (2014), the American Psychology Association states that research data should only be kept for five years and then destroyed. All career inventory assessments, surveys, interview instruments, and any study documents were kept locked up in a file cabinet. Additionally, any information on the computer was kept on an external jump drive and secure. The table below will outline techniques that will serve this process.

Specific data of an individual student's responses will not be provided to the instructor or administration at the O.T.C. Only aggregate data will be reported to instructors and administration. After the study, I will prepare a one-page white paper to share with the administration and instructors about the general themes indicated in this research.

**Table 4**

*Data Storage and Security.*

Data Type	Storage and Security Location.	Discard Time	Identifying Information.
Study Information	Kept in a locked filing cabinet.	Approximately one year after initial collection.	Name of the school, location, and names of participants.
Assessments	Kept in a locked filing cabinet.	Approximately one year after initial collection.	Names of faculty and students participating.
Student Satisfaction Survey	On the researcher's computer and is password locked.	Approximately one year after initial collection.	Saved the survey numbering to the participant.
Student Interviews	Keep in a locked filing cabinet or protected on a personal laptop.	Approximately one year after initial collection.	Names of students and programs.
Documents	Scanned onto researcher's computer.	Approximately one year after initial collection.	The facility, student, or forms.

**Trustworthiness of Findings**

The trustworthiness of any research must begin with the action that the qualitative

researcher represents the constructs truthfully. Lincoln and Guba (1985) suggest four criteria for establishing the trustworthiness of the findings in qualitative case studies: credibility, transferability, dependability, and confirmability.

### ***Credibility***

To ensure credibility, I incorporated the seven specific techniques Lincoln and Guba (1985) recommend prolonged engagement, persistent observation, peer debriefing, member checks, purposeful sampling, and triangulation. Prolonged engagement on the campus will help build trust, develop a student rapport, and collect valid data. The persistent observation allowed me to collect accurate data and understand the school's culture and climate. Lincoln and Guba (1982) define peer debriefing as "a process of exposing oneself to a disinterested peer in a manner paralleling an analytical session to explore aspects of the inquiry that might otherwise remain only implicit with the inquirer's mind (p. 308). I used my peers to help review, make suggestions, and make changes during this study. Member checks will be conducted; students will be given copies of the interview to verify the accuracy of the interview.

Merriam's view on triangulation or data validation notes, "One of the assumptions underlying qualitative research is that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured as in quantitative research" (Merriam, 1998, p. 202). Therefore, Merriam explains that qualitative research shows validity, reliability, and juxtaposes, and states, "The qualitative study provides the reader with a depiction in enough detail to show that the author's conclusion makes sense" (Merriam, 1998, p. 199). Triangulation for this study was achieved by collecting information from two data sources, Holland's

S.D.S. assessment tool; and face-to-face interviews (Holland & Rayman, 2013; Rufflao, 2018; Nelson, 2018). I used data collection to ensure a complete understanding of Holland's S.D.S. assessment tool and the face-to-face interviews and how the data could be used for advisement, increase retention, and graduation rates.

### ***Transferability***

Lincoln and Guba (1985) state that any study must have validity be relevant, and can be transferred to a future study. Additionally, Merriam and Tisdell (2016) convey that a qualitative study needs a neutral undertone and does not take on the researcher's control because it can affect its outcome. Since the reader is responsible for transferability, it will be up to the researcher to describe the school campus, student participants, the study's design, and the data collection analysis, so the reader can fully comprehend this study. Creswell (2014) discussed about rich and holistic descriptions, which would allow the reader to be immersed in the study.

### ***Dependability and Confirmability***

Dependability suggests that the study can be replicated, and confirmability refers to another researcher's interpretation of the findings consistent with this study's findings. Lincoln and Guba (1985) suggest that inquiry audits and reflexive journaling techniques are utilized during a study to ensure dependability and conformability. All research material, career inventory assessments, and student face-to-face interviews will be readily available for an audit. Transparency will be at the forefront of this study, and noting any changes from the beginning to the end. Table 5 was adapted from Lincoln and Guba (1985) and displayed techniques to ensure trustworthiness in this study.

**Table 5***Trustworthiness Techniques and Examples.*

<i>Criteria/Technique</i>	<i>Credibility</i>	
	<i>Intended Results</i>	<i>Examples</i>
Prolonged Engagement	Understand the culture of the study site. Build trust with students. Collect complete data.	Work on campus and will spend time in classrooms with students. Explain the purpose of the survey and face-to-face interview.  Conduct face-to-face interviews and communicate regularly via email.
Persistent Interviews	Collect in-depth data. Collect accurate data. Sort relevance is from irrelevancies.	Interviews with the returning second-year students in the program on campus.
Triangulation	Verify data and look for emerging themes in assessments, surveys, and interviews.	Data for triangulation will come from assessments, surveys, and interviews.
Peer debriefing	Gain additional perspective from peers and advisors.	I will discuss emerging themes with peers and advisors
Member checking	Verify documentation and conclusions.	The participants will receive copies of the final paperwork to validate the accuracy and conclusions from the study. If missing information is provided in a follow-up meeting.



Purposeful sampling	The site will provide an honest, accurate sample of students for the data collection.	Purposeful sampling selection is based on the students on campus.
<b>Transferability</b>		
<i>Criteria/Technique</i>	<i>Result</i>	<i>Examples</i>
Thick description	Provide sufficient detail to allow readers to make a sound judgment on the findings.	Provide a detailed narrative of the case, campus, participants, and interactions. Report any other essential details.
<b>Dependability/Conformability</b>		
<i>Criteria/Technique</i>	<i>Result</i>	<i>Examples</i>
Inquiry audit	Confirm accuracy of finding with audio.	All data will be collected into a database and made available to an auditor.
Reflexive Journaling	Allow for biases and continual reexamination of my perspectives.	Post assessments, surveys, and interviews will be stored in a database, so if the need arises, add content as the work in the study progresses.

Adapted from "Naturalistic Inquire" by Y.S. Lincoln & E.G., Guba. Copyright 1985 by SAGE.

### **Limitations**

The case study faced limitations and assumptions. Creswell (2014) states that the researcher's presence is one limitation when interviewing participants. Other limitations will be how much of the student's story they will want to provide, and if the student is honest with their response. Based on my role on the campus where the research will be

conducted, I am known in some programs by students, and in other programs, I am not known by students. The level of familiarity with me might have potentially influenced the respondent's willingness or non-willingness to participate in the study. Additionally, Stake (1995) identifies that "Many a researcher would like to tell the whole story but of course cannot; the whole story exceeds anyone's knowing, and anyone is telling" (p. 240).

Additionally, this study only represented one campus and is a snapshot picture of one moment in time. Although this is not my first qualitative study, and I still consider myself a novice researcher, I will attempt to collect data and prevent bias from influencing the study's findings.

### **Summary**

Chapter III outlines the methodology utilized that will guide this qualitative case study. In addition, it discusses my role in the research process, and potential areas of bias are discussed. Chapter III explains the trustworthiness of the findings and gives specific examples to ensure this study is credible. Chapter III discussed my role as the researcher and the bias I avoided while conducting research. Then the research design I chose was discussed, provided the sampling techniques, data collection, and data analysis procedures used for the case study. A trustworthiness table was included, and techniques used were discussed. Lastly, the limitations of the study were summarized.

Chapter IV reveals the findings discovered during the research. Emerging themes also support the questions that guided the case study. Chapter IV also contains a synopsis of Holland's three-letter summary code; and the interviews conducted at Oklahoma Technical College.

## CHAPTER IV

### PRESENTATION OF DATA

The purpose of Chapter IV is to provide the data collection, overarching categories from the data collection, and emerging themes discovered from the data findings and analysis. Additionally, answering the three research questions that guided this study, and this qualitative case study was to gain knowledge of why the second-year technical students were returning for the final year of their training at the Oklahoma Technical College (O.T.C.). The O.T.C. is a two-year technical college located in Oklahoma.

This chapter presents the collected data and analyses that support the case study. First, the technical school is described in-depth, purposeful sampling of participants, a detailed explanation of the procedures and processes for Holland's self-directed search tool, and the face-to-face interview. I will provide supporting evidence of the data, and a detailed summarization of the findings and analysis, of Holland's S.D.S. tool and each face-to-face interview conducted.

### **Study Site: Oklahoma Technical College**

The Oklahoma Technical College used in this study was founded in 1946 to train World War II veterans returning and needing a trade or skill to enter the workforce. The purpose was to train the veterans in a skill set to enter the workforce (Kowarski, 2022). O.T.C.'s evolution has grown to become one of the most well-known technical schools across the country (Kowarski, 2022). Industry leaders rely on the school to provide students with the knowledge needed to succeed in the global workforce. The O.T.C. enrolls students who have graduated from high school or adults wanting to earn a degree in a specific career field after completion. The students have to meet specific criteria for enrollment, which consist of filling out an application, providing high school and health documents, and completing a school and program tour.

The Oklahoma Technical College serves approximately 37000 residents (NCES, 2021). Most of these technical students are from rural towns, and only a small percentage are from urban areas. Additionally, Native American and white males make up 75% of the student body, while the remaining 25% make up the female population, blacks, Hispanics, and Asians. Before technical students can enroll in their academic career program, students have to apply and be accepted. Also, many of the programs require the student to obtain a dealer sponsor for their selected program to complete their program internships requirements. Additionally, the technical college provides on-campus residential facilities, with many of the student community coming from local areas.

### **Purposeful Selection of Participants**

The participants were selected based on voluntary participation. The second-year

returning students were given the opportunity to complete the Ruffalo Noel Levitz student satisfaction inventory survey, which identified their ranking of importance and satisfaction with their college experience and support services offered on campus. Appendix A displays the Ruffalo Noel Levitz student satisfaction inventory survey. Of the second-year returning students, 367 students participated in the survey. At the end of the R.N.L.S.S. survey, the student was asked if they would consider participating in a study on why students return for their program's second and final year. Also, the principal investigator's name, email address, and mobile phone contact number were listed at the end of the R.N.L.S.S. survey. Once the student made contact with me, I emailed the participant explaining the study and what survey instrument would be utilized, along with each student participating in a face-to-face interview. Appendix E is the email I sent to each participant that contacted me to participate in the study. Once the participant agreed to participate and contacted me, a date and time were set to administer Holland's self-directed search tool survey and complete the face-to-face interview. Appendix F is the chart I used to select a date and time. Then Appendix G was sent to the participant with a date and time. Additionally, Appendix B displays Holland's self-directed search tool survey, and Appendix C is the face-to-face interview questions utilized during the interview process.

### **Data Presentation**

Sharing and explaining the participants results that completed the Holland's self-directed search tool, and the responses of each participant's story through the face-to-face interview was enlightening. Holland's self-directed search tool was valuable to participants because it gave them an understanding of their personality to their chosen

academic career program. Additionally, the face-to-face interview was an exchange of valuable information between the participant and the interviewer, and a set of questions were framed to guide the interview to uncover contributors that influenced the student returning for their second year in their academic career program.

Merriam and Tisdell (2016) agree that the researcher is the instrument used in the study for data collection and analysis and provides a rich holistic picture of the reader. At the center of an interview, the understanding is part of the researcher's perception of people and how they place meaning on specific experiences (Seidman, 1998).

An interesting analogy by researcher Seidman (1998) states that the use of interviews in research, used to collect the findings and beliefs of students are unusual. Additionally, Seidman (1998) states that it is highly unusual that research uncovers the perspectives of technical college students. The face-to-face interviews enabled the researcher to collect information and analyze an understanding of the A.A.S. two-year technical college student at the O.T.C.

Merriam, as the methodologist and following her recommendations and procedures, I have presented the collected data, findings, emerging themes, and data analysis (Merriam, 2009).

### **Data Findings**

In these sections, data is collected by several methods and listed on tables, such as demographics, characteristics of sample participants, Holland's self-directed search tool results, and the face-to-face interview responses.

The population for the study started with 1400 second year returning students, and at this point, there were specific boundaries put into place. After the boundaries, the participant population was 519, and out of these, only 367 students completed the R.N.L.S.S inventory. After the inventory, the new potential sample size for the study was 367. Out of those 367, 22 participants agreed to participate in the study, three were females and nineteen males between the ages of 18-44. Those boundaries mentioned for the selection of the participants, are listed on page 38, chapter III, and explains in detail the boundaries set for the selection of the participants. Before Holland’s self-directed search tool and the face-to-face interview questions were completed, each participant was asked eight general questions, those questions and responses are listed in Table 7. The results from these question showed there were some commonalities between all technical students who completed the first year of their academic career program, and returned for the second and final year of their program.

### **Demographics of Sample Participants**

Demographics on the 22 participants that agreed to participate in the study are listed on Table 6.

**Table 6**

*Demographics Characteristics of the O.T.C. Student Participants.*

Baseline Characteristics	Participant Sample
Participant size	
Second-year	22

Gender	
Female	3
Male	19
Race	
Caucasian and Native American	20
African American	1
Hispanic	2
Asian and others	0
Household commitment	
Rural	16
Suburban	6
Live on campus	14
Age	
Female	18,19,36
Male	17 @ 19-20, 2 @ 44

*Note.* Statistical data from O.T.C. Case Study; Lessons Learned from Returning Second Year Technical Students, 2022.

### **Characteristics of Sample Participants**

The characteristics of the 22 participants on the Table 7 listed below, gives details on student responses to the general questions asked of each participant. Questions asked covered race, marital status, parents education if they attended any type of college, the participants program, student's G.P.A., and if they received any type of financial aid or funding. Two interesting facts were the participants G.P.A.'s were around 2.5, and most of the participant's parents had some form of college or degree. The students were almost an equal split on receiving financial aid funding. Also, if they had any previous or concurrent college courses. Table 7 shows the characteristics of sample responses to the general questions asked.



**Table 7***Characteristics  
of Sample.*

Participants	Age	Race	Marital Status	Parents Education	Program	G.P.A.	School	Funding/ Previous College
Bob	20's	C	S	M/D-No	H. Truck	2.75	STHE	N-N
Scott	20's	C	S	M-D-Yes	H. Truck	2.95	STHE	Y-Y
Mike	40	C	M	N	Construction	3.4	SECT	Y-N
Tom	19	C	S	M-Yes	W.E.D.A	3.9	STHE	Y-N
Jim	19	C	S	M-D-Yes	W.E.D.A	3.23	STHE	N-N
Rick	20	C	S	M-D-Yes	W.E.D.A	4	STHE	N-Y
Fred	19	C	S	M-D-Yes	W.E.D.A	3.4	STHE	Y-N
Beth	18	C	S	M-Yes	H. Truck	4	STHE	N-N
Conrad	19	C	S	No	H. Truck	4.0	STHE	N-N
Tanner	23	C	S	M-D-Yes	Construction	4	SECT	Y-Y
Cole	20	B Racial	S	No	Construction	4	SECT	Y-Y
Bill	19	C	S	No	Construction	4	SECT	Y-N
Jackson	19	Native	S	M-D-Yes	H. Truck	4	STHE	Y-Y
Alex	19	Native	S	M-D-Yes	Culinary	3.5	SASH	Y-Y
ACE	19	Hispanic	S	M-Yes	I.T	3.5	SCIT	Y-Y
Sally	36	C	M	M-D-Yes	Nursing	3.7	SASH	N-Y
Johnny B	44	C	S	M-D-Yes	Nursing	2.5	SASH	N-Y
Jeremy	44	C	M	D-Y	Nursing	3.5	SASH	N-Y
James	20	C	S	No	Mopar	3.5	STHE	Y-N
Jeffery	24	C	M	M-D-No	Komatsu	2.8	SECT/ST	N-Y
Red	20	C	S	Tech- Y	Komatsu	2.6	SECT	N-Y
Wes	20	C	S	M-Yes	Mopar	4	IT/STHE	N-N

*Note:* Data from Case Study- Lessons Learned from Second-Year Returning Students.

Legend: Heavy Truck- H. Truck, Western Equipment Dealers Association-W.E.D.A.,

Information Technologies- I.T.

### **Holland's Self-Directed Search Tool Findings**

Holland's self-directed search tool was used in this case study. The S.D.S. measured the degree to which the individual personality aligns with a specific career field. The students in this study took the survey, which is self-administered and self-

scored. Once the students completed the S.D.S. tool, the results produced a three-letter summary code that represents the complexity of their personality type (Holland & Rayman, 2013). The codes represent the six personality types in Holland's theory- realistic, investigative, artistic, social, enterprising, and conventional, also these personality types align to work environments (Smart et al., 2006). Because both personalities and occupation types can be classified using the same system, you can use your three-letter summary code to find the occupation that aligns with your personality type (Holland & Rayman, 2013; Smart et al., 2006). Below Table 3 lists the students, program, and results of the participant's S.D.S. three-letter summary code.

**Table 8**

*Holland's S.D.S. Participants Summary Codes; Realistic “Doers”; Investigative “Thinkers”; Artistic “Creators”; Social “Helpers”; Enterprising “Persuaders”; Conventional “Organizers”.*

Student	Program	Summary code
Beth	Heavy Truck	R.S.C.
Jim	NAEDA- Agriculture	R.S.C.
Jackson	Heavy Truck	R.S.C.
Ace	Auto- Mopar	R.S.C.
Fred	NAEDA- Agriculture	R.I.E.
Tom	NAEDA- Agriculture	R.S.I.
Bob	Heavy Truck	R.I.S.
Red	Komatsu	R.I.S.
Jeffery	Komatsu	R.I.S.
James	Auto- Mopar	R.E.C.
Rick	NAEDA- Agriculture	R.C.E.
Conrad	Heavy Truck	I.S.E.
Tanner	Construction	I.S.C.
Bill	Construction	I.S.R.
Jeremy	Nursing	I.A.S.
Johnny Blaze	Nursing	I.S.A.
Mike	Construction	S.R.A.
Scott	Heavy Truck	S.R.A.
Wes	Komatsu	S.A.R.

Cole	Construction	S.I.E.
Sally	Nursing	S.I.E.
Alex	Culinary	S.E.C.

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*Note.* Data collected from this case study 2022; Summary codes adapted from Holland's S.D.S. summary code chart (Holland & Rayman, 2013).

### **Holland's Self-Directed Search Tool Analysis**

Analyzing the 22 participant's summary codes and comparing them to occupations aligned with their code was interesting for the participant and me. The data collected showed that in most of the 22 participants, many other occupations aligned with their personalities (ONET, 2022). For example, summary codes, R.S.C., R.I.E., R.S.I., R.I.S., R.E.C., I.S.R., I.A.S., I.S.A., and S.E.C. all had anywhere from seventeen to seventy-four different occupations that represent these summary codes. Additionally, summary codes I.S.E., I.S.C., S.R.A., and S.I.E. had fewer than 5 occupations that represented each of these summary codes.

The emerging themes of the participants, in relation to Holland's summary codes, were all 22 participants are enrolled in a technical academic career program. Out of the data collected identifies 22 participants, 19 of the participants have the RSI combination of at least two of the personality types, and only two have the SEC or REC combination of at least two of the personality types.

Beth, Jim, Jackson, Ace, Fred, Tom, Bob, Red, Jeffery, Conrad, Tanner, Bill, Jeremy, Johnny Blaze, Mike Scott, Wes, Cole, and Sally all have two or more of the same personality types. James, Rick, and Alex are the only three with different summary codes. Additionally, all three share at least two of the personality types.

The O.T.C. is a technical school, and comparing the summary codes to the academic career programs was in alignment with Holland's person-environment fit theory, as identified in Table 3 above. Below will be more specific in the codes and what participant was identified with what summary code.

Out of 22 participants, ten of them represented the summary code R or realistic as the first characteristic of their summary code. The R summary code represents the personality of being realistic or being the do-er, which represents the academic career program these students are enrolled in at the campus. The R summary code did represent the participant's Beth, Jim, Jackson, Ace, Fred, Tom, Bob, Red, Jeffery, and James, which agreed that their three-letter summary code did represent their personality to career interest.

Out of the 22 participants, six represented the summary code S or social as their first character of the summary code. The S summary code represents the personality of being social, or the helper, which represented Mike, Scott, Wes, Cole, Sally, and Alex. All five participants agreed that the three-letter summary code represented their personality to career interest. Only one participant was not in agreement, Wes stated that the three- letter summary code did not represent his personality to career interest.

Out of the 22 participants, five represented the summary code I or investigative as the first character of their summary code. The I summary code represents the personality of being investigative or the thinker, which represented Conrad, Tanner, Bill, Jeremy, and Johnny Blaze. All five participants agreed that the three-letter summary code represented their personality to career interest.

Overall, Holland's person-environment fit theory and the S.D.S summary code assessment, did accurately represent the majority of the participant's personalities and career or academic career program they have chosen. Therefore, reinforces Holland's person-environment theory, that a person's personality does align with certain career paths (Smart et al., 2006), and answers research question three.

### **Research and Interview Questions Alignment**

The three research questions, on page 6, chapter I, guided the face-to-face interview, which was the one of the methods utilized for the collection of data. I will repeat that the Ruffalo Noel Levitz student satisfaction (R.N.L.S.S.) inventory survey was used in this study, and was only in place for the purposeful selection of the sample of participants if needed. I did not analyze the data from the R.N.L.S.S inventory, for this study. The R.N.L.S.S. survey was already being administered and was used to ask the students if they wanted to participate in the case study.

I conducted the interviews in three areas, my office, a construction trades conference room, and a nursing classroom. In all the areas, participants kept a safe distance of six feet from each other to follow COVID protocols. The students were given the option to wear masks, but all students did not see a need since the distance was there. All three interview spaces were bright, clean, and provided confidentiality for the students. Overall, the students who participated in the survey and face-to-face interview were genuine and open with their responses and experiences at this Oklahoma Technical College.

After completing the face-to-face interviews, each audio recording was

transcribed, using a program called Otter. However, the transcriptions were not clear, and I personally transcribed each audio interview. Each personal transcription of the face-to-face interviews created data that showed emerging specific themes. Krueger (2009) states that qualitative research methodology suggests that the data collection continues until saturation has occurred in the data collection. This study achieved saturation with the technical students who agreed to participate. The saturation was achieved at 22 technical students, which is sufficient for this study.

Below, I have provided each research question separately followed by the face-to-interview questions that were aligned to answer the specific research question. Research and the face-to-face interview questions alignment.

1. Why did the students initially select their academic career program?
  - a. Why did you choose to attend O.T.C.?
  - b. What career would you like to have in the future?
  - c. Why did you choose that career?
  - d. What influenced you to choose that career? Did you have family members or others who encouraged your career choice?
  - e. What challenges do you foresee in this career field?
2. What contributors led to students returning for their second and final year of training?
  - a. Why did you return for the second year? Did you consider not returning for the second year? If so, why? If not, why not?
  - b. What were your expectations of this career path?

- c. In what ways have your expectations been met? Not met?
3. Does Holland's person-environment fit theory explain or fail to explain these decisions?
  - a. How would you describe yourself?
  - b. Do you believe that personality type accurately reflects you? If so, why? If not, why not?
  - c. Describe what you know about the occupations identified in the summary code. Did you consider any of these occupations?
  - d. How would you describe the "fit" of the academic career program?
  - e. Is there anything else you would like to add?

### **Research Questions Interview Findings and Analyses**

Once the completion of the face-to-face interview, the transcripts were transcribed, and the findings are aligned with the research questions in this case study below.

1. Research Question 1: Why did the students originally select their academic career program? Interview Questions 1,2,3,4, and 12, answered this question.

Eleven of the twenty-two participants indicated they chose the O.T.C. because they were influenced by a family member, mentor, or high school technology instructor. Conrad, Beth, Fred, Rick, Jim, Bob, Bill,

Cole, Mike, Alex, and Wes acknowledged that they chose their program because a family member or mentor was in their chosen field.

Eight of the twenty-two participants indicated they chose their academic career program because they liked this kind of work and worked well with their hands. Rick, Mike, Jeffery, Conrad, Bob, Cole, Wes, and James all agreed they wanted a career that was hands-on, and gave them a challenge.

Seven of the twenty-two participants indicated they chose the O.T.C. because it had the program of their choice. Beth, Rick, Bob, Jonny Blaze, Ace, Red, and Wes all indicated their importance in finding a technical school with the program they wanted.

Five out of twenty-two participants indicated they chose the O.T.C. because of its cost and was affordable. Beth, Tom, Jackson, Johnny Blaze, and Alex indicated the importance of the cost of this O.T.C., which enabled them to attend a college; otherwise, they could not.

2. Research Question 2: What contributors led to students returning for their second and final year of training? Interview Questions 5,6, and 7, answered this question.

Eighteen of the twenty-two participants returned for their second and final year of training, because their goal was to finish the program and graduate. Conrad, Beth, Fred, Rick, Tom, Bob, Scott, Jackson, Tanner, Cole, Mike, Johnny Blaze, Jeremy, Ace, Red, Wes, and James all agreed that getting a degree would advance their career in the future.



Eleven of the twenty-two participants chose to return for their second and final year of training because they liked the program, and growing their knowledge would be needed to succeed in their field of study. Beth, Fred, Tom, Bob, Scott, Bill, Cole, Mike, Ace, Alex, and James all stated that in order to be successful in their career, it was a must to gain valuable knowledge and have the ability to apply the knowledge in the career. Continuing education was another point that was spoken about in all of their responses.

Seven of the twenty-two participants stressed that finishing their second year of training would benefit earning higher wages and career advancement. Jim, Bill, Tanner, Mike, Johnny Blaze, Sally, and Alex stated their goals were career advancement and making a good living for their family, which were the driving factors to complete the second year of their academic career program.

3. Research Question 3: Does Holland's person-environment fit theory explain or fail to explain these decisions? Interview Questions 8,9,10, and 13, answered this question.

Twenty-one participants stated that Holland's self-directed search tool summary code opened other career opportunities to explore. They were surprised by the careers listed in their summary code. Conrad, Beth, Fred, Rick, Bob, Jim, Tom, Scott, Tanner, Jackson, Bill, Cole, Mike, Johnny Blaze, Jeremy, Sally, Ace, Jeffery, Red, Alex, and James agreed they wanted to be in the academic career program they have chosen. Also,

even if other career opportunities were available, more than likely, they would have chosen the same academic career program.

Nineteen of the twenty-two participants agreed that their academic career program fits their personality and career choice. Two of the twenty-two agreed that part of them was a fit with their academic program career, and only one out of the twenty-two stated they were not a fit for their academic career program. Conrad, Fred, Bob, Jim, Tom, Scott, Jackson, Bill, Tanner, Cole, Mike, Johnny Blaze, Jeremy, Sally, Ace, Jeffery, Alex, and James agreed that their summary code did represent their personality. Beth and Rick agree that Holland's person-environment fit theory fits their personality to a career choice in many ways, but not 100%. Only Wes stated that Holland's person-environment fit theory does not fit his personality or career choice.

In addition, questions were asked if the student had any formal career counseling in high school, college, or other opportunities. Twenty-two students were asked, and ten agreed they had no formal career counseling in high school. Five had formal career counseling, and six had a mix of college, military, and other career counseling out of high school. Additionally, the last question was asked if the student had had formal career counseling, would they have explored other career options? Fourteen out of twenty-two said they would have explored other options or at least thought about it.

Table 9 aligns the research questions with the interview question's categories contributors. I have provided the findings for each question that specifically aligns to the research question, categorized each response, and the number of times each

participant's contributors. I have provided the findings for each question that specifically aligns to the research question, categorized each response, and the number of times each participant's response were given.

**Table 9**

*Alignment of Research Questions to Interview Questions Categories Contributors.*

Research Questions	Interview Questions	Categories
1. Why did the students originally select their academic career program?	I.Q. 1,2,3,4,12.	
	1. Why did the student choose to attend O.T.C.?	Family/Mentor/Friends Influence. Cost. Close to where I live. Program I wanted. Schools reputation.
	2. What career would you have in the future?	Management. Mechanic/ technician. Own a business. Other careers.
	3. Why did you choose the career?	Enjoy the work, work with hands. Continue education in the field. Helping others.
	4. What influenced you to choose that career? Did you have family members or others who encouraged you in your career choice?	Family/mentors/friends and other people. Like the trade. Help people. Career advancement.
	12. What challenges do you foresee in this career field?	Continue education. Physical shape for the job. Helping others/not a social person. Having Patience.

		Time management/Burnout.
2. What contributors led to students returning for their second and final year of training?	I.Q. 5,6,7. 5. Why did you return for the second year? Did you consider not returning for the second year? If so, why? If no, why not?	Like the Program/Pride. Finish Degree, job security after graduation. Yes. Reasons, girlfriend, doubted myself, Personal reasons, and academic failure. No.
	6. What were your expectations of this career path?	Hard work. Knowledge & learning new technology. Fulfilling career. Better life after program.
	7. In what ways have your expectations been met, or not met?	Abundance of Knowledge. Hand on approach to learning. Teacher support. Career opportunities.
3. Does Holland's person-environment fit theory explain or fail to explain these decisions?	I.Q. 8,9,10,11,13. 8. How would you describe yourself?	Help people. Goal oriented. Thinker. Doer. Leader. Professional.
	9. Do you believe that personality type accurately reflects you? If so, why? If not, why not?	Yes. The code reflects spot on/ changed person/ outgoing. No. Somewhat close, not a social person, not organized.
	10. Describe what you know about the occupations	Surprised. Lots of education to be in that field.

identified in the summary code. Did you consider any of these occupations?	Helping people not my style. Yes. No.
11. How would you describe your fit of the academic career program?	Accurately/ Spot on/ fit for the career/ doer/helper/ thinker. Not a fit for my program.
13. Is there anything else you would like to add?	Yes, understand more about the fit and the career, Great experience, how to build self-confidence. Nothing to add.

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*Note.* Alignment of Research Questions to Interview Questions Categories.

Below is Table 10, which is a summary of Table 9, the alignment of research questions to interview questions categories.

**Table 10**

*Summary of Alignment of Research Questions to Interview Questions Categories.*

Research Questions	Face-to-Face Interview Findings
Why did the students initially select their academic career program?	Students indicated their needs were met, and the college offered their program of choice. The school's reputation was the best. Students had some mentor and family influence. The cost was a factor, and the college was close to where I live.
What contributors led to students returning or their second and final year of training?	Pride. The main reasons were that their goal was to finish the program and gain more knowledge to succeed in a tiered career. I liked the program, and my family will be proud of me.

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Does Holland's person-environment fit theory explain or fail to explain these decisions?

The theory explained how Oklahoma Technical College programs fit the student's needs, and the summary code reflected their personality and career. The participants validated these findings in this study.

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*Note.* Questions and findings are from this case study, 2022.

### **Themes that Emerged in the Face-to-Face Interview**

Some of the commonalities that emerged in the data from the face-to-face interviews included self-drive, family, friends, mentor support, and cost of the degree. Almost all of the students considered they were a fit for their academic career program. Additionally, in most responses the participant had almost no career counseling in the high schools, and what formal career counseling they did receive came from their program at a technology school they attended. I also examined the responses to uncover any themes that might have suggested the kinds of situations and concerns these students wrestled with in their decision to return. Again, some of these responses include living away from home and family, the ability to make money rather than go to school, and academic challenges. While many of these challenges were apparent in their responses the participants did persist, completed, and came back to complete their second year in their technical program.

The categories, commonalties, and themes that emerged were strong and supportive to the answering of the three research questions. Almost all of the students considered they were a fit for their academic career program, and were positive that they had chosen the right program that fit their personality. The themes represented below are

the strongest that emerged in the data. There were five themes and all had the support of the majority of the participants. Below are the themes that were most pronounced in the face-to-face interviews.

- Theme 1: The participants made it clear that there was someone that had an influence on their choosing a career path or field. Additionally, most of the participants commented that they enjoyed working with their hands, and liked the career path they had chosen.
- Theme 2: The majority of students that returned for their second year of the academic career program made it clear it was their goal to finish, graduate, and have a better life and career.
- Theme 3: The participants stated they understand that continuing education is a must for career advancement.
- Theme 4: The students all agreed that Holland's self-directed search tool strongly relates to their personality and career choice. It was stated that the summary code "was spot on," and only one student said the code did not represent him. The statement that was this academic career a fit for you, again with the one exception, all agreed they were a fit for this career choice.
- Theme 5: The last and most relevant theme was the participants understanding of Holland's self-directed search tool stated "that they would have explored other career opportunities if given the information or had some career assessment as in Holland's self-directed search tool."

To reiterate, one outcome that occurred during the face-to-face interview was the fact that many of these participants had no formal career counseling in high school or

before they entered their technical collage academic career program. This supports the idea that the lessons learned from returning students suggests that career counseling could be a contributor, and why students not completing their academic career program.

I had the opportunity to have a conversation with these technical students and experience just a tiny part of their passion, goals, and how they think of themselves as a person. I was impressed with each student and how they were comfortable and eager to participate in this study.

Many of these technical students are from rural America, and for most, their first time away from family, friends, and home. The Oklahoma Technical College is a rural school that does not offer many activities for students like a suburban area would. Additionally, that might contribute to why students feel at home, comfortable, and make friends with other peers. The students talked about how their teachers were mentors and kept them moving forward and in a straight line, how the programs were aligned with their career industry, and when they were on internships the students felt confident in what they were doing.

During the interviews students shared their family and home life experiences, and how they wanted to follow in their Dad or Grandpa's footprints. Additionally, the most heart-felt statement was from Jackson, he stated, "his life has changed because of the school, and he has become a better person because of his college experience" (Interview response with the participant, September, 2022). Hearing this response was a surprise and joy for me to hear as some of their thoughts and goals.

### ***Relationships***

Through student surveys and interviews, I observed the close relationships



between the students, instructors, and their relationship with the O.T.C. The participants stated that they were comfortable asking for help from the instructor, mentor, or internship sponsor. The atmosphere was comfortable, and the students genuinely cared about their coursework and their peers.

### *Perceptions*

The Oklahoma Technical College has a reputation that technical students understand and know the importance of a solid academic career program to succeed in their chosen careers. The students utilize their resources and build relationships on campus with their peers, instructors, and potential employers while on internships. The students are also goal-driven and know they are a fit for their chosen career, which is the main reason for returning and completing their second-year academic career program.

During the interviews, students expressed their satisfaction with their program and what they learned in their first year. Several expressed that the college and program have changed their lives. Each participant from every school at the O.T.C. explained that they have gained valuable knowledge, which would give them the edge in their career.

### **Summary**

Through careful analysis of the data collected, “Each type of data collection has strengths and weaknesses. Using a variety of data collection techniques increases the validity and strengths of one approach that will compensate for the weaknesses of another approach” (Patton, 2002, p. 306). An overarching theme was that the students did have congruence with their academic career program and were a fit for their selected industry. Holland’s person-environment fit theory and the S.D.S tool is validated by the

participant's responses. Most of the students understood their three-letter summary code, and agreed it did represent their personality, and represented their career path.

Chapter V will conclude the case study and discuss implications and recommendations based on the findings from Chapter IV.

## CHAPTER V

### DATA ANALYSIS

Chapter V discusses the findings through the lens of the theoretical framework presented in this study. Additionally, it discusses the implications of this case study. I will have recommendations for examining the contributors that may or may not influence on students returning for the second and final year of their academic career program.

Additionally, the research has studied the context of students' personalities compared to a career spectrum, then verified by the student's responses to interview questions, which were driven by the research questions. The data collected by these interviews relied on their personal stories of goals, experiences, and influencers to enter their chosen academic career program.

The foundation of this study was three research questions:

1. Why did the students initially select their academic career program?
2. What contributors led to students returning for their second and final year of training?
3. Does Holland's person-environment fit theory explain or fail to explain these decisions?

This study's primary purpose was to understand better and identify any contributors that influenced technical students returning for the second and final year of their academic career program.

Merriam & Tisdell (2016) describe a case study as used to research for understanding and meaning and to create a clear picture of the problem, which would support the use of Holland's person-environment fit theory. Additionally, to understand and create a detailed description, the researcher collected the information through data collection from student career surveys and interviews. The participants were a diverse group of twenty-two, mainly eighteen to twenty-four-year-olds, with two in their mid-forties. All participants were returning students completing their second year of an academic career program. The Oklahoma Technical College, where this study was conducted, is described as a public, small rural, two-year institution.

### **Discussion of Findings**

Holland's person-environment fit theory supports the theoretical framework that served as the lens to analyze the collected data in this study. Holland developed this theory in response to other theories on college students' post-secondary retention, experiences, and success (Holland, 1966, 1985a, 1997; Holland et al., 1973; Holland & Holland, 1977; Feldman et al., 2001; Smart et al., 2006).

#### ***Holland's Person-Environment Fit Theory***

Holland's person-environment fit theory is based on an individual's personality, interaction with the environment, and the congruence or lack of congruence between the personality and environment (Kemboi et al., Nauta, 2010; Smart et al., 2006). Holland's

theory suggests that students seek out environments that fit their personality types and engage in activities that align with their abilities or environments (Holland, 1997; Kemboi et al., 2016). In addition, Holland's theory assumes that students can be classified into one of six personality types, realistic, investigative, artistic, social, enterprising, and conventional (Smart et al., 2006). Holland's theory suggests that a specific personality type will lead to a particular career path (Feldman et al., 2001; Smart et al., 2006).

In this study, two methods were utilized in the data collection process, Holland's S.D.S tool and the face-to-face interviews. The data collected was needed to support and align with the theoretical framework in this study. Also, the data collected supports Holland's person-environment theory. Holland's S.D.S tool was given to the 22 participants, and each participant verified that the three-letter summary code given to each participant that the summary code did represent their personality. Additionally, each participant was either surprised or shocked that their summary code, compared to possible career opportunities, was in fields the participants had never considered. Many summary codes represented careers such as doctors, lawyers, judges, management, nurse practitioner, artist, and even one participant showed a park naturalist.

In the conversations during the face-to-face interviews, I was able to pay close attention to their facial and body motions when answering questions. I could tell each participant was enthusiastic and wanted to be a part of this study because the participants wanted to explain their life stories. During the hour to hour and a half interview, each participant never failed to answer any of the thirteen questions, opened up about their life experiences, and explained in detail what some of their contributors that influenced the participant choosing their academic program.

Holland's person-environment fit theory was supported by the data collection in this study and verified by each participant completing Holland's S.D.S. and the thirteen interview questions. Furthermore, the data was supported by an overwhelming majority of the participants. Out of the 22 participants, 21 confirmed their personality did align with their personality, and their academic career choice was aligned to their personality to work environment represented by Holland's person-environment theory. Again, this verifies that Holland's person-environment fit theory can explain the participants' decisions in choosing an academic career program.

### *Holland's Self-Directed Search Summary Three-Letter Code*

Holland's work on the person-environment fit theory led to the development of the self-directed search (S.D.S.) tool, which identifies specific personality types that align with specific occupations, which will help a student to identify a career choice (Kemboi et al., 2016; Smart et al., 2006).

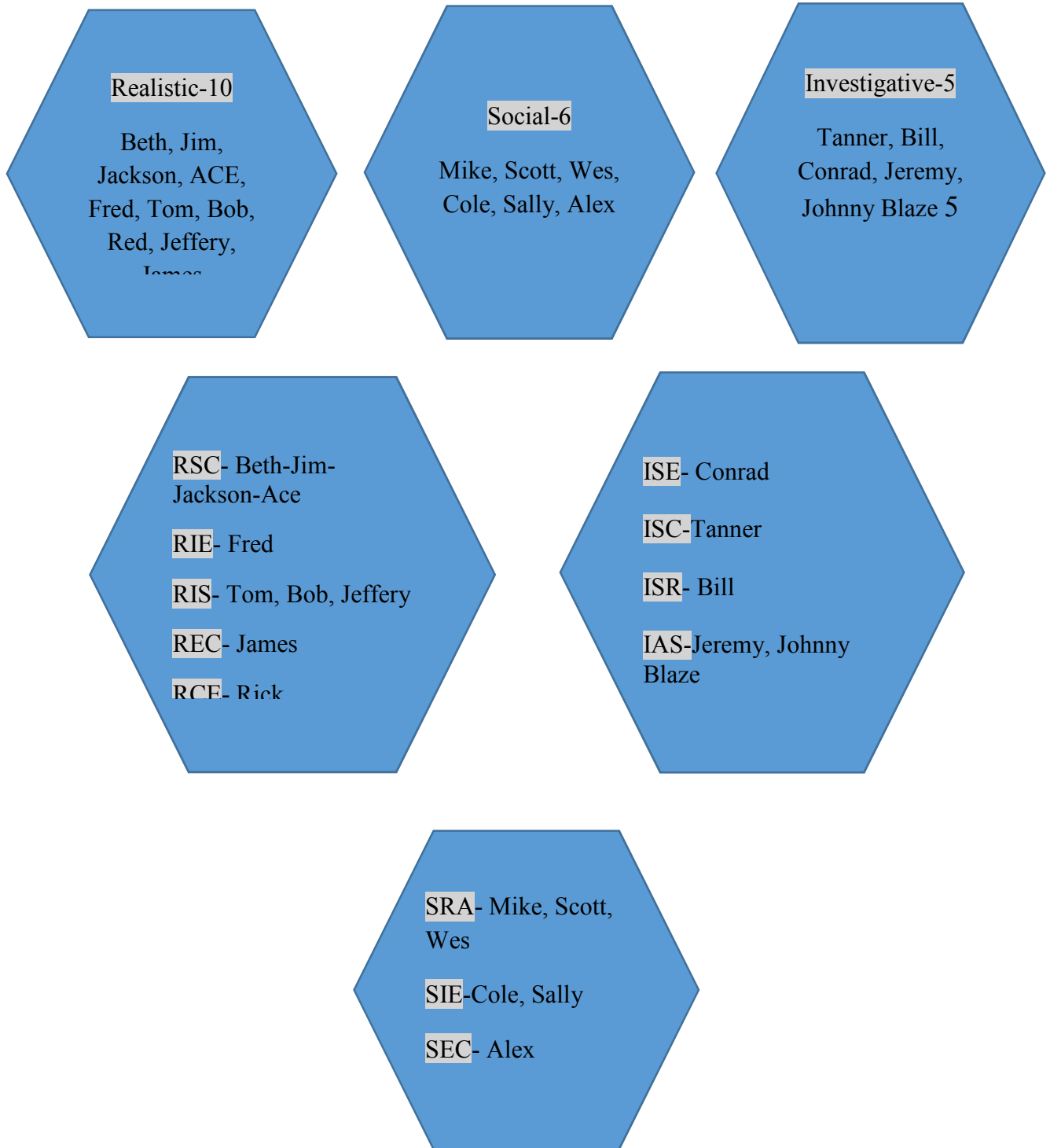
The S.D.S. measures the degree to which the individual aligns with each personality type and then compares this to careers that align with the personality types. The code is driven by the six personality types in Holland's person-environment fit theory, realistic, investigative, artistic, social, enterprising, and conventional. These personality types also align to work environments (Smart et al., 2006). Because personality and occupation types can be classified using the same system, individuals can use the three-letter summary code to find the occupation that best suits their personality type (Holland & Rayman, 2013; Smart et al., 2006).

Holland's self-directed search three-letter summary code is represented by six

personalities, realistic, investigative, artistic, social, enterprising, and conventional.

Illustrated by the first set of Hexagonal models are the participant's summary codes first letter. The second and third set of Hexagonal models represents the participant's three-letter summary codes.

Figure 2. Hexagonal model defining personality types is adapted from “John Hollands Hexagonal Model’s - Representing the six personality types” (Smart et al., 2006).





Additionally, Holland identified personality and environmental types, and the S.D.S. tool helps align and find the relationship between a person's personality types and their work environment and whether or not the relationship is congruent (Bullock & Reardon, 2008, 2021; Donohue, 2005; Nauta, 2010).

### **Emerging Themes from the Face-to-Face Interview**

The face-to-face interview was an important tool that was utilized to capture the participant's responses to the interview questions. These responses are critical to the understanding and analyzing of the research questions. Several themes emerged. These themes supported and answered the research questions, which are discussed in detail in the next section. The themes are listed below give the participants voice in the study, and will be used to recommend or develop specific assessments or counseling services for the technical students at this O.T.C.

Below are the themes that represented the participant's responses to the interview questions:

- Theme 1: The participants main it clear that there was someone that had an influence on their choosing a career path or field. Additionally, most of the participants commented that they enjoyed working with their hands, and liked the career path they had chosen.
- Theme 2: The majority of students that returned for their second year of the academic career program made it clear it was their goal to finish, graduate, and have a better life and career.

- Theme 3: The participants stated they understand that continuing education is a must for career advancement.
- Theme 4: The students all agreed that Holland's self-directed search tool strongly relates to their personality and career choice. It was stated that the summary code "was spot on," and only one student said the code did not represent him. The statement that was this academic career a fit for you, again with the one exception, all agreed they were a fit for this career choice.
- Theme 5: The last and most relevant theme was the participants understanding Holland's self-directed search tool stated "that they would have explored other career opportunities if given the information or had some career assessment as in Holland's self-directed search tool."

### **Research Questions Answered**

In this section, the research questions are answered with the participant's responses.

Research Question 1. Why did the students initially select their academic career program?

At the O.T.C., the participants were straightforward and honest in answering the question asked during the face-to-face interview. To answer research question 1, the responses to the interview questions are discussed in detail, in the below paragraphs. Out of the 22 participants, most agreed they had some influence, whether from a family member, friend, mentor, or teacher at their high school or career technical program. Additionally, most students stated that their father or grandfather profoundly influenced

them in entering their chosen field. It was apparent that many of these students entered their academic career program because of a family member and that they wanted to follow in the family's footsteps working on the farm, taking care of sick people, or helping people with their hospitality needs.

The participants strongly responded to what they enjoyed, like working with their hands and the hands-on approach to learning that they experienced in their academic career programs. The participant's goals ranged from being a technician to a general manager in the auto trades area, while the nursing areas were moving to nurse practitioners later in their careers. Others stated owning their own business, and all stated that continuing education was the only way they would grow in knowledge or move up in their career. It is not so common to hear this about continuing education in a technical field, but today's advancement and new technologies keep the industry moving at a fast pace.

Another area was the financial aspect of attending the O.T.C. Costs were a factor for some participants and were their main reason for attending. Another financial contributor was that many lived close to the O.T.C. Additionally, having the resources to obtain financial aid helped them pursue a college degree. In contrast, without financial aid, there was minimal hope of a college experience. With the needed resources for the students to enter the O.T.C., they saw the opportunity that the college had the right program for them and the career they wanted to enter after they completed the academic career program.

Overwhelmingly, the research question was answered by the participant's

responses from interview questions 1,2,3,4 and 12. Additionally, students' well-being and contentment directly correlate to their career choice or academic career program (Antaramian, 2017; Nauta, 2010; Smart et al., 2006).

Research Question 2. What contributors led to students returning for their second and final year of training?

The O.T.C participants from this study main reasons for returning for their second and final year of training were to finish the degree because they would have job security after graduation, and it was a sense of pride to finish. One of the participants stated that his grandpa was getting old and needed to take over the farm business, and others made similar comments about working for their families. Other contributors the participants stated were that they liked their program and wanted to learn more knowledge to be successful after completion of their program. Several participants commented that by completing their program, they would have a better knowledge bank when they started their career journey than someone just off the street with no formal training. Additionally, many participants agreed that having abundant knowledge, a hands-on approach to learning and the desire to keep learning was the road to career fulfillment and a better life.

Participants were asked if they considered not returning to complete their academic career program and, if so, what contributors affected the participant not returning for the second year. The reasons varied; however, two contributors were apparent in their decision-making process. One was the partner they shared their life with, and the other was an academic failure. Several participants stated it was hard living

away from home, doing the school stuff, and knowing things needed to be done at home. They missed their families and felt left out at school, but the participant and family understand that this endeavor will improve their life in the long term. The participant's response to academic failures was not understanding the curriculum, getting failing grades, the online curriculum being challenging, and trying to find support.

Overall, the research question was answered with supporting contributors that affected the participant returning and completing the final year of their academic program. Interview questions 5, 6, and 7, supported and answered the research question, and the participant's response aligns with the theoretical foundation that supports this study. American psychologist Seligman states that there are five elements in experiences well-being, engagement, relationships, accomplishments, meaning, and positive emotion (Cagle, 2017).

Research Question 3. Does Holland's person-environment fit theory explain or fail to explain these decisions?

Research question 3 specifically dealt with the theoretical framework, Holland's person-environment fit theory. The theory further explains the findings and gives meaning to the participant's decisions and responses. All of the interview questions asked were directly geared toward the research questions, and each participant expressed their views and opinions. To further elaborate on Holland's theory, Holland developed a self-directed search (S.D.S.) assessment tool, which all participants in this study completed before the face-to-face interview. After the participants completed the S.D.S., each was given a three-letter summary code. The participant and I had a conversation explaining

what the code represented about their personality and what occupations aligned with their three-letter summary code.

The participants were asked several questions over the S.D.S., like do you agree with the summary code and your personality type, and after examining the career opportunity, would you consider a career in these areas? Out of 22, 21 agreed that the three-letter summary code did represent their personality and was pretty accurate. In the statement about another career, 22 would consider exploring other careers but were confident that their career selection was right for them. The participants did go on to state they were shocked or amazed about the career fields offered for their summary code, and if they had some formal career counseling early on, they might have entered a different career field.

Research question 3 supported and answered that Holland's person-environment fit theory explained the participant's decision to choose their academic career program. Other supporting evidence is Holland's self-directed search tool and the participant's responses to interview questions 8,9,10,11, and 13. Again, Holland's person-environment theory suggests that a student with congruence between their personality and work environment will have a more significant opportunity to complete their academic career program and experience well-being and success in life (Kemboi et al.; Nauta, 2010; Smart et al., 2006).

### **Implications**

Historically, there is no set formula to use in deciding what will have an impact on students returning for the second year of their chosen academic career program.

Participants in the face-to-face interview did elude having some influence by a family member, some event, or they chose this path because they grew up in that environment. Out of the participant's responses, there began to form a pattern of contributors that influenced their choice in their academic career program, goals in this career, and what particular job or position they would like to have.

One implication for research is the need to propose and test a theoretical framework that includes the idea that a student needs to understand and be familiar with all aspects of a career. That would include a good understanding of their own personality, and how it might fit in a given work environment. One such way to find a student's fit would be to have formal career counseling before deciding on or entering a technical college. Students taking some career assessments and finding a fit between their personality and careers fields would directly impact a student's academic career program choice. Hypothetically, having the fit would increase the number of students returning for the second and final year of their academic career program.

In thinking of the above statement, another study could be conducted to determine the relationship between the assessment career summary codes and the related careers associated with the summary code. Also, the research could explore the student's perception of what their summary code means and how it is represented in their personality.

### ***Implications to Holland's Person-Environment Fit Theory***

The premise of Holland's person-environment fit theory was a simple gesture of helping people make a career choice. The understanding of vocational personalities aligned with work environments came from this work. Holland believed these vocational

personalities could be aligned with specific work environments through a classification chart (Ackerman, 2020; Morales-Rodrigues et al., 2020; Smart et al., 2006). Holland's Self-Directed Search Tool was utilized in this study, and was an important part of the data collection. The tool was useful in collection of personality traits from the participants and comparing those to career paths. Additionally, if this tool is utilized in the school systems, it is an inexpensive tool that is valuable in the advising of students.

The participants in this study took the Holland's S.D.S assessment, and commented it was easy to use, and were amazed that it did accurately reflect their personality to chosen career field. Most had expressed if they had taken this assessment early on it might have helped them examine other career paths.

### ***Implications to Gender Theory***

One interesting point that came out of the conversations, was the fact that in every domain represented, there was the male influence that was dominate in the participant's decision to enter their chosen academic career program. Studies suggest that males have an influence on both male and female students entering a career field. There is an equal split with some students entering the field the male influence is in, or the students chooses a different field (Mannon & Schreuders, 2007). Additionally, the result of the male influence in the family setting, is the desire and even a perceived obligation, to continue a family tradition.

The female influence, whether it is a mom, sister, or other female that knows the person, does have an influence on students entering a career field. This support appears to be more emotional support rather than career support (Puccia et al., 2021). Interesting



enough, is the fact that females have an influence on a student's decisions, even if the student does not know the person (Puccia et al., 2021).

### *Theory*

Each of the participants were given the Holland's S.D.S. assessment tool and the brief description of the theory listed in this paragraph. Holland's person-environment fit theory consist of these six specific personality types, realistic, investigative, artistic, social, enterprising, and conventional. In addition, Holland's definition of these personality types are as follows (Feldman et al., 2001; Smart et al., 2006):

- Realistic people prefer explicit activities, ordered and systematically manipulated objects, tools, machines, and animals.
- Investigative people prefer observational, symbolic, systematic, and creative activities of a physical, biological, and cultural phenomenon.
- Artistic people prefer ambiguous, accessible, and un-systematized activities that involve manipulating physical, verbal, or human materials.
- Social people prefer manipulating others to inform, train, develop, cure, or enlighten others to avoid explicit orders and systematic activities involving materials, tools, or machines.
- Enterprising people prefer activities that involve manipulating others to attain organizational goals or economic gain and avoid scientific, intellectual, and abstruse activities.
- Conventional people prefer activities involving explicit, ordered systematic manipulation of data, such as keeping records, filing, and reproducing materials.

Holland identified and classified the six-model career environment types (Nauta, 2010; Smart et al., 2006):

- Realistic environments emphasize practical activities, machines, tools, and materials, including careers: Public Health, Veterinarian, or Dentist.
- Investigative environments emphasize analytical or intellectual activities aligned with creating and using knowledge, including careers such: Epidemiologist, Environmental Health, or Health Services Researcher.
- Artistic environments emphasize ambiguous, accessible, and un-systematized activities that are emotionally expressed interactions with others, including careers: Public Health or Communications.
- Social environments emphasize activities that involve mentoring, treating, healing, or teaching others, including careers: Health, Educator, or Health Educator, or Health Promotion Specialist.
- Enterprising environments emphasize activities that involve manipulating others to attain organizational goals or economic gain, including careers: Public Health, Policy Maker, or Health Planner.
- Conventional environments emphasize explicit activities and ordered, systematic manipulation of data to meet demands or specify standards, including careers such: As biostatistician or Data Administrator.

After classifying and aligning the personality and environmental types, Holland's idea was to give a person a tool to help identify their personality to a career fit. Many psychologists have done studies and have stated by the data collected that if a person is

happy with their chosen career, they will stay in the career and have greater success in life (Holland & Rayman, 2013).

### **Recommendations**

A recommendation could be for this Oklahoma Technical College, would be to investigate the contributors that had an influence on the students returning for the second and final year of their academic career program. Ultimately, understanding if the student identifies if they are fit for the academic career program would help with retention and overall graduation rates at this college.

Another recommendation is given the changing nature of work, the company brick and mortar building's with offices have now transitioned into an office inside the employee's personal home. Additionally, many technical colleges have adapted this same strategy by offering more online courses. With this being said, does the theory need to be updated to reflect these changes?

Further research needs to be done to find ways to measure readiness, interests, and learning profiles. Additionally, a recommendation would be to reach out to visiting students at open houses, career fairs, recruiters visiting school districts, and consider including formal career counseling for students. Also, this would allow all stakeholders to see the needs of students and what new emerging trends will be needed in the future. Also, what are future students needing to be successful and experience well-being in their life.

Lastly, for further research, reach out to students that did not complete their final year of the program and find out the contributors that did influence their decision not to

return. Tinto (2012) stressed that certain areas like social integration, the student's academic ability to continue, and the desire to complete their school goals are factors that do have a positive influence on student retention and graduation rates. Therefore, finding what contributors are missing, or needed from the students that did not complete their second year of training, might offer solutions in the future and give the students that boost to finish their academic career program.

### ***Conclusion***

Chapter V presents an overview of the problem statement, purpose, and tools used to conduct the study on second-year returning A.A.S. degree students. This study revealed the complexity of the contributors that influenced the technical students' academic career program choice at this Oklahoma Technical College. Holland's person-environmental fit (Smart et al., 2006) provided a robust framework for this study. The idea is that this study helps create awareness of how formal career counseling affects students at any level and that utilizing career assessment tools allows students to look into other career choices (Lafond, 2015). Early and often exposure to other career opportunities and resources has been shown to directly impact students returning to complete their final years in their academic career program (Nauta, 2010).

### **Summary**

Technical students typically are best when they are learning hands-on and in a career that pushes their abilities. As an administrator in a technical college, I see the benefits of career counseling and how it can and will affect students. My industry experience and educational courses have prepared me to understand technical students

and their needs to be successful. The Oklahoma Technical College allowed me to converse with the students and discover the influence that gave them the desire to return and finish the second year of the academic career program. The face-to-face interview gave me a better understanding needed to advocate for formal career counseling and counseling students in their career choices.

In conclusion, having completed this study, it is essential to share this knowledge and data with school administrators, counselors, recruiters, communities, and any stakeholders that are part of the student's educational experience. Since the beginning of this dissertation journey, I have examined different theorist and their theories that would best support, benefit, and fit this study. Holland's person-environment fit theory was the theory that was a fit for my study, and was needed to gain the knowledge on a student's personality type and their fit in the work environment. My goal is to bring career counseling awareness to all stakeholders involved in a student's educational journey. One must remember the other outside influences that drive students to choose their academic career programs and careers. However, with the combined knowledge of multiple tools, one can be confident that the student is getting the best academic career program and career guidance needed to succeed and experience well-being and contentment in their life. Furthermore, this is why we are educators, to give students the knowledge and tools needed to promote their success in their endeavors.

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# APPENDICES

## APPENDIX A

### RUFFALO NOEL LEVITZ STUDENT SATISFACTION

#### INVENTORY (R.N.L.)

The following inventory will be utilized before the student interview process.



### STUDENT SATISFACTION INVENTORY™

Community, Junior and Technical College Version  
Form B

Laurie A. Schreiner, Ph.D., and Stephanie L. Juillerat, Ph.D.  
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Dear Student,

Your institution is interested in systematically listening to its students. Therefore, your thoughtful and honest responses to this inventory are very important.

You are being asked to share feedback about your college experiences thus far. Your responses will give your campus leadership insights about the aspects of college that are important to you as well as how satisfied you are with them.


— Thank you for your participation.

**Instructions:**

- Use a No. 2 pencil only. Please do not use ink or ballpoint pen.
- Erase changes completely and cleanly.
- Completely darken the oval that corresponds to your response.

Each item below describes an expectation about your experiences on this campus. On the *left*, tell us how *important* it is for your institution to meet this expectation. On the *right* tell us how *satisfied* you are that your institution has met this expectation.

	Importance to me . . .	. . . My level of satisfaction
	1 - not important at all 2 - not very important 3 - somewhat unimportant 4 - neutral 5 - somewhat important 6 - important 7 - very important does not apply	not available/not used very satisfied - 7 satisfied - 6 somewhat satisfied - 5 neutral - 4 somewhat dissatisfied - 3 not very satisfied - 2 not satisfied at all - 1
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	1. The campus staff are caring and helpful.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	2. Classes are scheduled at times that are convenient for me.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	3. My academic advisor is available when I need help.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	4. Security staff respond quickly to calls for assistance.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	5. Financial aid awards are announced in time to be helpful in college planning.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	6. Library resources and services are adequate.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	7. Admissions staff provide personalized attention prior to enrollment.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	8. The quality of instruction I receive in most of my classes is excellent.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	9. I am able to register for classes I need with few conflicts.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	10. Parking lots are well-lighted and secure.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	11. Counseling services are available if I need them.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	12. Faculty are fair and unbiased in their treatment of individual students.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	13. The campus is safe and secure for all students.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	14. My academic advisor is knowledgeable about my program requirements.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	15. Financial aid counseling is available if I need it.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	16. My advisor helps me apply my program of study to career goals.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	17. Admissions counselors accurately portray program offerings in their recruiting practices.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	18. Computer labs are adequate and accessible.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	19. Registration processes are reasonable and convenient.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	20. Students are made to feel welcome here.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>


206739

PLEASE DO NOT MARK IN THIS AREA



Importance to me ...		... My level of satisfaction
1 - not important at all 2 - not very important 3 - somewhat unimportant 4 - neutral 5 - somewhat important 6 - important 7 - very important does not apply		not available/not used very satisfied - 7 satisfied - 6 somewhat satisfied - 5 neutral - 4 somewhat dissatisfied - 3 not very satisfied - 2 not satisfied at all - 1
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	21. The amount of student parking space on campus is adequate.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	22. My academic advisor is knowledgeable about transfer requirements of other schools.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	23. This institution helps me identify resources to finance my education.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	24. The equipment in the lab facilities is kept up to date.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	25. Faculty provide timely feedback about my academic progress.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	26. There are adequate services to help me decide upon a career.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	27. Tutoring services are readily available.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	28. This campus provides online access to services I need.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	29. There are convenient ways of paying my school bill.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	30. The assessment and course placement procedures are reasonable.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	31. Faculty use a variety of technology and media in the classroom.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	32. I am able to take care of college-related business at times that are convenient for me.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	33. Administrators are available to hear students' concerns.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	34. Faculty are usually available to students outside of class (during office hours, by phone or by e-mail).	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	35. I receive ongoing feedback about progress toward my academic goals.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	36. Tuition paid is a worthwhile investment.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	37. I seldom get the "run-around" when seeking information on this campus.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	38. Most classes deal with practical experiences and applications.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	39. On the whole, the campus is well-maintained.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	40. There are sufficient courses within my program of study available each term.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

Your institution may choose to provide you with additional questions on a separate sheet. The section below numbered 41 - 50 is provided as a response area for those additional questions. Continue on to item 51 when you have completed this section.

Importance to me ...		... My level of satisfaction
1 - not important at all 2 - not very important 3 - somewhat unimportant 4 - neutral 5 - somewhat important 6 - important 7 - very important does not apply		not available/not used very satisfied - 7 satisfied - 6 somewhat satisfied - 5 neutral - 4 somewhat dissatisfied - 3 not very satisfied - 2 not satisfied at all - 1
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	41. (If items 41-50 not available, skip to item 51.)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	42.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	43.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	44.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	45.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	46.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	47.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	48.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	49.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	50.	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>





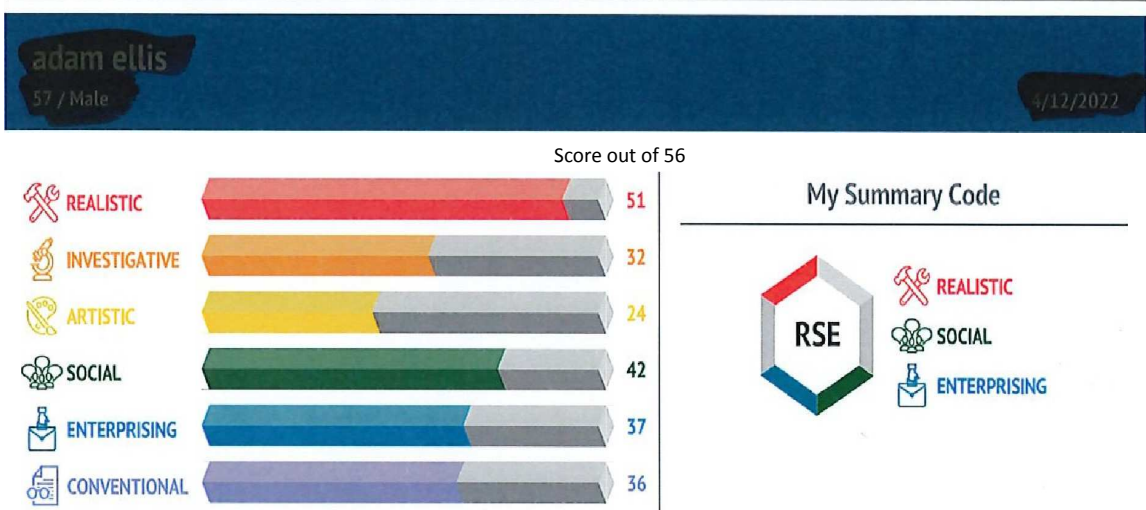


## APPENDIX B

### HOLLAND'S SELF-DIRECTED SEARCH TOOL (S.D.S.)

#### Summary Report

## My Summary Code



When you completed the StandardSDS, you described what you like best—your favorite activities and interests. The three personality types that match your activities and interests most frequently make up your three-letter Summary Code. Your Summary Code is a brief way of saying what you like—your combination of interests.

Based on your responses on the StandardSDS, your Summary Code is RSE, or Realistic, Social, and Enterprising.

## Exploring Occupations





Now that you have a better understanding of which personality types best represent your interests, it is time to think about how this is all related to careers.

The following section includes a list of occupations based on your three-letter Summary Code of and its combinations.



## My Occupational List

Note, In the Outlook column, -t tells you if a job is a Rapid GroMh job (projected to grow much faster than average jobs in the coming years). \* tells you if it is New and Emerging (new and emerging in a high-growth industry).

TOP PICKS	OCCUPATION	HOLLAND CODE	EDUCATION REQUIRED	CAREER CLUSTER	OUTLOOK	EDUCATION REQUIRED	CAREER CLUSTER	OUTLOOK

	Adapted Physical Education Specialist
	Administrator, Health Care Facility
	Advertising Sales Agent
	

SRE

College degree	Education	
Advanced degree	Health	
Some college	Business	

SER

ERS

## APPENDIX C

### QUESTIONS FOR STUDENT INTERVIEWS

#### Face-to-Face Interview Questions

**In this study, the Holland Self-Directed Search tool will be administered and data collected, before the face-to-face interview. The data collected will guide the interview questions.**

The following questions will be utilized during the student interview process.

1. Why did you choose to attend O.T.C.?
2. What career would you like to have in the future?
3. Why did you choose that career?
4. What influenced you to choose that career? Did you have family members or others who encouraged you in your career choice?
5. Why did you return for the second year? Did you consider not returning for the second year? If so, why? If not, why not?
6. What were your expectations of this career path?
7. In what ways have your expectations been met? Not met?
8. How would you describe yourself?

You have taken several different assessment tools while here at O.T.C. Recently you took the Holland's Self-Directed Search tool. The tool provides a summary code. The summary code identifies your personality type. I will share with the participant their summary code along with a chart that lists the 6 personality types.

9. Do you believe that personality type accurately reflects you? If so, why? If not, why?

Now that you have a better understanding of which personality types represent your interests, it is time to think about how this is related to careers. I will provide the participant the occupational list. Using the three-letter summary code and all the combinations, compare to your occupational list.

10. Describe what you know about the occupations identified in the summary code. Did you consider any of these occupations?

11. How would you describe the “fit” of the academic career program?

12. What challenges do you foresee in this career field?

13. Is there anything else you would like to add?

Additional probing questions will be asked as needed.

## APPENDIX D

### RESPONSES TO QUESTIONS FOR STUDENT INTERVIEWS

---

**Research Questions- Why did the student originally select their academic career program?**

**IQ 1,2,3,4,12**

**1. Why did you choose to attend O.T.C.?**

**Conrad-** Dad graduated tech school in automotive, his teacher graduated from this OTC.

**Beth-** 12 minutes from my house- cost efficient- had the program I wanted.

**Fred-** Grew up with mechanics- whole family was mechanics- Dad mention OSUIT.

**Rick-** Enjoy working on stuff, senior year, saw the OTC website and found a program.

**Jim-** Need for Diesel Techs-Grew up on a farm- saw an opportunity to go to this OTC.

**Tom-** wanted a degree- job require some type of degree- affordable

**Bob-** Liked working on vehicles and learn how they worked, was interesting, and this school had the program I liked.

**Scott-** Opportunity to go to college- having a degree will benefit my future

**Jackson-** Good reputation- affordable- gave you your degree quick

**Bill-** Did not want to go to a 4 or 6 year of school – Did good in HS- Vo-tech instructor help make the decision

**Tanner-** Job security- got info from employer

**Cole-** best opportunity- Internship w/school is good 1/2 on and half off

**Mike-** like to work outside- like to work with my hands- to learn a new career- make a good living.

**Johnny Blaze-** Live close to campus- Had program wanted to attend

**Jeremy-** Resources- location- research showed this programs was top- pass rate – knowledge graduates had and how happy the graduates are, and they spoke highly of this program

**Sally-** how supportive the faculty is with students- structure of the program

**ACE-** more specialized toward interest- was wanting to change from IT to an auto program and this school offers both

**Jeffery-** Growing up with working on stuff- family wanted me to go into a 4-year college program- dropped out and heard about this college. Dad had friend that went to this college and had a good experience.

**Red-** Best opportunity and the program is what I wanted to do

**Alex-** The program was top in the state- cost- instructors are known to be the best

**Wes-** The college reached out at the local vo-tech I was attending- the auto program was what I wanted- enjoyed and wanted to do it- had good networking and friends going there

**James-** Recruiter- I circled the auto and my program instructor came first to talk to me, so I went to this program

---

**Why did the student originally select their academic career program?      IQ 1,2,3,4,12**

**2. What career would you like to have in the future?**

**Conrad-** Something in management- open my own shop- lots of goals.

**Beth-** Mechanic then a service writer.

**Fred-** Technician for a while- then a service manager.

**Rick-** Ten years in the career, then maybe farming or own my business.

**Jim-** work on a farm.

**Tom-** Working at an ad dealer as a technician, then to service manager

**Bob-** to open up my own shop in ten years

**Scott-** Service manager

**Jackson-** Diesel technician- Farming and Ranching

**Bill-** Field service technician- own business- farm or ranch

**Tanner-** Technician by 30, then something else- containing my education

**Cole-** Service manager- own my own shop

**Mike-** some type of construction Forman or job

**Johnny Blaze-** Neo-Natal Nurse Practitioner

**Jeremy-** R.N.

**Sally-** Nurse Practitioner

**ACE-** Computer Repair Technician

**Jeffery-** Managing a heavy equipment- owner or working manager in shop

**Red-** Own my business

**Alex-** Hospitality/ tourist event planner

**Wes-** Service manager/ business owner/ want to climb the company ladder

**James-** Own my shop

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**Why did the student originally select their academic career program?      IQ 1,2,3,4,12**

**3. Why did you choose that career?**



**Conrad-** Loved this kind of work- loved working on things-maintained dirt bike and road them- like doing things.

**Beth-** Interested in trucks- no experience needed- this program would train and teach me what I needed to learn- good career path.

**Fred-** Grandpa had a lot to say to help guide me into this career. Dad talked about the ag side, and talked me into this degree.

**Rick-** Grandfather was a farmer, been around farms my whole life, Grandpa wants me to take over farm.

**Jim-** to be able to do anything on a farm, and work for a company.

**Tom-** Family is mostly farmers

**Bob-** Dad works in the field, and I liked working on things- hands on.

**Scott-** Seemed like an interested career- has many opportunities

**Jackson-** Family has a lot of Diesels and Trucks- neighbors as well- Start a small business

**Bill-** Dad was owner/operator-and worked on his trucks- Grandpa had farm equipment

**Tanner-** Pandemic no company were hiring- marine was a mechanic am it transferred good.

**Cole-** like work hand on- grew up around tractors- always like the heavy equipment construction world

**Mike-** I liked being in the construction area- always liked it- good money in construction

**Johnny Blaze-** Wanted Nursing Degree- been in Para Medicine for 25 years, natural progression.

**Jeremy-** Helping others- enjoy medical anatomy- lots of parallel movement in this profession- diversity of types of jobs and flexible to move geographically

**Sally-** Help people- new career- had been a teacher- social worker

**ACE-** Did not want to do IT, and use my knowledge I had from IT to go into an auto program

**Jeffery-** Work with my hands – using my brain or mind

**Red-** God with my hands- Been working on things for as long as I can remember

**Alex-** Helping people – fulling an event and have happy people- feel good to take part in a large event, and know I made it good

**Wes-** From young age I wanted to fix things- Dad, we bought a car and fixed it up

**James-** Older pickup I worked on, Dad would help work on it with me- Enjoyed doing this kind of work- thought might as well make a career out of it

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**Why did the student originally select their academic career program?**

**IQ 1,2,3,4,12**

**4. What influenced you to choose that career? Did you have family members or others who encouraged you in your career choice?**

**Conrad-** Cousins and brother.

**Beth-** Father influenced me- Diesel was interesting to me- just my father.

**Fred-** whole family are mechanics- Grandpa and Dad were influencers

**Rick-** My Girlfriend Mom, told me about the OTC, and I looked at the website, and this career just kind of stuck out. Yes, Dad, Grandpa are farmers. So I wanted to help out someday.

**Jim-** Family worked on farms and shops- Grandpa was big influencer, and Dad kind of pushed a little.

**Tom-** Wanted to do something in ag- There are opportunity to work- Dad and Grandpa are farmers.

**Bob-** My Dad works in the same field, and he has done good. Have some other family, cousins that are technicians and work on big trucks

**Scott-** working on friend's farms, would like a career, no stuck in a small town where no jobs are present. No- parents when to college, only had friends that worked on farms

**Jackson-** Broke equipment- paying a mechanic to fix our equipment the bills- Learn it to take care of repairs – Dad encourage me into this career choice.

**Bill-** Dad- wanted me to be a doctor or lawyer- Vo-tech instructor was an influence- Dad & Grandpa also help influenced me.

**Cole-** Grandpa worked hard- had farm work on the equipment

**Tanner-** Choose to be a mechanic- enjoy working on things- secure job w good pay- no- family in this line of work

**Mike-** Dad is in construction- other friends were in it and convinced me to get into it- needed school to learn more and move up

**Johnny Blaze-** Youngest Daughter- was in the NEO-Natal unit when born- I felt helpless

**Jeremy-** Being a EMT & Firefighter – worked in ER as a tech- seemed all the ER people were happy in what they were doing and enjoyed it

**Sally-** advancement- making a difference in the care of patients- Flexibility of schedule- Yes, sisters are nurses

**ACE-** Love Mopar- Yes- Dad and Stepdad were mechanics, wanted to be a mechanic- that would mix with IT.

**Jeffery-** Being around and grower up with it. Family had used vehicles, family is in farms and agriculture. Grandpa was head of big company

**Red-** Had worked on diesel trucks and good with it. Dad lived on a fam, first experience on big equipment for me.

**Alex-** Father- cooking and baking since I was a little girl- Sr. year lost a fudge contest- so wanted to learn more- Yes- Dad and Grandma

**Wes-** Neighbor was a shade tree mechanic- he inspired me- wood shop was good but I wanted to fix things

**James-** Nothing influenced me- just wanted to do it-Great Uncle had a shop, but never worked in it.

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**What contributors led the students returning for the second and final year of training?**

**IQ 5,6,7**

**5. Why did you return for the second year? Did you consider not returning for the second year? If so, why? If not, why not?**

**Conrad-** Liked the program- have a job once I graduate- goal to finish the program- Never thought about not coming back, “I start something, I finish it”.

**Beth-** I am 3-4 semester in- financially was right to finish- needed degree to get a career – No mom would have killed me if I quit.

**Fred-** Liked the career path, I am pretty focused on coming back to finish.

**Rick-** From the beginning “was to finish, never quit anything”. Everyone wants you to succeed- Easy to quite, but come back, I can say I finished the program while other quit.

**Jim-** Can graduate- be a technician full time- important to graduate.

**Tom-** to learn more- more knowledge for better advancement- Graduate- wanted my Graduate- wanted my Grandpa to see me graduate.

**Bob-** Promised my boss I would finish school- my pride- I can say I finished college/Diesel school. No- personal pride to finish-

**Scott-** wasn't not going to finish it, I wanted the degree- Sense of accomplishment. No- Had one year done and one year to go- more opportunities than not if completed 2<sup>nd</sup> year.

**Jackson-** Wanted the degree- start something finish it is my thought- Yes- because I tried to convince myself that I could work on trucks without an education- found out I thought there would be more to learn about and I was right.

**Bill-** Already started program- getting raises at work- Yes- not because of program, but personal reasons.

**Tanner-** Finish the program/ have to finish to keep job- Yes, girlfriend had me some doubts but realistic no had to finish program

**Cole-** Have good grades/ benefit to finish- Never- have to finish the program to be successful

**Mike-** I knew if I completed, my family would be proud- I could be proud of myself – My wife and parents told me to finish

**Johnny Blaze-** Part of the program, I had to finish- stuck it out - Yes- I did not pass the 3<sup>rd</sup> semester, was a kick to me- angry at myself, and had self-doubt. - all of family- wife and kids

**Jeremy-** Have to finish for the benefit- if not, I would be in the same spot as I am now, no have to finish- family depends on me to finish

**Sally-** Because of how successful the college was in the profession- manageable for me to finish- Nope- never because I knew I wanted to advance in this career- 10 years ago was a CAN

**ACE-** If I am coming – I am going to finish the program- No- not really

**Jeffery-** See it through- Did not want to drop another program- Yes- First year was hard on my internship- had doubts if I wanted to do this- It got better, and I did good on 2 internship

**Red-** started it so I have to finish the program- benefit to me to finish, better advancement – Yes, because of the internship where I was at

**Alex-** Eager to learn more- how supportive the chefs were to me- FCA and the chefs- scholar ship

**Wes-** Mon taught me never to quit- band director was a bad influence and told me I would never finish his program- Mom would not let me quit- never give up- No, never crossed my mind to quit the program

**James-** Was already half way through the program- Really enjoy it- Yes, first semester thought it wasn't for me- biggest reason was something new- not the school

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**What contributors led the students  
returning for the second and final year of training?**

**IQ 5,6,7**

6. **What were your expectations of this career path?**

**Conrad-** Lot of hard work- it is reality- my expectation were high and met- so far, all have been met.

**Beth-** Become a mechanic- ASE certified- gain knowledge and experience before starting career.

**Fred-** Learn a lot, the program gave me a lot of knowledge- was a lot of work to do- think about how to fix it right- don't do it sloppy

**Rick-** get to work on things- farm equipment- help people- money.

**Jim-** work on anything- go to work at a company- more opportunity

**Tom-** Learn how to work on equipment- Diagnosis equipment- Tear down and put back together correctly

**Bob-** Todays technician have to think out of the box- and learning how to do that- learning how to have patience when you have a hard job.

**Scott-** learn computer diagnosis- electronics and electrical- what it takes to be a service manager

**Jackson-** I entered the program with an open mind- not many expectations-

**Bill-** To get knowledge on equipment- Do something and be good at it –good job security.

**Tanner-** Good start getter back into civilian life- support myself- while I can think what My career choice will be in future

**Cole-** work in shop- manager- learning everyday – not just about the money

**Mike-** to learn a career in the construction trade- make a good living

**Johnny Blaze-** Expect to Graduate- be successful in this career- well-paying job- continue education with more knowledge about the field

**Jeremy-** Work life balance- my fulfillment of the need for progression- fulfillment helping others- being a dam good human being.

**Sally-** advance as far as I can in the medical field- provide for my family- inspire my kids for generations to come.

**ACE-** To graduate as a level 2 technician- advance my knowledge

**Jeffery-** Easier than past college- not too physical- fulfilling and challenging

**Red-** move up in the ranks to management- learn more knowledge- graduate

**Alex-** Love what I do- Make money- be successful- Training for my career

**Wes-** To grow as a person- to do something I like or love- not about the money

**James-** Gain more knowledge- Understand to like what I do- don-t burn out

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**What contributors led the students returning for the second and final year of training? IQ 5,6,7**

**7. In what ways have your expectations been met? Not met?**

**Conrad-** Teacher had experience- very helpful- hands on approach to teaching (“I have a hard time retaining information I read in class”). All were met.



**Beth-** Certification in many area's –covered engine, brakes, suspension- did not have any prior training and know have some- offers from companies this OTC brings in to the program. No all have been met.

**Fred-** The program has taught me a lot- Internships are good- building a lot of knowledge.

**Rick-** Came along way at work and school- how I think about things as an employee- Not met: no, went in the program with an open mind, and at work and school.

**Jim-** Yes- learned many things- come alone way at work- Not met- none, thank company for this career

**Tom-** Have taken engines apart and pot back together- Learned Hydraulics systems- Learning at a dealership what I learned at school. Not met: maybe the pay isn't as high as I thought it should be

**Bob-** Learning more knowledge- having more experience with hands on- learning patience from my instructor- taught me so much

**Scott-** Yes, using the diagnostic equipment and understanding it- learning new knowledge. No- so far all have been met.

**Jackson-** Yes- coming here there were greater opportunities for my career- companies came and gave us info about their company and what they offered- learning what we should. No- overall all was good, ran out of hot water.

**Bill-** Went through different system- Instructors are though and good instructors- Invest in their students- Not met: Do not think so, no complaints

**Tanner-** Been able to support myself- got to save money- set schedule and peruse other things outside of work- enjoy life- No- all have been met

**Cole-** School and work much harder as I expected- learn a lot- working with the other students

**Mike-** have learned many things- internship lets me see my family and not get side tracked- all have been met and lots more

**Johnny-** Yes- Knew what to expect – lots of help to Succeed-Not met- have some issues, need more instructors

**Jeremy-** Yes they have been met and exceeded- progressed in knowledge and as a person- first semester changed my thinking – mainly just by taking care of a life and having compassion

**Sally-** Gotten a lot of experience- internships- outside of school experience- all exceeded my expectations- non on not met

**ACE-** they have been met, by the second point- I have advance my knowledge- Not met, but time has to happen to meet the level 2 technician

**Jeffery-** Yes all have been met, none not met

**Red-** Yes, showing how everything works, and translate that knowledge in how to run a shop

**Alex-** Yeah, have exceeded- career is far more advanced- understand the front and back of the house, for management opportunist- can work around the world

**Wes-** Yes all have been met- I have learned a lot and grew as a person- make the customer happy and like doing it- No- all have been met

**James-** Yes all have been met- Engine knowledge is still lacking, but have to get it in the dealership

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**Does Holland's Person-Environment-Fit theory explain or fail to explain these Decisions?**

**IQ 8,9,10,13**

**8. How would you describe yourself?**

**Conrad-** Goal oriented-professional- over thinker- sometimes I think my brain will explode.

**Beth-** Career oriented- doer- EGO- ambitious- leader.

**Fred-** Do-er- like to do things- think a lot- help people make decisions.

**Rick-** changed person, help people, like to work on things, like to accomplish things.

**Jim-** I like to help people or customers- I am organized- focused

**Tom-** Helper- always help my Dad and Grandpa- Fast learner- hard worker

**Bob-** hard worker- like to learn new things- like challenges- help people

**Scott-** driven- creative- a leader

**Jackson-** never met a stranger- tall- outgoing- doer- helper- somewhat organized- have lots of patience.

**Bill-** Realistic –when I say something I back it up-

**Tanner-** Discipline- motivated- naturalist- hardworking-

**Cole-** learner- hard worker- open-minded- helper

**Mike-** hard worker- physically fit for this career- open to learn

**Johnny-** Great guy- Realistic- work hard- not complacent

**Jeremy-** Loyal- spontaneous- adventure seeking

**Sally-** Dependable/ loyal/ honest/ hard-working

**ACE-** Quiet but efficient

**Jeffery-** Reserve- think critically about things- do work well with others- Being outdoors- Play instruments

**Red-** independent- hard worker- go getter

**Alex-** Very motivated- hard worker- busy 24/7- love new experiences- take life and experience it.

**Wes-** outgoing- social person- Positive

**James-** Caring- goal oriented-

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**Does Holland's Person-Environment-Fit theory explain or fail to explain these Decisions?**

**IQ 8,9,10,13**

**9. Do you believe that personality type accurately reflects you? If so, why? If not, why not? Now that you have a better understanding of which personality types represent your interests, it is time to think about how this is related to careers.**

**Conrad-** Yes, I –always been a person who wants to figure it out, S- Enjoy helping others people- helping Grandpa do things, E- Trying to be a manager in the future want to lead people- explain things to people.

**Beth-** Yes/no- R- mechanics have to be leaders, doers, no slack space- S- I answered many questions neutral on the questions, I need more context to say if I like or not- C- I am organized in my career path, like bolts together, injectors clean and wrapped and labeled, take pics of things, know the steps. Personal life is no as organized.

**Fred-** Yes- R-I like to do things, I-I am a thinker, and S-like to help people. Very close to my personality.

**Bob-** Somewhat- R- realistic, I like to do things- I- I find it interesting to find new ways to fix a problem or just fix a problem- S- I need to learn more about dealing with customers

**Rick-** Yes somewhat- S-I like to help people, R-I am a doer, don't know about the conventional part- persuading others to do things.

**Jim-**Yes- R I am a person that does things, S-I like to help people- C-I keep my tools organized

**Tom-** Yes- Realist I do things and get it done- S- I help all the time others- I- I think about how to fix something before I do it.

**Scott-** Yes- Social- I like to help- Realistic- a leader – Artistic- like being creative, finding out how to fix things.

**Jackson-** Yes and no, realistic- I am a doer- Social- I do help people- C- organized- depends on the environment, work yes- personal no

**Bill-** Yes- the I.S.R is very close to my personality, pretty accurate

**Tanner-** Yes and no- investigative and conventional yes- but social no in work setting, only in outside of work. Church etc.

**Cole-** the summer code reflects my personality- I am a doer- and reflect the way I think

**Mike-** Yes- It is close to my personality- I like outdoors- I need all three of these areas to be in construction-

**Johnny Blaze-** I.S.A- Artistic yes- Thinker yes- Social I am split, don't want to fluff the pillows or listen to other parts of people's problems

**Jeremy-** Yes- Definitely hits it head on- Investigative- wanting to learn something new- Social- being able to talk to people- artistic- love playing music instruments

**Sally-** Yes, very spot on SIE

**ACE-** R and C are right but not Social- I am not a social person but willing to help others

**Jeffery-** Yes- RIS- R & I are spot on, but the Social is off, I like to help, but not personal help due to past working knowledge of past employment

**Red-** Yes/No- RIS I am realistic and a thinker both are correct- Not so much on the social side- I like to help people, but no deep in their problems

**Alex-** The summary code reflects my personality perfectly

**Wes-** SAR- does reflect me- I love helping people- Elders- I keep the program and my counterparts together

**James-** REC- Yes- very realistic- I am focused on tomorrow- I will be a manager, people listen to me- they think of me as a friend not a manager- C- I keep the same routine all the time.

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**Does Holland's Person-Environment-Fit theory explain or fail to explain these decisions?**

**IQ 8,9,10,13**

**10. Describe what you know about the occupations identified in the summary code.**

**Did you consider any of these occupations?**

**Conrad-** I understand all of them- and was shocked it showed that a good job could be a lawyer or Judge or in the health field- Yes, I am a health nutrition nut, law is very interesting.

**Beth-** Yes I understand them- Thought about nursing and psychology.

**Fred-** I know they take a lot of school, and never thought about these before- No, never was told about them in high school. Mom went to college, and dad went to trade school.

**Rick-** Most are in the medical field, could be in food. Yes, my Mom and Dad went to college and wanted me to do something in the medical or essential work area.

**Bob-** I am really surprised my code is with the medical careers, so many choices. I thought or think I can be a teacher when I have experience and knowledge.

**Jim-** seems like these help people- No, never thought about any of these, most are in the medical area, not for me.

**Tom-** there are a lot of jobs in the medical field, there are a couple in the ag area. I might want to be a game ranger or some kind of ag teacher.

**Scott-** No, never thought about being a Park Ranger or naturalist- I do like to hunt and fish

**Tanner-** No- Health not interested – teacher is needed, but not for me- teachers are not valued

**Jackson-** they are all in the health industry- no, never thought about these jobs- I do not want a career in the health- HS did not get any type of career inventory test or counseling- English teacher did some tests like these

**Bill-** the occupations I could do if they interested me- but that is not the way I want my career or life to go-

**Cole- No-** Did not do a career test in H.S.- no inside jobs- not as physical

**Mike-** Yes I understand these careers- for me do not know if I can be a park officer

**Johnny Blaze-** Yes- Math teacher and educational coordinator- no counselors

**Jeremy-** Broad range and cover different areas- environment services- physicality- instruction- I would try out as a career

**Sally-** Have been several of these that were mentioned by the code- Teacher and social worker- No- follow my dreams- and be a nurse that I started before, but life got in the picture

**ACE-** Understand about them- Radiologist have not consider, and others have not considered no my fit.

**Jeffery-** most were in the Medical field- Yes- I considered working in the medical areas and focus on Bio-Chemistry- but never thought about any other careers

**Red- Yes-** most have the doer/thinker aspect but not too much social in it-



**Alex-** Many are doing clerks work, and are behind a desk- I can't be behind a desk- Do not like the clerk side- Yes, the convention and event coordinator is 100% my pick

**Wes-** the park naturalist goes out and protects wildlife and educates people- go out and improve the conditions and be a voice for the animals- Yes, I did consider that job

**James-** You have to work in management to do many of these jobs- they do align with what I am interested in. Yes- construction worker- Supervisor position – any hands on job- I thought about an Insurance appraiser

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**Does Holland's Person-Environment-Fit theory explain or fail to explain these Decisions?**

**IQ 8,9,10,13**

**11. How would you describe the "fit" of the academic career program?**

**Conrad-** I am a fit in this career- I enjoy working on things- Don't want to be a tech all of my life, but maybe go into management.

**Beth-** Yes- I personally enjoy it- feels right to me in this career.

**Rick-** I enjoy working on things- I am organized when I work- I feel comfortable in the program and at work.

**Fred-** I am a fit for this career path, I like to fix things, I like doing what I am doing.

**Jim-** I like the trade that I am going into. I think I fit being a mechanic.

**Tom-** It is a fit for me, I like the hands on and no paper work.

**Bob-** I am a fit, and had some experience and learned a lot my work- would not have the job I have to day if I did not have the right career.

**Scott-**Yes- opportunity to be a leader- learning new technology – Preparing to do the job you were hired for

**Jackson-** I am a fit, I am cool-headed- don't mind working- don't mind failing and learning

**Bill-** Fit pretty well, good program –mechanical aptitude for this kind of work- Hand and eye correlation – physically fit for it.

**Tanner-** Yes- at the present- the program gives you information, but could use more hands on or real-life experiences- like the on an off time in this program

**Cole-** Fit is good- hands on work- challenging on repairing things- finding problem and fixing them.

**Mike-** Yes I am a fit- I like construction trade- don't know if I get older I can do the work, unless I am a foreman or own my construction company

**Johnny Blaze-** No- I do not fit the program or profession- male is a non-traditional and people still stereotype us in this career –

**Jeremy-** Fulling what I need- working with instructors helping me and they have compassion for students.

**Sally-** Leader- mom of the group is my fit

**ACE-** Average fit- before the program was not mechanically inclined, but after I can do more things without help

**Jeffery-** I fit the program- could learn this in a classroom- I need less lab time- but fit very well for my personal style

**Red-** yes- commitment to the program- ready for a work load- willing to learn- being physically fit is a must

**Alex-** I like helping people and the hospitality side of this program is helping people and making them happy- I like to smile and you have to naturally smile in this work-management is a fit for me along with this program- I need a variety

**Wes-** Enjoy fixing things- hands on learning- being in the ship- -getting things diagnose and repaired-

**James-** Stay on task- work on one job at a time- like to learn- work with hands

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**Why did the student originally select their academic career program?**

**IQ 1,2,3,4,12**

**12. What challenges do you foresee in this career field?**

**Conrad-** Need more knowledge- learn a lot more to be hireable- electrical is challenging.

**Beth-** Having strength to do the job better- being doubted and disrespect as a woman- male dominated profession and the shop may be tough, because amplified as a woman (rhetoric).

**Fred-** Got to think a lot- New equipment have to fix them and learn to adjust to new equipment- and not get upset and freak out when can't fix it.

**Rick-** Helping others understand about their work, dealing with other dealerships, ordering parts.

**Jim-** Amount of new technology- technology changing fast.

**Tom-** government getting involved in the farming business- Electric machines are going to be hard- Farmers are no going to move to electric.

**Bob-** Patience is tough, and one has to have lots in this job- keeping my anger down and controlling it when I get mad on a job.

**Scott-** more electronics in vehicles- will need more education

**Jackson-** Time management- headaches- failures

**Bill-** working with people- I do not want to work with others

**Tanner-** Getting out of this field once in it- not in it for long- not wanting blue collar work

**Cole-** Electrical and computer new technology systems- continue to learn- working with new employer

**Mike-** harder when I get older- new technology replaces human worker

**Johnny Blaze-** The future is continuing education- supervisory position go to mainly females. Female dominated profession

**Jeremy-** Burnout- another pandemic- lack of influence from the younger co-workers- no life experience or work ethic

**Sally-** getting attached to the patients

**ACE-** Try to work on everything once- have to learn a lot- have to be able to fix any other brands

**Jeffery-** Interpersonal communication between manager and customers- working with other employees?

**Red-** Problem solving- hard to evaluate the situation- electrical is an ongoing issues- reading and identifying the books and schematics

**Alex-** Knowing how to handle customers- bad and good ones- I believe customers are not always right- understanding food reviews- how to plate food nice and not ugly

**Wes-** Eclectic Vehicles are a challenge- brand company want to move in this direction- learning a new way of life- technician training

**James-** Getting faster at doing jobs- first pay check will be low due to the pay scales and me being new- continuing education in the area

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**Does Holland's Person-Environment-Fit theory explain or fail to explain these Decisions?**

**IQ 8,9,10,13**

**13. Is there anything else you would like to add?**

**Conrad-** No

**Beth-** need to build confidence/ I do things myself

**Fred-** Nothing

**Rick-** I want to be in this 10 years, and then I am planning my career after.

**Jim-** No

**Tom-** Glad I am getting a degree- Dad dropped out, and Mom was first to get a degree.

**Bob-** Yes, parents dropped out of college, my sister is going to colleges school

**Scott-** No

**Jackson-** no I am good

**Bill-** No

**Tanner-** Mom and dad went to college mom is a nurse and dad is a contractor

**Cole-** no questions, all is good

**Mike-** Yes- I hope by going to college, I can aspire my family and kids to go and be something they want to be in life.

**Jeremy-** no

**Sally-** no

**ACE-** No

**Jeffery-** No

**Red-** none

**Alex-** no

**Wes-** Yes, it has been a great experience coming to this college

**James-** no

**Have you had any formal academic counseling?**

**Mike-** Yes in the military, nothing in High school

**Cole:** No HS career counseling

**Tanner:** No formal- had some in the military

**Bill-** Yes, some HS from teachers and counselors

**Jackson-** No and had approx. 400 graduating

**Tom-** Very little HS, some in Vo-Tech

**Rick-** Nothing in High School

**Conrad:** Yes, had some in High School

Beth:

**Johnny Blaze-** Had career counseling in high school, military, and the VA.

**Jeremy-** No never at High School

**Sally-** Yes- in the other college I went to for my social work and CNA, and it was about the student

**ACE-** Yes- Survey in HS in the career assessment/ vo-tech more like a test but specialized in the IT area

**Jeffery-** Yes in college- advisor counseled me

**Red-** Yes- a college visit – but I was not individualized, was a group setting and no career assessments.

**Alex-** Yes, at the technology center- gave me the scope on this college

**Wes-** No career counseling- High School year book teacher was a counselor and gave me the info on the auto program. Vo- tech had better career days and information on different career paths – the Vo-tech is why I went to this college

**James-** High school had some type of career assessment that I was given- tribe came down and a couple of other colleges- no individualized just group

**Would you have maybe explored the other careers if you would have known about them or had counseling?**

**Mike:** No I am a shop kind of person,

**Cole:** Yes, I might have, I had good grades

**Tanner:** Not interested in other fields yet. I do not know my career path

**Bill-** I could have done something else, if I were interested in the career.



**Tom-** Something different that farming, because gov. is into their business.

**Rick-** Since everyone wants you to do good, it is possible to look or go into another field

**Conrad:** Yes, interested in health or law

**Beth:**

**Johnny Blaze-** No- they pushed me to go into law enforcement or a physician

**Jeremy-** If I had career counseling, possibly I would have made other career choices.

**Sally-** Other college I went for my education degree, did career counseling but only about the program that you were in, nothing extra. If it had been more individualized and offered other areas, yes possibly

**ACE-** No- middle school was in the Robotics and went to the R team in Hs, so vo-tech I was in the IT program until I completed it.

**Jeffery-** Yes, would have maybe went into a differently career choice

**Red-** No, would have looked into some of the careers, but would not swayed me to go into any of these careers.

**Alex-** Yes, would have made a difference if I had career counseling- possibly would have changed my career and went into a different program that is in the area I want to be an event planner

**Wes-** I think I would have gone to auto eventually with or without any type of career counseling.

**James-** I cannot say if I would or not

## Appendix E

### Email to Prospective Participants

Adam Ellis

Oklahoma State University Institute of Technology, Okmulgee, OK. 74447

Dear Participant:

I am completing a research project that is addressing why students return for their second and final year of their technical program. The study is “Lessons Learned from Returning Second Year Technical Students.” The idea is to understand why retention rates are down in technical programs at this technical college.

In summary, you the participants will be selected by first completing a RNL student satisfaction survey, which would have been completed your last semester. Students will be asked if they would like to participate in the research project. If you agree, you will email the Principal Investigator (Adam Ellis), and he will contact the student for a time to participate in the study. From this point, 25-30 students will be selected from across the technical programs that offer the student an A.A.S degree in that program.

Each of the participants that agree to be part of the study, will be given a career inventory assessment, the survey is called Holland’s Self-Directed Search tool. This will be used to narrow down the participants for the face-to-face interview. The time line for the Holland’s Self-Directed is 20 minutes to complete, and the face-to –face interview is approximately 1:00 hour.

This will be a voluntary participation, and no compensation will be given. There will be professional counselling services offered to students if needed, at no cost.

The research is on the OSUIT campus, and Adam Ellis, 580-512-5244 or 918-293-4730, is the contact person. Email information: [adam.ellis@okstate.edu](mailto:adam.ellis@okstate.edu).

All surveys and face-to-face interviews will remain confidential, and no data collected will be shared with any other person. Adam Ellis will be the only person that has access to any of the collected data.

Again, this research is to collect data to find out why students do return for their second and final year of their technical program. Additionally, this research will be used to understand and find solutions to increase retention rates which ultimately will increase graduation rates.

Thank you for your participation in this study! Adam Ellis

## Appendix F

### Research Study- Schedule of Appointments

Date:	Time:	Name:
9-14	1:00 - 2:30	x
9-14	3:00 - 4:30	x
9-15	9:30 - 11:00	x
9-15	12:00 - 1:30	x
9-15	1:45 - 3:15	x
9-16	10:30 – 12:00	Bob
9-16	12:30 - 1:30	Scott
9-16	2:00 - 3:30	Mike
9-19	1:00 – 2:30	Tom
9-19	3:00 – 4:30	Jim
9-20	9:00 – 10:30	Rick
9-20	11:00 – 12:30	Fred
9-20	1:00 – 2 :30	Beth
9-20	3:00 – 4:30	Conrad
9-21	1:00 - 2:30	x
9-21	3:00 - 4:30	x

9-22	1:00 – 2 :30	Cole
9-22	3:00 – 4:30	Jackson
9-26	9:00 – 10:30	Culinary
9-26	11:00 – 12:30	Construction
9-26	1:00 – 2 :30	Construction
9-26	3:00 – 4:30	Culinary
9-27	9:00 – 10:30	
9-27	11:00 – 12:30	Nursing
9-27	1:00 – 2 :30	Nursing
9-26	3:00 – 4:30	Nursing
9-28	9:00 – 10:30	James
9-28	11:00 – 12:30	x
9-28	1:00 – 2 :30	Red
9-28	3:00 – 4:30	x

## **Appendix G**

### **Individual Interview**

Thank you so much for volunteering to participate in this case study. Your participation and feedback are important to this study for being successful. Based on our email or phone call, the research study time and location will be:

#### **TIME AND LOCATED LISTED**

All information discussed during the interview will remain confidential. Before the career assessment survey or face-to-face interview. You will complete a consent form for the survey and face-to-face interview. I appreciate your participation to share your personal experience and time.

If you have any questions, please contact me. I look forward to our conversation about your college experience.

Adam Ellis

Oklahoma State University

Doctoral Candidate

[Adam.ellis@okstate.edu](mailto:Adam.ellis@okstate.edu) or 580-512-5244

## APPENDIX H– CONSENT/PARTICIPANT SURVEY FORM



### College of Education and Human Sciences

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## CONSENT/PARTICIPANT SURVEY FORM

[Lessons Learned from Returning Second Year Technical Students]

### **Background Information**

You are invited to be in a research study of second year returning students. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time. Your decision whether or not to participate in this study will not affect your internship; grades in your academic career program.

This study is being conducted by: [Adam Ellis – OSU School of Educational Studies.

### **Procedures**

If you agree to be in this study, we would ask you to do the following things: Complete a Ruffalo Noel Levitz Student Satisfaction Survey, and Holland's Self-Directed Search assessment tool. The Student Satisfaction Survey is a 80-question survey, which will utilize a Likert Scale ranging from 1-7. The participant taking the survey will rank each question on a level of importance and a level of satisfaction to the survey items. The questions cover areas on academic advising, admissions and financial aid effectiveness, campus climate, campus services, instructional effectiveness, registration effectiveness, safety and security, and student centeredness. Holland's Self-Directed Search assessment tool is a career aptitude personality type survey used for career advising and placement. There are approximately 138 items to score in areas of personality and environments interests. After completion, the results of the survey will be compared to career interests and a report will be generated and sent to the participant of their assessment.

Participation in the study involves the following time commitment: The Student Satisfaction Survey will take approximately 15-30 minutes. The Holland's Self-Directed Search assessment will take approximately 20 minutes.

### **Compensation**

You will receive no payment for participating in this study.

### **Risks**

There is a potential risk of breach of confidentiality, which is minimized by the protocols to protect the participant's confidentiality in this study.

### **Confidentiality**

The data collected will be kept locked in a metal cabinet, with the only access being the researcher. No names will be used in any of the surveys or interviews.

Researcher does not know who completed the study:



Approved: 07/20/2022  
Protocol #: IRB-22-283

The information you give in the study will be anonymous. This means that your name will not be collected or linked to the data in any way. The researchers will not be able to remove your data from the dataset once your participation is complete.

Coded Data/Pseudonym linked with identifying information:

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

Confidentiality cannot be guaranteed:

In some cases, it may not be possible to guarantee confidentiality (e.g. an interview of a prominent person, a focus group interview, ethnographic research, oral history projects).

Because of the nature of the data, I cannot guarantee your data will be confidential and it may be possible that others will know what you have reported. The researchers will make every effort to ensure that information about you remains confidential, but cannot guarantee total confidentiality. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your particular story/situation/response

We will collect your information through interviews, audio recordings, online surveys, paper surveys, e-mail, etc. Data will be stored in a locked drawer in a restricted-access office, on an encrypted flash drive/external hard drive, in a restricted access folder on Dropbox.com, an encrypted, cloud-based storage system, etc. If the data has identifiers that will be separated and destroyed, state the timeframe for doing so: When the study is completed and the data have been analyzed, the code list linking names to study numbers will be destroyed. This is expected to occur no later than 5 years from date of data collected. If the data has audio/visual recording, The audio/video recording will be transcribed. The recording will be deleted after the transcription is complete and verified. This process should take approximately two months, or the audio/video recording will be kept as part of the study records for no longer, than five years from data collected.

The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at [adam.ellis@okstate.edu](mailto:adam.ellis@okstate.edu).

### **Contacts and Questions**

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at [580-512-5244], or at [adam.ellis@okstate.edu](mailto:adam.ellis@okstate.edu). If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu). All reports or correspondence will be kept confidential.

### **Statement of Consent**

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

Indicate Yes or No:

I give consent to be audiotaped during this study.

Yes  No

I give consent for my data to be used in future research studies:

Yes  No

I give consent to be contacted for follow-up in this study or future similar studies:

Yes  No



Approved: 07/20/2022  
Protocol #: IRB-22-283



Written Informed Consent:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_



Approved: 07/20/2022  
Protocol #: IRB-22-283

## APPENDIX I-CONSENT/PARTICIPANT INTERVIEW FORM



College of Education and Human Sciences

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### CONSENT/PARTICIPANT INTERVIEW FORM [Lessons Learned from Returning Second Year Technical Students]

#### **Background Information**

You are invited to be in a research study of second year returning students. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time. Your decision whether or not to participate in this study will not affect your internship; grades in your academic career program.

This study is being conducted by: [Adam Ellis – OSU School of Educational Studies].

#### **Procedures**

If you agree to be in this study, we would ask you to do the following things: Complete a face-to-face interview. The face-to-face interview will consist of fifteen questions, ranging from your college experience, family and college, and your career choice or choosing a career path. The face-to-face may be audio-recorded to analyze the answers to the questions in more depth.

Participation in the study involves the following time commitment: The face-to-face interview will take approximately 30 minutes.

#### **Compensation**

You will receive no payment for participating in this study.

#### **Risks**

There is a potential risk of breach of confidentiality, which is minimized by the protocols to protect the participant's confidentiality in this study.

#### **Confidentiality**

The data collected will be kept locked in a metal cabinet, with the only access being the researcher. No names will be used in any of the surveys or interviews.

Researcher does not know who completed the study:

The information you give in the study will be anonymous. This means that your name will not be collected or linked to the data in any way. The researchers will not be able to remove your data from the dataset once your participation is complete.

Coded Data/Pseudonym linked with identifying information:

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report

Confidentiality cannot be guaranteed:



Approved: 07/20/2022  
Protocol #: IRB-22-283

In some cases, it may not be possible to guarantee confidentiality (e.g. an interview of a prominent person, a focus group interview, ethnographic research, oral history projects). Because of the nature of the data, I cannot guarantee your data will be confidential and it may be possible that others will know what you have reported. The researchers will make every effort to ensure that information about you remains confidential, but cannot guarantee total confidentiality. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your particular story/situation/response

We will collect your information through interviews, audio recordings, online surveys, paper surveys, e-mail, etc. Data will be stored in a locked drawer in a restricted-access office, on an encrypted flash drive/external hard drive, in a restricted access folder on Dropbox.com, an encrypted, cloud-based storage system, etc. If the data has identifiers that will be separated and destroyed, state the timeframe for doing so: When the study is completed and the data have been analyzed, the code list linking names to study numbers will be destroyed. This is expected to occur no later than 5 years from date of data collected. If the data has audio/visual recording, the audio/video recording will be transcribed. The recording will be deleted after the transcription is complete and verified. This process should take approximately two months, or the audio/video recording will be kept as part of the study records for no longer, than five years from data collected.

The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider about a copy of the privacy policy at [adam.ellis@okstate.edu](mailto:adam.ellis@okstate.edu).

**Contacts and Questions**

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at [580-512-5244 ], or at [adam.ellis@okstate.edu](mailto:adam.ellis@okstate.edu). If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu). All reports or correspondence will be kept confidential.

**Statement of Consent**

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

Indicate Yes or No:

I give consent to be audiotaped during this study.

Yes  No

I give consent for my data to be used in future research studies:

Yes  No

I give consent to be contacted for follow-up in this study or future similar studies:

Yes  No

Written Informed Consent:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_



Approved: 07/20/2022  
Protocol #: IRB-22-283

## Appendix J

### IRB Approval Form



#### Oklahoma State University Institutional Review Board

Date: 07/20/2022  
Application Number: IRB-22-283  
Proposal Title: LESSONS LEARNED FROM RETURNING SECOND YEAR  
TECHNICAL STUDENTS:  
A CASE STUDY

Principal Investigator: Adam Ellis  
Co-Investigator(s):  
Faculty Adviser: Maryjo Self  
Project Coordinator:  
Research Assistant(s):

Processed as: Exempt  
Exempt Category:

#### Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

**This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.**

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Sincerely,  
Oklahoma State University IRB

## VITA

Adam Scott Ellis

Candidate for the Degree of

Doctor of Education

Dissertation: LESSONS LEARNED FROM RETURNING SECOND YEAR  
TECHNICAL STUDENTS: A CASE STUDY

Major Field: Work Force and Adult Education

Biographical:

### Education:

Completed the requirements for the Doctor of Education in Work Force and Adult Ed, at Oklahoma State University, Stillwater, Oklahoma in December, 2022.

Completed the requirements for the Master of Science, in Teaching, Learning, and Leadership, Stillwater, Oklahoma, in May, 2012.

Completed the requirements for the Bachelor of Science, in C.T.E.D, Stillwater, Oklahoma, in May 2011.

### Experience:

Assistant Dean- School of Transportation and Heavy Equipment, Oklahoma State University, Okmulgee OK. 2019- Present

Transportation Program Coordinator, Tulsa Technology Center, Broken Arrow, OK. 2016-2019

Professional Memberships: Oklahoma Dept. of Labor Board Committee Chair (EV); Association for Curriculum Development and Supervision (ASCD); Oklahoma Career Technology Association. National Education Association.